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THE EFFECT OF COACH EXPECTATIONS ON FEMALE ATHLETES’ MOTIVATION TO PLAY: A MIXED METHODS APPROACH

A Dissertation presented in partial fulfillment of requirements for the degree of Doctor of Philosophy in Higher Education
The University of Mississippi

By
MEGAN MATTHEWS BUNING

May 2013
ABSTRACT

This concurrent, embedded mixed methods study used predominantly quantitative analyses to examine coach expectations and behaviors on female athletes’ intrinsic motivation to play softball. Qualitative methods in the form of structured, open-ended questions were used to enhance the data by examining athletes’ perceptions of coaching behavior and changes in motivation and competence levels. A cluster sampling technique was used to randomly select 20 Division I softball teams competing in the United States. The resulting quantitative participant sample included 174 female collegiate athletes ranging in age from 18-22 years old, and 20 male and female head coach participants ranging in age from 24-60 plus years. Qualitative procedures involved inductive content analysis of interview responses from 41 female collegiate softball athletes. A structured interview protocol was followed to answer the research questions of how do female athletes’ perceive head coaches affect intrinsic motivation to play softball for their current team, and specifically, what types of coaching behaviors do athletes perceive to alter their motivation to play softball?

Results of this study indicate coaches do form expectations about athletes’ performance ability, and coaching behaviors differed between expectancy groups. Competence and motivation levels remained constant over the course of the study, but expectancy groups were motivated differently. Low expectancy athletes were more extrinsically motivated, and showed trends of higher levels of amotivation than high and average expectancy athletes. High expectancy athletes showed trends indicating more intrinsic motivation overall. Low expectancy athletes perceived
more ignoring, or non-rewarding, behaviors than other athletes. Athletes experienced a decrease in encouragement and corrective instruction from pre- to post-study.

Overall, athletes reported aspects of the perceived coach-athlete relationship affected competence and motivation the most. Relationships characterized by open, direct, clear communication were the biggest positive influence on motivation and competence. Other coach strategies including emphasis of athlete’s personal best, actions display confidence in the athlete’s performance ability, and encouragement after performance attempts emerged as important factors enhancing athlete self-perception variables. Relationships characterized by unclear or no communication had the biggest negative influence on motivation and competence.
DEDICATION

This dissertation is dedicated to all of the individuals who encouraged and assisted me along this great journey. The beginning of this process dates back many years, and there are so many people that deserve a thank you for encouragement, support, and belief in my abilities. My most constant supporter is my husband, Shaun Buning. I would not have completed this task without your consistent, uplifting support throughout this process. Thank you for never giving up on me, for supporting me emotionally and financially during this time, and for carrying extra daddy duties during times I needed to write. You are a huge reason this journey was completed successfully.

My next biggest supporters are my parents, Chuck and Brenda. You not only offered emotional stability and encouragement, but you helped Shaun and I provide for our family during this period. Without you, this process would have been much more difficult and would have taken considerably longer! Thank you for believing in me and pushing me when you knew I needed it. You both have been tremendous influences and examples in my life, and I hope you will read this with pride. I love you, and I am thankful you are my parents.

I cannot thank my parents without thanking my GiGi. Grandma, you have been a constant in my life for as long as I can remember, and I cherish every conversation, every second I am blessed to spend with you. I know you did not understand exactly what I was working on, but you just knew I could do it, and knew I could do it well! I know Grandad would be proud, and there were many times I could hear him telling me I could do it. You mean more to me than you will ever know. Thank you for always being there and believing I am better than I actually am.
I am fortunate to have amazing family members and friends, all who have provided endless support for my goal. Thank you for realizing how difficult this journey can be yet still encouraging me exactly when I needed it. My dad Mike, my grandmother Mary Ann, my aunt Linda, and my dear friend Vera, all of you have helped me in ways you may not even realize. Your belief in me and your interest in my studies have been crucial to this journey.

I cannot forget all of the faculty members and supervisors that have helped me achieve this accomplishment. Every supervisor that has supported my decision to attend classes part-time while working full-time have taught me the value of an education. They could have easily suggested I focus on my professional responsibilities, but they chose to allow me to grow and develop. I am a changed person because of their support. To the faculty members, especially Dr. Robert Eklund, that have offered continued support and advice, this dissertation is dedicated to you. Your advice has been invaluable, and you taught me well. I hope you read this study and remember you helped create this. Thank you.

Finally, this dissertation is dedicated to my daughter, Emory. You are the sole reason I began this journey. Your father and I wanted to provide a life for you that we knew would only be possible if I achieved this goal. I hope one day you will read this document and realize that you can “do anything through Christ who strengthens” you. I love you, baby girl, and I look forward to the day when you achieve great things. Because you will.
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First, I would not be where I am today without my faith in the Lord, my savior. I have turned to him many times throughout this process, and He has lifted me up each time. He has placed so many people in my life that have contributed immensely to the completion of this study and my development as an academic professional. I am eternally grateful for each person who offered direction, advice, and encouragement through this process. I must first start with my amazing Advisor and Dissertation Chair, Dr. Lori Wolff. She provided me with honest, realistic advice throughout the course of my studies and the writing of this dissertation. Her unwavering confidence in my abilities pushed me to test my limits each day. I have learned so much from her throughout this process, and I owe much of my professional growth to her. She served as more than just an academic advisor, and often provided the invaluable service of life coach free of charge. I wish I could take her with me wherever the future leads.

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Dr. Leslie Podlog, Dr. Chris Lonsdale, and Dr. Gloria Solomon for their input and professional feedback on the development of the interview protocol. Dr. Solomon and Dr. Lonsdale provided me with a copy of the MERS and BRSQ, and I am grateful to have had their assistance.

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CHAPTER I

Introduction

Athletic coaches at all levels in the United States have received an intense amount of scrutiny particularly within the last decade. Coaches in a variety of sports and levels have displayed gross position abuse that ranges from illegal practice actions (Mahony, Fink, & Pastore, 1999) to forms of physical, emotional, and sexual abuse (Brackenridge & Kirby, 1997; Gervis & Dunn, 2004; Martin, 2003; Stirling, Bridges, Cruz, & Montjoy, 2010; Stirling & Kerr, 2007; Tofetgaard, 2001). These are extreme and unfortunate examples of coaches abusing the authority and impactful nature of their position.

Athletic coaches are placed in positions to have tremendous influence on the athletes they coach (Amorose, 2003; Bell, 1997; Gallon, 1980; Mahony, Fink, & Pastore, 1999; Wang, Koh, & Chatzisarantis, 2009). Some coaches intentionally abuse the authority of their position in outrageous ways while others unintentionally harm athletes in more subtle ways through psychological damage. Based on 13 years of playing and seven years of coaching experience ranging from youth sports to high-level professional sports, I have witnessed coaches treating athletes differently based on the coach’s expectation about that athlete’s performance or skill ability. Over the years, I have watched teammates, friends, and pupils change teams, change sports, deteriorate psychologically, and in some cases quit playing sports because they were so distraught and affected by the coach’s behavior toward them. However, I have witnessed the positive impact of coaching behavior on athletes that is often over-shadowed by the negative. Other past teammates and I still have meaningful relationships with the coaches who
encouraged us and motivated us appropriately. Every coach is going to have a bad day and say or
behave toward an athlete in a way the coach will regret at some point during the coaching career.
No individual is perfect, but all coaches can benefit from knowing what specific behaviors affect
athletes in positive and negative ways. The truly exceptional coaches learn how to approach each
athlete as an individual in terms of motivation and feedback, and successful coaches
communicate consistently expectations of athletes both individually and as a team (Becker &
Wrisberg, 2008; Bloom, Crumpton, & Anderson, 1999; Kahan, 1999; Segrave & Ciancio, 1990;
Tharp & Gallimore, 1976).

Coaches can and do form expectations about athletes’ performance ability based on
different types of cues (Solomon, 2008; 2010). Differential feedback and behavior patterns based
on coach expectations displayed toward athletes are documented and, if perceived negatively,
can be harmful to the athlete’s performance, enjoyment level, persistence, and overall motivation
level to continuing playing (Amorose, 2003; Lyle, 1999; Smith, Ntoumanis, & Duda, 2010;
Snyder, 1972). Motivation, specifically intrinsic motivation, is critical to continued participation,
persistence, and effort (Deci & Ryan, 1985, 2000, 2007). A startling finding is many coaches are
largely unaware or unrealistic about the behavior they display toward their athletes (Krane,
Eklund, & McDermott, 1991; Smith et al., 2010; Smith & Smoll, 2000; 2002; Smith, Smoll, &
Barnett, 1995; Smith, Smoll, & Curtis, 1979). Coaching behaviors can have an extreme impact
on the influence of athletes. More research needs to be conducted to expand the knowledge about
exactly what actions and behaviors can affect athletes’ motivation to continue playing. Self-
determination theory (Deci & Ryan, 1985) can be a useful resource to understand all levels of
motivation and catalysts and deterrents of self-determined motivation.
Deci and Ryan’s (1985) Self-determination Theory (SDT) defines different types of motivation along a continuum moving from no motivation toward self-determined motivation. The most self-determined, and arguably the most important type, of motivation is intrinsic motivation. Intrinsic motivation has routinely shown the strongest correlation with positive outcomes such as persistence, interest, performance, and willingness to continue a task despite challenges (Ryan & Deci, 2000; Vallerand & Bissonnette, 1992; Vallerand, Deci, & Ryan, 1987). All of these outcomes are characteristics of successful athletes. SDT details an explanation of why motivation is different among individuals, and the social and environmental factors that can enhance or hinder self-determined motivation. SDT includes several sub theories that further explain certain social and environmental factors on motivation.

Cognitive evaluation theory (CET), one sub theory of the SDT, explains extrinsic factors (social and environmental) that influence intrinsic motivation (Vallerand & Bissonnette, 1992). One social factor of particular interest is feedback, and the effects different kinds of feedback can have on self-determined motivation. Basic psychological needs theory (BPNT), another sub theory of SDT, explains individual’s psychological needs to feel autonomous, competent, and related to an action or behavior for the individual to be intrinsically (or maximally self-determined) motivated to perform an action or behavior (Amorose & Horn, 2001; Deci & Ryan, 1985; Ryan & Deci, 2000; Vallerand & Losier, 1999). The three basic psychological needs act as mediators to intrinsic motivation. Social factors, such as leadership styles, feedback patterns, and behaviors, can have an effect on perceived autonomy, competence, and relatedness (Amorose & Horn, 2001; Deci & Ryan, 1985; 2000; Henderlong & Lepper, 2002; Vallerand & Losier, 1999). Coaching behaviors toward athletes, specifically types of feedback, can be critical to athletes’ formation of perceptions of competence toward their sport (Jowett & Cramer, 2010). Athletes,
especially young athletes, use social feedback from important figures in their lives to assess and evaluate how much they know, how well they perform skills, and what adjustments they need to make to improve (Bell, 1997; Treasure, 1997). If coaches form expectations about athletes based from false information, or cues that are present at the given moment a self-fulfilling prophecy (SFP) can be triggered (Horn, Lox, & Labrador, 1998; Solomon, 2008, 2010). Once a coach and an athlete enter into the SFP cycle, coaching behaviors toward the athlete can change, and the athlete’s perception of competence is in jeopardy.

Horn et al., (1998) created an expectation-performance process outlining a continuous cycle of a self-fulfilling prophecy in sports. The process starts with the coach forming an expectation about an athlete’s performance ability generated from false information. The coach’s behavior changes toward the athlete based on the expectation. The athlete perceives behavior changes in the form of actions and feedback and conforms behavior to match the perceived coach behavior. The coach sees the athlete’s behavior matching the expectation set and believes the expectation was correct. The process begins again and can continue until the coach breaks the cycle by forming an expectation based on correct (not false) information. The expectation-performance process represents a self-fulfilling prophecy within the athletic domain.

Existing research shows support for coaches forming expectations (Becker & Solomon, 2005; Horn, 1984; Horn et al., 1998; Rejeski, Darracott, & Hutslar, 1979; Solomon, 2001; Solomon 2002a, 2002b; Solomon & Rhea, 2008; Solomon, Striegael, Eliot, Heon, Maas, & Wayda, 1996), and coaches behaviors toward athletes changing based on their expectations about athlete performance (Amorose & Wiess, 1998; Krane et al., 1991; Rosenthal, 1974; Sinclair & Vealey, 1989; Solomon et al., 1996; Solomon, Golden, Ciapponi, & Martin, 1998; Solomon, DiMarco, Ohlson, & Reese, 1998; Solomon & Kosmitzki, 1996; Solomon & Rhea, 2008).
Research is available documenting and coding coaching behaviors of various types of coaches through quantitative and qualitative methods (Becker & Wrisberg, 2008; Bloom et al., 1999; Kahan, 1999; Segrave & Cianco, 1990; Smith et al., 2010; Smith & Smoll, 1990, 2002; Smith et al., 1995; Smith et al., 1979). Other research examines the affects of coaches’ feedback types on motivation and the constructs of SDT (Amorose & Horn, 2001, 2002; Amorose & Wiess, 1998; Black & Wiess, 1992; Deci, Koestner, & Ryan, 1999; Hollembeak & Amorose, 2005; Ryan & Deci, 1985; Weiss & Ferrer-Caja, 2002; Whitehead & Corbin, 1991).

No existing published research was found that examined the expectation-performance process, resulting coach behaviors, and the affect on athletes’ intrinsic motivation to play within one study using quantitative, qualitative, or mixed methods procedures. This study examined the effects of coach expectations on female athletes’ motivation to play their sport by specifically analyzing the impact of coach feedback on perceived competence levels of athletes. A brief history of sports and female participation is useful to better understand the struggles female athletes have overcome to enjoy sport participation, benefits of participation, and the purpose of this study.

The History of Youth Sport Participation

Over the last five decades, participation and interest in youth sports activities has grown tremendously. In the United States, youth sport encompasses the variety of sport programs that provide a consistent series of practices and competitions specifically for youth and children (Seefeldt, Ewing, & Walk, 1992). Organized youth sport programs were developed at the beginning of the twentieth century, and were managed and promoted by a variety of different social groups (e.g., YMCA, Boy Scouts) (LeUnes & Nation, 1989). Agencies believed that providing healthy leisure activities would help keep young boys out of trouble (Berryman, 1996;
Seefeldt & Ewing, 1997). Carl Statz’s formation of the Little League Baseball organization in 1939 encouraged male athletes across the country to become actively involved in sports participation for pleasure, and by 1954, this organization had grown tremendously in status (Little League Chronology, 2010). The year 1954 was a turning point in the management of youth sports programs. With the popularity of the Little League organization came a movement away from social group management of youth sports teams to individual adult-organized management. Youth sport participation grew rapidly, but team formation consisted of all male athletes and suppressed female participation (Berryman, 1996; Seefeldt & Ewing, 1997).

Even though female sport participation can be traced as early as 776 B.C. (History of Women in Sports, n.d.), the type of participation was limited to single participants and sparse involvement in a limited selection of sports. Before and during the beginning of the 20th century, doctors and society believed light forms of exercise, permitted in a limited number of non-contact sports, was acceptable to promote beauty and health. However, too much exercise was believed to make female participants appear masculine and affect reproductive functioning (Fields, 2005). Society hesitantly approved female athlete participation, but female involvement in contact sports was prohibited. Contact sports included any sport where potential contact, regardless of type or amount, could be made with an opponent. The definition of “contact” severely limited the amount of sports females could enjoy. Women were not satisfied with society’s hesitant and restrictive approval of female athletes, and continued to break through the stereotypical restraints about physical activity and sports participation. Women attempted to gain equal access in the playing field by forming the American Association of University Women (AAUW) in 1921, followed by the All-American Girls Professional Baseball League (AAGPBL) in 1943, the Commission on Intercollegiate Athletics for Women in 1967, the Women’s Equity
Action League (WEAL) in 1968, and the Association for Intercollegiate Athletics for Women (AIAW) in 1971 (Mitchell & Ennis, 2008). None of the attempts for equal treatment truly succeeded until the civil rights movement of the 1960s began (Fields, 2005).

As the 20th Century progressed, more females began participating in sports, but funding between male and female sports teams was significantly different, and females were at a disadvantage in terms of equipment and facilities compared their male peers (Fields, 2005). Tensions rose over the discrepancies between genders and race during the 1960s. During the Civil Rights movement of the 1960s, the women’s movement began and added frustration to the treatment of non-white males and females as a whole (Fields, 2005). Starting with the implementation of the Equal Pay Act of 1963 (EPA) followed by Title VII of the Civil Rights Act of 1964 (Title VII), and finally the addition of Title IX of the Education Amendments of in 1972 (Title IX), both non-white males and women were on the way to more fair treatment both socially and politically. Interestingly, Title IX only offers partial protection for females participating in athletics because although it does ban gender-based discrimination in public education settings receiving federal funding, Title IX does not give access to females in all sports, such as contact sports. After the enactment of Title IX, the court cases dramatically increased, and it was not until these cases were presented that the courts determined the Equal Protection Clause of the Fourteenth Amendment gave females access to all sports because no state is permitted to deny any person within jurisdiction equal protection of all the laws (Fields, 2005).

Although the Equal Protection Clause (U.S. Const. amend. XIV) is just as important to female sport participation; Title IX has received the most attention. Female participation in organized youth sport teams sponsored by public schools did not show a noticeable increase until
the enactment of Title IX in 1972. Before Title IX, in public school settings, females were limited to participating in school-sponsored sports with many serving as cheerleaders for male sports teams (Women’s Sport Foundation, 2008). One portion of Title IX required gender equity for boys and girls in every educational program that received federal funding (Title IX; U.S. Department of Justice, n.d.; Women’s Sport Foundation, 2008). After the passage of the legislation, slowly, and after many court cases (Fields, 2005; Mitchell & Ennis, 2008) females began competing on a wider variety of organized competitive sports teams not only on public school teams, but also community-based teams. Since the enactment of Title IX, the number of female athletes participating on sports teams has increased by 904%, female collegiate athletic participation has increased by 456% (Women’s Sports Foundation, 2008), and growth is still on the rise today. With the rapid growth of youth sports and female participation, and the continuing battle for equality in gender participation, an interest in identifying the benefits and drawbacks of involvement, particularly involving female athletes, has been a growing area of research and debate. The physical, psychological, and emotional benefits of sports participation for both genders are well documented. Although there are some concerns for sports participation, the benefits and positives appear to outweigh the negatives. Sports participation should be encouraged to appropriate individuals, and should not be a negative experience for athletes.

The benefits of physical activity and sport participation for males and females are linked to a decrease in the risk for cardiovascular disease, high blood pressure and cholesterol, improved strength and endurance coupled with healthier bones and muscles, weight control, and reduced levels of stress and anxiety (Calfas & Taylor, 1994; Crimmins, Hayward, Ueda, Saito, & Kim, 2008; Dietz, 1998; Sallis & Owen, 2003; Twisk, Kemper, & VanMechelen, 1999; U.S. DHH, 1997). Benefits specific to females who participate in sport and physical activity include

Even more interesting for females are the connections between sport participation and sexual behavior, illicit drug use, and self esteem. Females who participate in sports often become sexually active later, have less unprotected sex, fewer partners overall, and are less likely to have sex under the influence of drugs or alcohol than female non-athletes (Dodge & Jaccard, 2002; Eitle & Eitle, 2002; Lehman & Koerner, 2004; Miller, Barnes, Melnick, Sabo, & Farrell, 2002; Tracy & Erkut, 2007). Research including older female athletes in high school and college found these athletes are less likely to smoke or use illegal drugs (e.g., cocaine, opiates, tranquilizers, prescription drugs, ecstasy), and are less likely to consider, plan, or attempt suicide than females who do not participate in sports (Ford, 2008; Melnick, Miller, Sabo, Farrell, & Barnes 2001; Wichstrom & Wichstrom, 2009; Sabo, Miller, Melnick, Farrell, & Barnes, 2005; Taliafero, Rienzo, Miller, Pigg, & Dodd, 2008).

Female participation in sports has grown tremendously over the last three decades because of women who fought to enjoy the freedom of having a choice. The benefits of sport participation are broad and well documented. Considering just the small portion of benefits listed above, sport participation should be encouraged and positive for those who choose to participate. Unfortunately, sport participation is not a positive experience for many athletes at all levels. As previously mentioned, coaches can have a tremendous impact on the type of experience athletes have through sport participation. Research needs to continue to examine more specifically the
role coaches play, and how coaching behaviors can limit or enhance athletes’ enjoyment, performance, and motivation.

**Purpose of the Study**

The first purpose of this concurrent embedded mixed methods study was to examine the expectation-performance interaction process that illustrates a self-fulfilling prophecy occurring between coaches and athletes. Coaches’ behaviors toward athletes based on the performance expectations of each athlete were examined to verify a relationship between coach feedback behaviors and feedback types perceived by female collegiate athletes at Division I athletic programs located in the United States. The independent variable was the type of expectation the coach forms for each athlete, and the dependent variable was feedback behaviors issued by the coach and perceived by the athlete. A second purpose of this study was to examine the affects of perceived coaching behaviors on athletes’ perceived competence and motivation. The constructs of Self-determination theory, specifically cognitive evaluation theory, were used to illustrate a relationship mediated by perceived competence between perceived coaching behaviors and self-determined types of motivation. The independent variable for this portion of the study was perceived coaching behaviors athletes report. The dependent variables were the athletes’ perceived competence levels and type of motivation reported. Structured, open-ended interview questions were used to contribute and add support to the quantitative data collected pertaining to perceived coaching behaviors and the affect on intrinsic motivation.

**Hypotheses**

Using data collected from male and female Division I softball head coaches and female Division I softball athletes in the United States, the quantitative analyses were guided by the following hypotheses:
1. No distinct expectancy groups would emerge from the first time point that indicates coaches’ high or low expectations about the athletes. Coach expectancy scores were used as the independent and grouping variable for this hypothesis.

2. Perceived sport competence would not be correlated with intrinsic motivation or with self-determined extrinsic motivational types. Scores from the measure of perceived sport competence and motivation were the variables for this hypothesis.

3. Athletes would not experience a change in perceived sport competence or self-determined motivation over the course of the fall season. The independent variable for this hypothesis was cluster group membership. The dependent variables were scores from the perceived sport competence and motivation measures.

4. Athletes would not perceive different coaching behaviors based on group assignment over the course of the fall season. The independent variable for this hypothesis was cluster group membership. The dependent variable was scores from the perceived coaching behavior measure.

Using data collected from female Division I softball athletes in the United States, the qualitative data collection was guided by the following research question: How do female Division I softball athletes perceive head coaches to affect their intrinsic motivation to play softball? Specifically, what types of coaching behaviors do athletes perceived to alter their motivation to play softball? Responses to structured interview questions were used to enhance quantitative data collected.

**Significance of the Study**

A review of the literature discusses the many benefits sports participation may produce. Benefits range from physical (Sallis & Owen, 2003; U.S. Department of Human Health, 1997) to
academic (Bailey, 2006; Broh, 2002; Marsh & Kleitman, 2002) to psychological (Fox, 2000; Hills, 1998; Smith & Smoll, 2002). The literature discusses the often overshadowing affect a coach can have on athletes’ desire to continue sports participation (Amorose, 2003; Bell, 1997). The literature presented introduces Self-determination theory (SDT) (Deci & Ryan, 1985) as a foundation for an explanation of how motivation differs within individuals and factors that can influence motivation.

Ample research exists supporting the constructs of SDT, but research is inconsistent on the mediating roles of the three basic psychological needs (perceived autonomy, competence, and relatedness) to intrinsic motivation. Some research shows all three needs must be met for intrinsic motivation to be increased (Hollembeak & Amorose, 2005). Other research argues the need for autonomy is the most important to increase intrinsic motivation (Amorose & Horn, 2001; Black & Weiss, 1992; Alamagro, Saenz-Lopez, & Moreno, 2010). Little research presents the need for perceived competence as the strongest mediator to intrinsic motivation (Hollembeack & Amorose, 2005; Horn, 2000). The first way this study contributes to existing research is the need for perceived competence is the only basic psychological need assessed. This study attempted to show a direct positive relationship between perceived competence and intrinsic motivation.

A second way this study contributes to existing research is by continuing the examination of different types of coach feedback that is perceived by the athlete. Exhaustive research is warranted on this subject because of the extreme impact the coach can have on an athlete (Bell, 1997; Jowett & Cramer, 2010; Treasure, 1997). Most of the research to date has been focused upon the affect of perceived coaching behaviors on intrinsic motivation as a whole, studying male and female athletes together as opposed to separately. Few researchers have attempted to
examine gender differences with regard to perceived coaching behavior and motivation. Among these studies, most have found that female athletes report lower levels of self-perceived athletic competence and global self-worth than male athletes (Gill, 1992; Hollembeak & Amorose, 2005; Vallerand & Bissonnette, 1992; Vallerand, Blais, Brière, Senecal, & Vallieres, 1992). Interestingly: however, females tend to show more self-determined intrinsic motivation across a variety of life domains, including education and sport, than males.

Another consideration concerning perceived coaching behaviors that has not been examined thoroughly is the determination of specifically which types of behaviors are more conducive to intrinsic development in each gender. Research has shown that male athletes generally prefer more competitive environments for more extrinsic reasons (Gill, 1992) due to their desire to compare their success to their peers success (e.g., ego-oriented goals), but females gravitate toward situations that emphasize performance accomplishment for more intrinsic reasons due to their desire to base success on their own effort and improvement (e.g., task-oriented goals) (Duda, 1992; Treasure & Roberts, 1994; Williams, 1994, 1998). Males and females are unique in their motivation to participate in a sport; therefore, the types of feedback they need to foster an environment for intrinsic growth should be considered.

Research has clearly indicated that coaches can influence the self-esteem of an athlete over the course of a season (Smith & Smoll, 1990; Smith et al., 1979, 1995; Stewart & Taylor, 2000). Other research has shown that coaching behaviors can have an effect on the athlete’s perceived competence and motivation to play (Amorose & Horn, 2001, 2002; Amorose & Weiss, 1998; Black & Weiss, 1992; Vallerand & Losier, 1999; Weiss & Ferrer Caja, 2002). Coaches can play an instrumental role in athletes’ careers; thus further research into coaching behaviors and their affects on motivational climates needs to be conducted. Although research exists on the
expectation performance process (Horn, Lox, & Labrador, 1998; Krane et al., 1991; Rosenthal, 1974; Sinclair & Veale, 1989; Solomon et al., 1996; Solomon, DiMarco, Ohlson, & Reese, 1998; Solomon et al., 1998; Solomon & Kosmitzki, 1996; Solomon, 2010; Solomon & Rhea, 2008), no published research was found that examined the expectation-performance process, resulting coach behaviors, and the effect on athletes’ intrinsic motivation to play within one study using mixed methods procedures.

**Delimitations**

This study was delimited to female collegiate softball players competing in the Division I category as defined by the National Collegiate Amateur Association (NCAA, 2012). This study was delimited to male and female head softball coaches at the Division I competing level. A third delimitation was the use of the Physical Self-Perception Profile: Sport Competence Subscale (PSPP; Fox, 1990). The complete PSPP contains five subscales assessing individual perceived sport competence, physical condition, body attraction, self-worth, and strength. Each subscale contains six items. The perceived sport competence subscale was isolated for use because this is the only subscale relevant for the purpose of this study. The items for the PSPP were developed for and validated by a sample of university students. The items are clear and easy to distinguish between response choices.

**Limitations**

This research has limited generalizability because of the selection of population. The results of the study are only generalizable to female collegiate softball players and coaches competing at the Division I level in the United States at participating institutions. Results cannot be generalized to male collegiate athletes, female collegiate athletes at any other competing level, youth, or adolescent athletes. Results are only generalizable to collegiate softball athletes.
and coaches. Results cannot be generalized to any other type of coach outside of the sample selected for this study.

A second limitation of this study is the use of instruments selected for quantitative measurements. Although all measures were validated and used in previous published research, the number of uses for each measurement is few. The use of one subscale of the PSPP is a limitation. The sport competence subscale consists of six items, and may not be a thorough assessment of perceived sport competence.

A third limitation pertains to issues with the quantitative analyses. Motivation subscales pertaining to intrinsic motivation, integrated regulation, and amotivation displayed unequal variances at both data collection points. Despite removal of outliers, exploratory normality, and data transformations, unequal variances remained. Interpretation of results pertaining to these variables should be examined with caution. A fourth limitation that may have contributed to unequal variances was sample size of low expectancy athletes. Of the 148 participants involved in group comparisons, low expectancy athletes represented only 11% (n = 17) of the sample. Cluster analysis was used to form expectancy groups, and this group was underrepresented for the study. Results pertaining to low expectancy athletes should be regarded with caution.

Summary

Identifying the coaching behaviors that can positively or negatively influence an athlete’s motivation to play a sport is crucial for success of the individual athlete, coach, and team. Coaches are in positions to have tremendous impact in athletes’ lives from a personal and athletic perspective (Bell, 1997; Jowett & Cramer, 2010; Treasure, 1997). Ryan and Deci’s (1985) Self-determination theory provides a sound framework to identify factors in the environment that can influence motivational development. In conjunction with Horn et al.’s
(1998) expectation performance process that outlines a self-fulfilling prophecy in sport, research can expand the understanding of what motivates athletes.

**Overview of the Remainder of the Study**

The following chapter gives an overview of relevant literature and deeper discussion of the issues presented. Chapter III provides the proposed quantitative and qualitative methods, and explains the research design, participant selection, and measures. Chapter IV presents the results of the quantitative analyses. Chapter V presents finding from the qualitative analyses. Chapter VI concludes with a discussion of the findings and possible explanations of the results produced.
CHAPTER II

Review of the Literature

The review of literature is presented as follows: first, potential benefits, and hazards, of participation in competitive organized youth sports teams is summarized and discussed. Second, the coach’s impact on athletes is briefly discussed to highlight the importance of the coach’s role in the provision of ongoing, positive experiences for athletes. Third, motivation is explained from a Self-determination theory perspective to highlight the benefits of self-determined behavior. The theory and associated sub-theories created by Edward Deci and Richard Ryan (1985; Ryan & Deci, 2000, 2007) are examined to provide a framework for the reasons individuals participate in sports, and the environmental and social determinants and deterrents of motivation. Fourth, from the foundation provided by Ronald Smith and Frank Smoll (1979), the impact of coaching behaviors on athletes is discussed in detail. Cognitive evaluation theory, a sub-theory of self-determination theory, is used to outline the potential impact coaching behaviors can have on athletes’ motivation toward their sport. Fifth, the self-fulfilling prophecy is defined and discussed to show how expectations formed by leaders can have an impact on subordinates’ performance outcomes. Horn et al.’s (1998) four-stage expectation-performance interaction process is used to explain self-fulfilling prophecy (or expectancy) effects, within sport, and the potential outcomes created by coach expectations. Finally, a connection is established between the behaviors created by an expectancy effect and the potential for impact on athletes’ intrinsic motivation toward their sport.
Positives and Negatives of Youth Sport Participation

Long before youth sports teams were officially formed, children were playing games with and against each other, but play was essentially self-directed and occurred without formal adult organization. The initial focus of organized youth sports teams and programs was to offer an environment for children, primarily males, that would occupy their time in an effort to keep them out of trouble (Seefeldt & Ewing, 1997), and to provide character building activities that would assist their transition from childhood to adulthood (Berryman, 1996). Since the development of organized youth sports, more specific benefits of participation have emerged for youth sports including impact on physical, behavioral, and psychological aspects.

The Centers for Disease Control and Prevention (CDC) report on Physical Activity and Health clearly indicates the physical benefits of activity in general (U.S. Department of Human Health, 1997). The benefits of regular physical activity in childhood and adolescence are much the same as for adults. Benefits include improved strength and endurance, healthy bones and muscles (Sallis & Owen, 2003), weight control (Dietz, 1998), reduced anxiety and stress levels (Calfas & Taylor, 1994), and a healthier blood pressure and cholesterol levels while decreasing the risk for cardiovascular disease (Twisk et al., 1999; U.S. DHH, 1997). For female athletes specifically, research indicates sports participation is associated with reduced incidence of body dissatisfaction (Miller et al., 2000; Physical Activity, 1997) and eating disorders (Tiggemann, 2001). Despite the long history of youth sport participation and documented physical benefits of physical activity in the United States, the staggering number of obese children and adults in the country increases each year. Data taken from the 2009-2010 National Health and Nutrition Examination Survey reported 16.9% (approximately 12.5 million) of children and adolescent ages 2-19 years old were obese (Ogden, Carrol, Kit, & Flegal, 2012). That number has almost
triplled since 1980. The response to use sports and physical activity as an intervention for the rapidly growing obesity epidemic has motivated important political figures to create campaigns. The First Lady of the United States, Michelle Obama, has stated a Nation-wide effort titled “Let’s Move” (Let’s Move, n.d.). Part of the “Let’s Move” campaign involves working with state and local communities to get children involved in some type of sport or physical activity experience because of the scientifically based research showing participation is beneficial. The physical benefits of youth sport involvement are abundant and well documented. Other research has focused on the relationship between sport participation and higher wages and income after the completion of high school (Barron, Ewing, & Waddell, 2000; Curtis, McTeen, & White, 2003; Ewing, 2007, 1995). The increasing interest in benefits that bolster academic achievement (Bailey, 2006; Dwyer, Sallis, Blizzard, Lazarus, & Dean, 2001; Hills, 1998; Marsh & Kleitman, 2002; Shephard, 1997), self-efficacy (Bailey, 2006; Physical Activity, 1997), and social behavior (Miller et al., 2000; Miller et al., 2002) is gaining momentum in the public sector.

Broh (2002) examined data from the National Educational Longitudinal Study of 1988 (NELS: 88) to analyze the affect of extracurricular activities on academic achievement. The NELS: 88 is a nationally representative longitudinal study supported by the National Center for Educational Statistics and the U.S. Department of Education. Participants for this study were a stratified cluster national probability sample that consisted of 24,599 eighth grade students from 1,052 public, private, and parochial schools across the United States. Participants were asked to complete surveys pertaining to schoolwork, attitudes, family, relationships, and behavior. Follow up surveys were issued to the same students when they were in 10th grade, and again in 12th grade. Curriculum-based achievement tests in math, science, reading, and history were administered in the same years as the surveys. The analysis used data from the 10th and 12th
grade assessments. To qualify for analysis, students must have completed the 8th grade questionnaire and tests, remained in school through 12th grades, and have valid scores from the four achievement tests. The final analysis group returned 12,578 diverse participants. For this sample of participants, the highest portion of consistent student participation came from students participating in interscholastic sports. The author centered analysis on sport participation and performed additional analysis for other types of extracurricular activities. Ordinary least squares regression analysis was performed on three models. The three models consisted of whether sports participation affected grades between the 10th and 12th grade, whether sports participation would affect a developmental model the author was interested in, and explanatory power of these three models in mediating the relationship between sports and academic achievement.

Results showed a small, but consistent benefit for students who participated in sports on grades, especially in the area of math. Participation in sports was related to a significant increase in students’ locus of control, time spent on homework, self-esteem, and social ties. Although sports participation may not entirely explain improvement in academic achievement, this study demonstrated participation does have a positive influence on students who choose to play.

Other studies have indicated similar outcomes from sport participation. The Centers for Disease Control and Prevention (CDC, 2010) conducted a review of peer reviewed journal articles of studies conducted within the United States studying the associations between physical activity and academic performance. Physical activity was defined as studies that included research on school-based physical activity classes, recess, in-class physical activity, and extracurricular activity (both school and community related events involving physical activity). Academic performance was defined as cognitive skills and attitudes (attention/concentration, memory, verbal ability), academic behaviors (conduct, attendance, time on task, homework
completion), and academic achievement (standardized test scores, grade point average). Forty-three articles met the criteria for review, and the overall results showed that 50.5% of all associations measured were positively associated with physical activity, and only four (1.5%) associations were negative. Studies testing the associations between extracurricular activity (mostly sports team involvement) and academic performance showed all neutral (46%) or positive (52%) associations. Grade point average was positively associated with extracurricular physical activity 54.5% of the time. Participation in physical activity was connected to a negative relationship with high school drop-out rates. Some of the studies included for assessment were studies that used physical activity as an intervention. The included intervention studies examined the use of extracurricular physical activity to influence self-esteem and all showed positive associations. All of the intervention studies aimed at enhancing academic performance through involvement in extracurricular physical activity showed some positive impacts on verbal and conceptual skills and grade point average combined or individually (CDC, 2010).

Other research has indicated that females, in particular sports participating females are more likely to graduate from high school than those who do not participate in sports (Sabo, Melnick, & Vanfossen, 1989). The National Collegiate Athletic Association (NCAA, 2007) reports that, of the students attending NCAA Division I schools between the years 1984-2000, female athletes posted the highest graduation rates ahead of all non-athlete students combined and male athletes. The NCAA reported in 1998 that for all female student-athletes registered with the NCAA, 71% graduated within six years of initial enrollment. This number is 8% higher than the overall female student graduation rates (non-athletes and athletes combined), and is 16% higher than the reported male student-athletes’ graduation rates (NCAA, 2005). Another comprehensive analysis funded by the Women’s Sport Foundation (Staurowsky, DeSousa,
Ducher, Gentner, Miller, Shakib, Theberge, & Williams, 2009) concluded that participation in physical activity and sports are essential for the overall well being of the developing woman, and that there is a positive link between female sport participation (and physical activity) and academic performance.

Organized sports teams were formed with a fundamental focus of using sports to distract children from compromising behavior, and to provide stable moral environments for them to develop sound characteristics (Berryman, 2006). The character building and social impacts of sport participation has been a topic for years among developmental theorists because of the correlation found between successful skills and habits in academics, sports, and everyday life (Danish, 2002; Eccles, Barber, Stone, & Hunt, 2003; Ewing, Gano-Overway, Branta, & Seefeldt, 2002; McHale, Vinden, Bruett, Richton, Shaw, & South, 2005). Within the scope of moral behavior is sexual activity, and teen pregnancy has been an issue receiving large amounts of attention for years. Each year, approximately 750,000 women under the age of 20-years old become pregnant with two-thirds of those pregnancies reported occurring between the ages of 18-19-years old (Kist, Henshaw, & Carlin, 2010). By both male and female teenagers’ 19th birthday, seven out of ten teenagers will have had intercourse (Abma, Martinez, Mosher, & Dawson, 2010) with the average age of their first sexual experience around the age of 17 years (Chandra, Martinez, Mosher, Abma, & Jones, 2005). Sport participation as an intervention for sexual behavior among female athletes has become a growing area of interest considering approximately four out of ten girls will become pregnant at least one time before they turn 20-years old (Sabo, Miller, Farrel, Barnes, & Melnick, 1998).

Savage and Holcomb (1999) used data from the CDC 1993 Youth Risk Behavior Surveillance (YRBS) resulting in a sample of 7,839 female high school students across the
United States. A cohort sample of high performance female athletes (n = 141) in the 9th through 12th grade was used for comparison to the national sample for risk-taking behavior regarding sexual activity. Chi-square analysis revealed high performance athletes reported significantly less frequent risky sexual behavior and were less likely to be sexually active than their non-athlete counterparts. The results of this study give support to sports involvement reducing some sexual risk-taking behaviors.

Other studies have indicated a lower prevalence of sexual risk-taking behaviors for females who participate in sports (Kulig, Brener, & McManus, 2003; Sabo et al., 1998). Research has related sports participation to female student athletes remaining sexually abstinent longer, experiencing their first sexual encounter later in adolescence, having fewer sex partners, making the choice to use contraceptives more often, and having sex less often resulting in less exposure to sexually transmitted diseases as compared with their non-athletic counterparts (Brown, Ellis, Guerrina, Paxton, & Poleno, 1997; Kulig et al., 2003; Sabo, Melnick, & Vanfossen, 1989; Sabo et al., 1998).

With such staggering statistics for teen pregnancy, there have been many attempts to create interventions ranging from teen developmental classes and mentor assignments (Allen, Philliber, Herrling, & Kuperminc, 2006; Bennet & Assefi, 2003) to a wide variety of abstinence and awareness programs (see Card, 1999 for review). Physical activity used as an intervention has been documented as having the same affect on sexual behavior as sports participation, and there are many studies supporting the use of physical activity to aid with the teen pregnancy problem (Colchico, Zybert, & Basch, 2000; Pate, Heath, Dowda, & Trost, 1996). Surprisingly, there is not as much research on using sports participation as an intervention method for female sexual behavior despite the potential positive outcomes. The research that does suggest using
sport participation as an intervention reports the same benefits that female athletes display by participating in voluntary physical activity exercises (Harrison & Gopalakrishnan, 2009; Reppucci, 1987). An important note for using sports participation as an intervention is some research has shown that although females displayed more positive sexual behaviors, male athletes were more likely to have sexual intercourse earlier and more sexual encounters than non-athletes (Habel, Dittus, DeRosa, Chung, & Kerndt, 2010; Zill, Nord, & Loomis, 1995). Although sport participation may be a beneficial intervention strategy for female athletes, a different intervention method may be better suited for male athletes.

One last noteworthy benefit of sports participation is the desirable relationship to positive psychological outcomes such as higher self-esteem or self-efficacy (Fox, 2000; Hills, 1998). An individual’s self-efficacy beliefs about the self develop from actually performing a skill as part of a behavior and receiving positive or negative feedback about the performance (Diekman & Eagly, 2008). Studies by Colton and Gore (1991), Ebben and Jensen (1998), Fox (2000), Hills (1998), and Tiggemann (2001) have involved comparing female student-athletes and non-athletes’ self-esteem levels. Each study has shown significantly higher levels of self-esteem in females who participate in sport organizations. Tiggemann’s (2001) study of 306 middle class female high school aged students measured life concerns, leisure activities (e.g., participation in organized sports or exercise), body dissatisfaction, disordered eating, and global self-esteem to gather information about eating disorder and self-esteem predictors on a broad scale. Multiple regression analysis showed a unique negative correlation between sport success and body dissatisfaction, and participation in organized sports was correlated with higher self-esteem levels. With the evidence presented, there seems to be many potential benefits for all children, and particularly females, to participate in sports activities.
Nonetheless, there have been researchers who have expressed concern about potential hazards for females, in particular, participating in sport. For example, studies on adolescent and college aged girls have shown that participation in sports that emphasize body composition for appearances (e.g., figure skating, gymnastics, dance, or cheerleading) may be associated with increased risk of eating disorders, obsessive weight concerns, body dissatisfaction, and excessive dieting (Brooks-Gunn, Burrow, & Warren, 1988; Davis & Cowles, 1989; Weeda-Mannak & Drop, 1985; Zucker, Womble, Williamson, & Perrin, 1999). Smolak, Murnen, and Ruble’s (2000) meta-analytic review of the mentioned studies however, revealed that athletes were only somewhat more at risk for eating disorders than non-athletes, and that most of the risk lies with elite level athletes. Although studies have shown more of an effect in elite level athletes, the risk of the female athlete triad is a major concern for health professionals (McCormick, 2007). The female athlete triad consists of three health issues that can escalate into more severe issues if not monitored. The triad is complete with the onset of disorderly eating, amenorrhea, and osteopenia leading to osteoporosis. This syndrome is most often triggered by eating disorders paired with over-training that is often a characteristic of body-conscious sports (McCormick, 2007).

Davison, Earnest, and Birch (2002) examined five (n = 197) and seven (n = 192) year old girls and their mothers over a two-year span. Each parent and child was interviewed to assess weight concerns and sport participation, and participant weight measurements were taken when the participant started the program. Program initiation occurred either when the participant was five-years old or seven-years old. The categories used to identify participant groups were: a) participation in aesthetic sports, b) participation in non-aesthetic sports (e.g., volleyball, soccer, basketball, softball, hockey, tennis, martial arts, and track), or c) non-sport participation. ANOVA results of this study indicated that females ages 5 and 7-years old who participated in
aesthetic sports reported higher weight concerns than the other two groups (F(1,187) = 5.71, p < .05 at age 5; F(1,191) = 4.43, p < .05 at age 7), and weight concerns within this group were highest at the age of 7-years old. Body image and eating disorders are the most popular issues that legitimately affect female athletes, but the benefits of female participation in sports may help to balance the negative possibilities if athletes’ experiences are positive during their participation time (Cronin & Mandich, 2005; Smith et al., 1995).

The attention competitive sport participation has received has drawn the interest of experts outside of sport sciences. For example, Hansen, Larson, and Dworkin’s (2003) study of 450 high school students’ involvement in extracurricular and community-based activities, including sport participation, revealed reports of higher rates of learning experiences, and development of team skills with those involved in sports and extracurricular activities. Larson (2000) suggested that extracurricular activities like sports help to cultivate motivation and intense concentration in adolescents. Although these studies found benefits of sport participation, negatives were found as well, such as increased instances of reported peer pressure and inappropriate adult behavior by coaches.

The physical, psychological, and social benefits of sport participation cannot be gained from involvement alone. The quality of adult leadership is a vital factor in capitalizing on all of the potential benefits sports participation (Bell, 1997). A concern for children across both genders participating in competitive sports is the reality of subjecting them at a young age to an environment where the pressure to win is too severe (Cronin & Mandich, 2005). Critics believe parents and coaches place too much emphasis on winning the game instead of focusing on teaching the skills and enjoying the process. As Larson (2000) and Hansen et al. (2003) reported, many sports participants experience inappropriate, negative behavior by coaches. Sport coaches
are in positions suitable for influence on athletes. The International Institute of Coaching (IIC) provides a fundamental definition of a coach as someone who provides processes that are enlightening and results-oriented with interactive teaching methods, and states coaches have the responsibility to provide a supportive environment to allow for athletes to develop natural skills to maximize potential (IIC, 2012).

**The Coach-Athlete Relationship**

The environment of youth sport is a one where the coach can have a strong influence on the value and character of the sport experience especially for younger athletes (Bell, 1997). Coaches play several roles in the lives of the athletes they coach. Coaches can act as a teacher, mentor, and leader for athletes. The nature of their interactions with their athletes can greatly influence athletes’ motivation and enjoyment of sport participation because of their powerful position (Gallon, 1980; Wang, Koh, & Chatzisarantis, 2009). Young athletes are especially sensitive and rely more heavily on social evaluations from people they have designated to be important figures in their lives (Amorose, 2003) and often select role models who are older, more skillfully advanced, and more experienced (Taylor, Wayment, & Carrillo, 1996). Many athletes name their coach as one of these important figures, along with parents, teammates, and opponents, but the relationship between a coach and an athlete has routinely been found to be an important factor related to athlete performance (Amorose, 2003; Lyle, 1999; Snyder, 1972). The coach can affect the level of enjoyment of the sport, lasting memories of playing time, the athlete’s preparation to continue competition (Smith et al., 1995), and strategies the athlete uses to set and attain performance goals (Smith et al., 2010).

Smith et al., (2010) studied 108 male and female British athletes, to better understand the process of striving to achieve goals in their sport. Part of their study examined the role of coach
behaviors as potential predictors for goal objectives at the start of the season, the affects of the objectives at the mid-point of the season, and the athletes’ well being. Results obtained through hierarchal multiple-regression analysis showed that the athletes who perceived their coach to display behaviors that allowed the athletes to feel as if they had a choice in their training regimen used a more autonomous goal setting process. Over the course of the eight-week study, the athletes who displayed more autonomous goal setting behaviors showed a positive increase in psychological well being because their goal attainment process was more self-determined.

Athletes who perceived their coaches to display more controlling behaviors generated internal and external pressure as they were forming their goals. Psychological well being for the controlled athletes was not as high as for the autonomous athletes because goal attainment was driven by pressure rather than self-determined behavior. Overall, the study showed coaches do have an impact on athletes’ goal formation, attainment, and resulting psychological well being.

Jowett and Cramer’s (2010) study examined coaches’ impact on athletes’ physical well being. This study examined 173 adolescent and young adult British athletes (male and female) to determine if younger athletes use the perceptions of their relationship quality with their coaches and parents separately or combined to predict their descriptions of their physical being. Physical being was defined as skill ability, body shape, physiological competence, mental competence, and overall performance. The researchers used only track and field and gymnastics athletes due to the close nature of the parent relationship with these types of athletes. Even though only two types of athletes were measured, hierarchal regression analysis showed the athletes’ perceived meaningfulness of the relationship with their coach was a significant predictor of all physical well being descriptors. A coach-athlete relationships including perceived conflict was a negative predictor of perceived psychological competence and overall performance. Further analysis
revealed the longer athletes had been involved in the sport the more they desired a positive, supportive relationship with their coach. One last noteworthy finding of this study is the parent-athlete relationship did not significantly predict any of the physical self-descriptors. The only meaningful relationship for these athletes on their perceptions of physical self was the relationship they held with their coach.

One responsibility, out of many, of a coach is to provide some type of feedback about skill performance so the athlete can self-assess and know when the skill is correct and successful, or when to make an adjustment to improve the skill. Athletes on competitive sports teams complain often about the coach’s feedback style as a reason for decreased levels of performance and enjoyment (Gearity, 2011; Garity & Murray, 2010; Turman, 2003). Research has shown critical or disciplinary feedback from a coach to create high levels of negative outcomes in youth athletes, especially in children who fear failure and disapproval (Passer, 1988). Past experiences and enjoyment level of sports participation contribute to the motivation to continue practicing a sport or skill (Cronin & Mandich, 2005). Discontinuation of sport participation is at its highest levels at the ages of 11 to 12-years old. Approximately 35% of young athletes quit all forms of competitive sport participation completely, or drop out of one sport and switch to another (Hedstrom & Gould, 2004). Athletes who have terminated sport participation have revealed through interviews and inquiries important reasons for discontinuation. The number one most repeated reason for sport termination among boys and girls was the sport was no longer interesting to them. The number two reason reported explaining termination was because the sport was no longer fun, and the number three explanation for sport termination was due to poor coaching behaviors or relationships (Seefeldt et al., 1992). The coach-athlete relationship is a
very important component of not only a successful athletic career, but also a continued athletic career (Schinke & Tabakman, 2001).

An individual’s interpretation and experience in any given situation can be vital in determining achievement behavior and developing adaptive (working hard, pursuing challenging goals, persisting when faced with difficulty) or maladaptive (seeking easy tasks, less effort toward the task, quitting when faced with difficulty) achievement strategies (Treasure, 1997). The type of motivational orientation an individual has to participate in a particular task is the foundation for the amount of persistence toward an activity, behavior, or skill the individual will display (Ryan & Deci, 2000). Self-determination theory can be useful for explaining the differences within and causes of motivation in individuals and how motivation relates to athletic pursuits (Ryan & Deci, 2000, 2007).

**Motivational Theories**

Understanding why athletes play a sport and continue participation is an important topic for many groups of people, but especially for coaches and researchers. Knowledge of what motivates, or de-motivates, athletes to participate can help others create environments that will enhance the motivation and enjoyment of sport for other participants (Vallerand & Fortier, 1998).

One definition of motivation is motivation is the direction and intensity of effort toward a task (Weiss & Ferrer Caja, 2002). People engage in different activities with varying levels of energy and persistence. Motivation has been a central and recurrent issue in psychology because of its consequences (Ryan & Deci, 2000). Motivation can produce desired results, and therefore is a great concern to people in roles that encourage others to act, such as managers, teachers, religious leaders, health care providers, parents, and coaches. Many researchers and individuals
refer to motivation as a singular construct, but people have been found to perform activities because they are motivated internally or externally (Deci & Ryan, 1985; Ryan & Deci, 2000, 2007). Linnenbrink and Pintrich (2002) discuss three assumptions about motivation when applying social cognitive theories. The first, and most important, assumption is that motivation is dynamic and complex. People can be motivated in several, overlapping ways, and practitioners must find out how each person is motivated toward an activity. The second assumption is that motivation is not a set construct. Individual motivation can vary based on the context and situation. The third assumption is the individual’s continuous control of personal behavior, beliefs, and motivation mediates the relationship between the individual and the circumstance and future achievement. The individual’s perceived thoughts and beliefs about a situation or context play a large role in motivation (Linnenbrink & Pintrich, 2002).

The foundation for motivational theories is assumptions about the nature of people and the situations or factors that encourage people to act (Deci & Ryan, 1985). The theories fall along a continuum from mechanistic to organismic, and the assumptions about action follow the same definitions. Mechanistic theories describe individuals as passive in motives for action. The interactions between psychological drives and environmental stimuli push passive individuals around as the individual makes a decision to act. Organismic theories describe individuals as making choices about action and starting the action actively instead of being passively directed. In organismic theories, the individual is driven by intrinsic needs and psychological drives, and these two factors give the individual the energy to actively pursue an action rather than simply function reactively to the environment (Deci & Ryan, 1985). Organismic theories regard external stimuli as opportunities for the individual to satisfy his or her needs rather than causes for
behavior, and the psychological meaning of the stimuli is more important than the characteristics of the stimuli.

The development of drive theories initiated the study of motivation (Freud, 1960; Hull, 1943). Drive theories, or instinct theories, operate on the thought that action is fueled by innate instincts within each individual (sex, aggression, hunger, thirst, and pain avoidance) and once the need is fulfilled, there is a reinforcement for future behavior. Some complications with original drive theories are the drives and actions resulting from drives are innate and uncontrolled, and reasons for action are conflict-based (Ryan & Deci, 1985). Human behavior can exist and move toward action without conflict (Hartman, 1958), so research shifted to focus more on intrinsic motivation and self-determined behavior (Deci & Ryan, 1985).

White (1959) is credited with shifting the focus from drive theory to effectance motivation. White (1959) used the term “effectance” because he believed individuals are born with a desire to complete a task or action with a goal of accomplishing a purpose. White (1959) argued that the feeling of effectively accomplishing the purpose with a sense of competence (i.e., “effectance”) was the reward for these types of behaviors, and this type of action and competence reward was separate from drive-based reinforcements. From White’s (1959) historic paper, many other types of theories have evolved concerning ego, or intrinsic motivation, (Deci & Ryan, 1985) and action either as a derivative of drive-based actions and an outcome of conflicts between the self and the social environment (e.g., Rapaport, 1967), or separate from drive-based actions and exposing innate characteristics (e.g., Shapiro, 1981; White, 1963; Wolstein, 1982). Shapiro (1981) described previous mechanistic drive theory approaches as illustrating impulses (i.e., drives) explaining awareness for action, but drive theory does not explain theory behind action. Shapiro (1981) suggested a need for theory encompassing the need
for self-direction toward choices, the flexibility of individual attitudes directing action, and choices made concerning future outcomes. Shortly following Shapiro’s (1981) suggestions, Deci and Ryan (1985) created a motivational theory that focuses on the “energization” (Deci & Ryan, 1985, p. 7) and course of behavior. They named the theory Self-determination theory, and it contains motivational constructs to arrange behavioral, cognitive, and effective variables.

**Self-determination theory.**

Deci and Ryan’s (1985; Ryan & Deci, 2000, 2007) Self-determination theory (SDT) is a broad meta-theory for the study of human motivation and personality. The theory attempts to explain human behavior and motivation based on individual differences in motivational orientations, background influences on motivation, and interpersonal perceptions. SDT is flexible in that it allows for exploration of the interaction between self-determined and non-self determined processes and behaviors. The central theme of SDT is defining the differences in self-determined, autonomous forms of motivation, and non-self-determined, controlling types of motivation. By examining the perceived forces that persuade a person to act, SDT has been used to illustrate several different types of motivation (Ryan & Deci, 2000). Each type of motivation has definable outcomes for learning, performance, personal experience, and well being. SDT does not focus on what causes motivation, but rather the conditions that extract and sustain, verses suppress and lessen self-determined motivation.

Three basic needs are presented within SDT that are argued to foster the desired and high quality forms of motivation and engagement for activities. SDT states humans have a fundamental need for autonomy (the degree to which an individual feels personal control or choice of actions), competence (the extent to which the individual feels he or she has the ability) and relatedness (the degree to which the individual feels connected) toward an action, behavior,
or skill for them to be intrinsically motivated to perform the action (Amorose & Horn, 2001; Deci & Ryan, 1985; Ryan & Deci, 2000; Vallerand & Losier, 1999). These three needs are considered vital toward the individual’s development, integrity, and welfare (Ryan & Deci, 2000), and can influence performance, persistence, and creativity. Conditions that create optimal environments to foster these three needs can lead to desired motivational outcomes, but conditions that undermine the development of the needs can have a strong harmful impact on well being within that setting (Deci & Ryan, 2000; Ryan & Deci, 2000). SDT consists of five mini-theories that further explain motivation in terms of multiple constructs as opposed to a single construct. A brief description of each sub theory will help to understand the breadth and usefulness of SDT.

*Causality orientations theory (COT), basic psychological needs theory (BPNT), and goal contents theory (GCT).*

Causality orientations theory illustrates individual differences in people’s tendencies to familiarize with environments and control behavior in numerous ways (Deci & Ryan, 2000; Ryan & Deci, 2000). COT analyzes three types of causality orientations: a) the autonomy orientation is when a person acts because the individual is interested in the behavior and places value on the outcome, b) the control orientation is when a person if focused on social approval, external gains, and rewards from the behavior, c) and the impersonal (or amotivational) orientation is when the person experiences anxiety and stress relating to perceived competence level about the behavior.

Basic psychological needs theory expands discussion of developed psychological needs and their connection to psychological health and well being. BPNT argues that autonomy, competence, and relatedness predict psychological well being and optimal functioning for a
behavior. Situations that support, not prevent, these needs should indirectly have an impact on individual wellness. BPNT argues that if any of the three needs is prevented or damaged then there will be obvious functional problems because all three needs are essential.

Goal contents theory discusses the clear differences between intrinsic and extrinsic goals. The differences in the two types of goals are discussed in relation to the impact on motivation and wellness. Because each type of goal is different in the level and type of needs satisfaction achieved, the differences on the impact of well being are examined.

Organismic integration theory (OIT).

The organismic integration theory was created to show detailed differences in the forms of extrinsic motivation, and to show background factors that can either promote or hinder internalization and integration of the regulation of these types of behaviors (Ryan & Deci, 2000). OIT explains the types of motivation as existing along a continuum from the least self-determined to the most self-determined types of motivation. The more internalized the motivation, the more autonomous the person will feel toward the activity. The Self-determination continuum shown in Figure 1 illustrates the types of motivation OIT suggests. OIT focuses on the social contexts that foster or prevent internalization. The need for autonomy and relatedness are critical to internalization within OIT. The definitions and descriptions of the types of motivation included within the continuum will now be clarified.

Amotivation.

The first classification listed on the continuum is amotivation. Amotivation is the complete lack of motivation to perform a task. This is the least self-determined construct of motivation. Individuals feel as if they are being forced against their will to perform an action, skill, or behavior (Vallerand et al., 1992). Although amotivation is not considered a type of
motivation (Ryan & Deci, 2000, 2007), it is included in the continuum because people do experience a lack of desire to perform a task.

Extrinsic motivation involves participating in an activity for externally driven, or controlling, reasons such as receiving rewards, social approval, or avoiding punishment (Amorose & Horn, 2001; Ryan & Deci, 2000, 2007). Extrinsic motivation is divided into four types moving from lower levels of self-determination to higher levels of self-determination.

External regulation.

The least self-determined type of extrinsic motivation is external regulation. This type of motivation is controlled through external means such as rewards, social approval, and limitations (Amorose & Horn, 2001; Vallerand & Fortier, 1998). An example of external regulation would be if an athlete chooses to go to voluntary practice because the athlete knows the coach will be
happy about the decision. The athlete is being controlled by the knowledge of the benefits of having the coach happy with the actions, which include being accepted by the coaching staff.

*Introjected regulation.*

The second type of extrinsic motivation, and slightly more self-determined, is introjected regulation. This type of extrinsic motivation involves the person beginning to internalize the reason for action; however, it is not considered self-determined motivation because the behavior is completed to avoid guilt or anxiety, or to enhance the ego. In other words, introjection involves motivation toward an activity (or avoidance) to enhance feelings of self-worth or self-esteem (Deci & Ryan, 1985). For example, a soccer athlete chooses not to participate in a Home Run Derby contest sponsored by the softball team because the athlete knows hitting a softball with a bat is difficult. The athlete chooses to avoid failure and embarrassment in front of peers. Although the person begins to internalize reasons for action, the action is still not considered self-determined. Reasons for action based on introjected regulation can be made to avoid a reaction or be made based on previous experiences (Ryan & Deci, 1985, 2000).

*Identified regulation.*

Identified regulation is the third type of extrinsic motivation, and this type of regulation is considered self-determined because the choice to participate is made by the individual for internal reasons. The individual chooses to participate in a behavior because the person has placed value on the behavior even if the behavior is unpleasant. An example of this type of regulation is a golf athlete who chooses to improve personal stamina by running long distance. This athlete does not enjoy this activity, and it is not required for the sport, but the athlete knows the results will be beneficial to sport performance. The athlete is not receiving external pressure from an individual and is not attempting to avoid guilt. The athlete chooses to train under these
conditions solely for self and the potential benefits that may gain for sport performance: however, the reasons for action are still external because the athlete is motivated to run because of the potential gain in stamina that may be produced.

*Integrated regulation.*

The last type of extrinsic motivation and most self-determined type is integrated regulation. This type of regulation involves a person choosing to participate in activity because the importance and value of the activity have been integrated into the person’s sense of self. The difference between this type of extrinsic motivation and identified regulation is the behavior chosen is specific to the activity, but also to the well being of the self. For example, an athlete is a good student and chooses to study for and exam instead of attending a party the night before the exam. Performing well on the exam is important to the athlete because of the athlete’s belief in being a good student, as well as athlete. Doing well on the exam is important to the athlete’s sense of well being and is consistent with the actions of a typical good student.

Although extrinsic motivation does move through a continuum from being completely externally regulated to more self-determined types of motivation, the reasons to participate in an activity are based on external imperatives rather than to satisfy fundamental psychological needs. All individuals function and need varying degrees of each type of motivation (Ryan & Deci, 2000). The more self-determined types of extrinsic motivation, specifically identified regulation, have been linked to positive performance outcomes within the academic domain (Vallerand & Bissonnette, 1992).

*Intrinsic motivation.*

The strongest association with positive outcomes in any domain is with intrinsic motivation (Ryan & Deci, 2000; Vallerand & Bissonnette, 1992; Vallerand et al., 1987). Intrinsic
motivation is determined by the organismic need of the individual to be self-determined and competent toward the chosen action (Deci & Ryan, 1985). An example of purely intrinsic motivation would be a long distance runner runs solely for the pleasure the athlete receives from running. SDT leaves intrinsic motivation in one general group as opposed to breaking IM into different types. Some researchers have suggested intrinsic motivation can be further divided into three different types: intrinsic motivation a) to experience stimulation, b) to know, and c) to accomplish (Vallerand, Blais, Brière, & Pelletier, 1989). Regardless of grouping, this construct of motivation on the SDT continuum is the most self-determined and arguably the most important type of motivation and the benefits of intrinsic motivation will be discussed in more detail later.

_Cognitive evaluation theory (CET)._ 

A fifth sub-theory within SDT is cognitive evaluation theory. The goal of CET is to explain inconsistencies in intrinsic motivation between individuals (Ryan & Deci, 2000). Intrinsic motivation is defined as the motivation to do an activity, skill, or behavior for the simple pleasure and satisfaction received from the activity itself (Hollembeak & Amorose, 2005), and is constantly being developed or undermined throughout a lifespan (Deci & Ryan, 1985, 2000).

More specifically, CET suggests intrinsic motivation can be affected by social (e.g., feedback, communication avenues, rewards) and environmental factors. If circumstances allow, intrinsic motivation may flourish. The primary focus of CET is the roles of autonomy and competence in support of fostering intrinsic motivation (Amorose & Horn, 2001; Deci & Ryan, 1985; Ryan & Deci, 2000; Vallerand & Losier, 1999). Conditions that are perceived by the individual to foster these basic needs can aid in the development of intrinsic motivation, but
adverse conditions for development of the basic needs can have a negative impact on intrinsic motivation (Ryan & Deci, 2000; Vallerand & Losier, 1999).

Social factors, if given positively, can create feelings of competence toward an action, behavior, or skill within an individual, and in turn enhances intrinsic motivation; however, individuals must feel as if their action is self-determined (Conroy, Elliot, & Coatsworth, 2007; Vallerand & Reid, 1984). Henderlong and Lepper (2002) examined the affects of praise and instructional feedback on intrinsic motivation toward school tasks in children through an examination of research. Through an exhaustive search, they concluded that praise and instructional feedback is beneficial to the children’s perceived competence when statements are made about the children’s performance attributions as opposed to their ability for a task. As the children received sincere quality praise and instructional statements about their performance attributions (e.g., effort toward a task), their intrinsic motivation to complete a task increased. The children examined in these studies were rewarded with verbal, extrinsic rewards from a teacher or parent. Another point of emphasis within CET discusses the use of more tangible, extrinsic rewards in relation to intrinsic motivation.

CET constructs can be used to explain how extrinsic rewards can undermine intrinsic motivation. A landmark study was performed by Deci (1971; 1972) in a laboratory setting. Participants were asked to complete the SOMA puzzle, an activity that participants later labeled as a very interesting task. The SOMA puzzle is a seven piece plastic puzzle that can be composed to form thousands of configurations (Brennan & Glover, 1980). Since the initial use by Deci (1971) of the SOMA puzzle, this method of measurement has been repeated in approximately 20% of the studies on the diminishing effects of extrinsic reward on intrinsic motivation (Rummel & Feinberg, 1988). Three groups were used in the experiment, a direction
plus monetary reward group, a direction only group, and a control group (e.g., no directions or reward issued). The control group showed no change in this study. The directions and monetary reward group spent significantly less time on the task than the directions only group. The monetary reward group of this study declined in intrinsic motivation to complete the task once an extrinsic monetary reward was offered.

Deci (1971) was the first to determine from research concerning extrinsic rewards and the affect on intrinsic motivation that rewards facilitated an environment that diminished one of the basic human needs, autonomy, depending on the meaning of the information which was carried by the extrinsic reward. Since this early study, there have been numerous studies arguing that extrinsic rewards do not have a diminishing affect on intrinsic motivation (Boals & Cumming, 1981; Brennan & Glover, 1980; Cameron & Pierce, 1994; Eisenberger & Cameron, 1996). After an extensive meta-analysis on the effects of extrinsic rewards on intrinsic motivation, Deci, Koestner, and Ryan (1999) confirmed that in spite of other arguments, expected tangible rewards given for task performance do undermine intrinsic motivation, but individuals must feel as if they are performing a task for the purpose of receiving a reward for undermining to occur. Many sports team coaches issue external rewards, such as trophies, money, certificates, ribbons, and medals to acknowledge that athletes have been successful at a sport. Other types of external rewards that have been shown to have an impact on intrinsic motivation are sports scholarships (Amorose & Horn, 2000). Rewards can be anything external that is given to the athletes based on performance achieved or performance desired. Issuing rewards for success in a sport is done with the intention to show the athlete they have competency in that sport. Issuing rewards for this purpose is considered controlling. The rewards are given to athletes for successful performances to indicate sport competence, and can be used to influence athlete behavior (Wilson, 2000). CET
discusses that if an athlete believes behavior is being controlled by external sources then low levels of self-determination develop. Additionally, the athlete may develop a negative perspective about individual competence level, and intrinsic motivation will decrease.

However, another type of extrinsic reward is informational rewards. Informational rewards are comments issued to the athlete about the individual’s sport competence. This type of reward is considered feedback, and can be used to issue praise, technical instruction, or training instruction. If information is given and received positively by athletes, self-determination levels will be enhanced (Ryan & Deci, 1985, 2000). As athletes receive information about individual competence levels, the athletes believe they are in control over the situation and intrinsic motivation increases. Ryan and Deci’s (2000) cognitive evaluation theory demonstrates that athletes who receive positive information about their competence, and therefore enhance intrinsic motivation react more positively toward their coach’s behavior. However, when the athlete has low levels of self-determination, a lack of perceived control, and is motivated by more extrinsic factors, the athlete may respond negatively toward the coach and athletic situation.

Although CET proposes a negative relationship exists between extrinsic rewards and intrinsic motivation, research supports the more self-determined types of extrinsic motivation to produce positive effects. Vallerand and Bissonnette (1992) determined within the academic setting, not all forms of extrinsic motivation had a negative relationship with intrinsic motivation. In their study involving college students’ motivation toward academics, they discovered the more self-determined types of extrinsic motivation (i.e., integrated and identified regulation) were positively related to behavioral persistence toward school work. The more self-determined types of extrinsic motivation can have positive effects on behavior, as well as, intrinsic motivation, but intrinsic motivation had the strongest correlation with desired behavior

The importance of intrinsic motivation.

Research on the benefits of intrinsic motivation has been exhaustive, particularly in the educational and athletic domain. In general, people who are more intrinsically driven and self-determined to perform a behavior, as compared to more extrinsically and less self-determined, have been found to have more interest, excitement, and confidence which has led to enhancements in performance, persistence, creativity (Deci & Ryan, 1991; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997; Vallerand & Bissonnette, 1992), self-esteem (Deci & Ryan, 1995), and general well being (Hein, Müür, & Koka, 2004; Ryan, Plant, & O’Malley, 1995). Two settings that have drawn the most attention concerning motivational outcomes are the academic and athletic environments.

Within the educational locale, research has indicated strong support for more self-determined and intrinsic motivation as determinants for more adaptive academic achievement behaviors. Grolnick and Ryan (1987) examined children’s motivation toward school. They measured external, introjected, and identified regulation and intrinsic motivation using the Self-Regulation Questionnaire (Ryan & Connell, 1989) and the self-determination index derived from the same questionnaire. Grolnick and Ryan (1987) showed that children with higher indications of self-determination were more strongly related to better conceptual learning as opposed to children who were less self-determined toward school. Vallerand and Bissonnette (1992) examined 1,062 male and female junior college students to assess their motivation toward academics using the Academic Motivation Scale (Vallerand et al., 1992) to assess amotivation, external, introjected, and identified regulation, and the three categories of intrinsic motivation.
Analysis of variance results showed a consistent positive association between intrinsic motivation and desired academic outcomes. Other educational measures were used in combination to measure for perceptions of perceived competence, positive emotions, concentration, and time spent on academic tasks. Although intrinsic motivation held the strongest association with positive academic outcomes, identified regulation had a positive association. External and introjected regulation held slightly negative associations, and amotivation held a strong negative association with academic outcomes. These findings support similar research using the same motivational measurement scale (Vallerand et al., 1992, 1993). Motivation research is vast within the academic achievement setting because of the many potential benefits, but growing popularity of athletic research has expanded the field dramatically.

Athletes must overcome many obstacles in their journey toward sport excellence. A few of the challenges they face in their athletic mission are countless hours of practice and training, rehabilitation from injuries, the anxiety and stress generated from competition and poor performances, and the disappointment of defeat (Vallerand & Losier, 1999). For athletes to be successful, they must possess not only physical strength and talent but also psychological strength. At the higher levels of athletics, coaches are responsible for shaping athletic talent and strength, but more importantly, keeping the athlete motivated to perform. The type of experiences athletes’ will obtain from their sport experience is greatly influenced by the type of motivation they possess (Vallerand, 2000).

Another interesting finding by Amorose and Horn (2000) showed athletes’ dominant motivational drive influenced their perceptions of their coach’s behaviors and leadership styles. Perceived coaching behaviors were measured using a researcher-developed questionnaire in line with the constructs of the Coaching Behavior Assessment System (Smith et al., 1979). Although
their research focused more on collegiate coaches’ leadership style, results showed a variety of male and female collegiate athletes (n = 368) who were more intrinsically motivated perceived their coach to display more democratic and emphasized more training and instruction than athletes who were less intrinsically motivated to play. A multivariate multiple regression analysis for both male and female athletes was significant, and a canonical correlation analysis further reveled which variables were major contributors. The results showed the more intrinsically motivated athletes perceived their coaches to display more positive and informational feedback with less punishment and ignoring mistakes behaviors. Internal consistency on a few of the measure items used were low (.62-.66) however, this is one of the few studies that suggest athletes’ perceptions of coaches can be affected by the type of motivation they possess to play their sport.

Within the athletic environment studies have indicated that athletes who participate for more intrinsically and self-determined reasons invest more effort (Fortier & Grenier, 1999; Pelletier, Fortier, Vallerand, Tuson, & Brière, 1995; Williams & Gill, 1995), maintain higher levels of concentration (Vallerand et al., 1995; Pelletier et al., 1995), exhibit more persistence when faced with difficulty (Fortier & Grenier, 1999; Ommundsen, Roberts, & Kavussanu, 1998; Pelletier, Fortier, Vallerand, & Brière, 2001; Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2001), and perform better (Beauchamp, Halliwell, Fournier, & Koestner, 1996; Pelletier et al., 2001) than athletes who are more non-self-determined in motivational approaches. A coach can influence all of the above-mentioned characteristics of highly self-determined athletes. Coaches can influence if athletes learn and achieve at a high level, enjoy their sport participation, display effort and persistence, and develop perceived competence and more self-determined motivation toward their sport (Amorose & Weiss, 1998; Chelladurai, 1993; Horn, 1987, 2002; Mageau &
Vallerand, 2003; Murray & Mann, 2001; Smith & Smoll, 2002). Coaches influence athletes’ motivation, and other psychological processes, through their actions and behaviors toward their athletes, and coaches’ behaviors can be crucial in the development of positive motivational environments (Horn et al., 1998; Smith & Smoll, 2002; Smith et al., 1995; Vallerand & Losier, 1999).

**Coaching Behaviors Toward Athletes**

Positive coach-athlete relationships are characterized by personal feelings of trust, respect, appreciation, commitment, and behaviors of cooperation that are commonly related (Short & Short, 2005). Coaches create a motivational climate by performing the responsibilities of a coaching position. Coaches design practices, group athletes to perform, give recognition, issue punishment, develop skills, evaluate performances, and share authority, all which shape the sport setting (Ames, 1992). Researchers have begun to pay close attention to the affect of different types of coaching behaviors on athletes’ performance, psychological domains, and motivation.

Smith, et al. (1979) laid the foundation for research on coaching behaviors and the effects on athletes. Their first experimental study involved 31 male Little League Baseball coaches in charge of 10 to 15-year old baseball players. Smith et al. (1979) trained an experimental group of coaches on certain coaching behaviors (e.g., positive reinforcement and technical instruction) so that the experimental coaches would display these behaviors more intentionally than the control group. The control group of coaches did not receive any behavior training through the course of the Little League season. The coaches in both groups were videotaped so their actions could be observed and coded using the Coaching Behavior Assessment System developed during this study, and the athletes on their teams were questioned about the coaching behaviors they
experienced from their respective coaches. Athletes were questioned about their self-esteem levels and enjoyment with the sport. Coaches in the experimental behavior-trained group displayed positive reinforcement and instructional feedback more often than the control group coaches throughout the course of the season. Athletes involved in the experimental group showed significant changes over the control group.

Using this study as the starting point for other studies (Smith & Smoll, 2002; Smith et al., 1995), Smith et al. (1979) found that coaching behaviors can affect the athletes’ perception of the coach’s ability to teach skills, athletes’ self-esteem levels pre- to post-season, and enjoyment levels of sport participation. Furthermore, the study showed that coaches tend to be unaware of their behaviors toward their athletes. The two most note-worthy findings of this study are the relationship to perceived coaching behaviors and the changes in self-esteem levels over the course of the season, and the coaches’ lack of awareness of the behaviors they exhibited toward the athletes. Although the increase in self-esteem was only reported in athletes who had initial lower levels of self-esteem, as opposed to already high levels, the change due to coaching behaviors needs to be examined.

The Smith et al. (1979, 1995, 2002) studies focused on the effects of positive feedback (positive reinforcement, technical, instructional), coaching behaviors perceived by the athletes, and the athletes’ enjoyment and self-esteem levels pre- to post-season. Observational studies on highly successful coaches consistently show the coaches use training and instruction more than any type of coaching behavior (Becker & Wrisberg, 2008; Bloom et al., 1999; Kahan, 1999; Segrave & Ciancio, 1990; Tharp & Gallimore, 1976). Results of these studies ignited interest in the long-term affects coaches can have on athletes, specifically athletes’ intrinsic motivation. Cadorette, Blanchard, and Vallerand’s 1996 study reported in an unpublished Canadian
manuscript (as cited in Vallerand, 2000) was one of the first to directly examine coaching behavior and the effects on athletes’ intrinsic motivation toward their sport. Using SDT as a guide, their study measured the general perceptions of competence, autonomy, and relatedness in male and female basketball players. The athletes’ intrinsic motivation toward basketball was measured using the Sport Motivation Scale (Pelletier et al., 1995). Athletes’ perceptions of their coach’s interactive style were assessed. Path analysis results indicated that the more the coaches were perceived by their athletes as autonomy-supportive, the more competent, autonomous, and related to the team the athletes felt. As a direct outcome, the athletes’ perceived autonomy, competence, and relatedness were positively associated with intrinsic motivation. As mentioned previously, CET suggests extrinsic social factors can have an effect on intrinsic motivation mediated by the relationship between intrinsic motivation and perceived autonomy and competence (Ryan & Deci, 1985, 2000). Researchers hypothesize the impact of social factors on motivation is determined through people’s perceptions of the event (Vallerand, 1997). The event itself is not as important as how the person perceives the event in terms of meeting the three basic psychological needs as stated in SDT (i.e., autonomy, competence, and relatedness).

Athletes use coaching feedback, such as praise, as an indicator of their athletic ability in some instances (Amorose & Weiss, 1998). A study by Amorose and Horn (2001) showed support for the findings by Cordette et al. (1996, as cited in Vallerand, 2000). Their study involved male and female athletes (n = 72) from a variety of varsity sports attending their first year at a Division I college. Athletes’ were measured for pre- to post-season intrinsic motivation toward their sport and perceived coaching behaviors from their respective coaches. A multiple regression analysis followed by a canonical analysis revealed a positive relationship between athletes’ intrinsic motivation levels and training-instruction feedback from coaches. Amorose
and Horn (2001) argued that the higher levels of instructional feedback increased the athletes’ perceived control over their future performances (i.e., autonomy), which in turn increased their intrinsic motivation toward their sport.

Hollembeak and Amorose (2005) followed the previous study with a more specific examination of several coaching behaviors and the mediating affects of perceived autonomy, competence, and relatedness on male and female college athletes’ intrinsic motivation. This study is unique because not much research exists explaining the mediating relationship between the three basic needs of autonomy, relatedness, competence and motivation as stated in SDT. Also unique to this study is the examination of the affects of the following coaching behaviors: training-instruction, positive feedback, autocratic behavior, democratic behavior, and social support. Structural equation modeling revealed the three basic needs had a significant mediating relationship with motivation. As for coaching behaviors, with the exception of social support, all of the coaching behaviors mentioned influenced the three fundamental needs supported by basic needs theory, another meta-theory of SDT (Ryan & Deci, 2000). Autocratic behavior (dictatorial leadership) diminished feelings of autonomy and relatedness for the athletes, and therefore had a negative relationship with intrinsic motivation. However, democratic behavior had the opposite impact, and increased intrinsic motivation. One other interesting finding was female athletes on scholarship and participating in individual sports had more positive motivational profiles than female athletes not on scholarship and participating on team sports. Although this study did not show support for positive feedback affecting perceived competence, rather training-instruction increased feelings of perceived competence, there are studies that have found these types of behaviors increase competence and lead to enhanced intrinsic motivation (Amorose & Horn, 2000, 2001; Deci et al., 1999; Whitehead & Corbin, 1991).
Most of the research to date has been focused upon the affect of perceived coaching behaviors on intrinsic motivation as a whole, studying male and female athletes together as opposed to separately. Few researchers have attempted to examine gender differences with regard to perceived coaching behavior and motivation. Among these studies, most have found that female athletes report lower levels of self-perceived athletic competence and global self-worth than male athletes (Gill, 1992; Hollembeak & Amorose, 2005; Vallerand & Bissonnette, 1992; Vallerand et al., 1992). Interestingly however, females tend to show more self-determined intrinsic motivation across a variety of life domains, including education and sport, than males. Another consideration concerning perceived coaching behaviors that has not been examined thoroughly is the determination of specifically which types of behaviors are more conducive to intrinsic development in each gender. Research has shown that male athletes generally prefer more competitive environments for more extrinsic reasons (Gill, 1992) due to their desire to compare their success to their peers success (e.g., ego-oriented goals), but females gravitate toward situations that emphasize performance accomplishment for more intrinsic reasons due to their desire to base success on their own effort and improvement (e.g., task-oriented goals) (Duda, 1992; Treasure & Roberts, 1994; Williams, 1994, 1998). Males and females are unique in their motivation to participate in a sport, therefore the types of feedback they need to foster an environment for intrinsic growth should be considered.

Research has clearly indicated that coaches can influence the self-esteem of an athlete over the course of a season (Smith et al., 1979, 1990, 1995; Stewart & Taylor, 2000). Other research has shown that coaching behaviors can have an effect on the athlete’s perceived competence and motivation to play (Amorose & Horn, 2001, 2002; Amorose & Weiss, 1998; Black & Weiss, 1992; Vallerand & Losier, 1999; Weiss & Ferrer Caja, 2002). Coaches can play
an instrumental role in athletes’ careers, so further research into coaching behaviors and their affects on motivational climates needs to be examined. One of the avenues coaches can potentially express behaviors toward athletes, and an area that demands continued research, is through a self-fulfilling prophecy.

**The Self-Fulfilling Prophecy**

The self-fulfilling prophecy was unintentionally discovered in early experimental laboratory research (Clark, 1927; Rice, 1929). Researchers noticed subjects were responding in ways the experimenter expected rather than offering unexpected results. Specifically, the self-fulfilling prophecy, or expectancy effect, occurred when the dominant experimenter’s expectations influenced the subject, or subordinates, performance (Wilson, 2000). As research continued with the expectancy trend, the term *self-fulfilling prophecy* was later introduced by Robert K. Merton (1948), and has since been used to explain a wide variety of social problems (Darley & Fazio, 1980). Merton suggested that a false, but widely believed prediction or expectation of an outcome could come true merely because enough people believed in the idea. The self-fulfilling prophecy starts with an inaccurate, or false, belief about a person or situation, followed by actions toward the person or situation that reflects the inaccurate belief, and result in a change of behavior or status. The ultimate conclusion is the change that occurs to the person or situation conforms to the original, inaccurate belief (Merton, 1948). Since Merton’s proposal of a definition, interest in the phenomenon and expectancy theories have grown tremendously. The prophecy became of particular interest in the late 1960s with the submission of Rosenthal and Jacobson’s (1968) study of the self-fulfilling prophecy in the classroom.

Rosenthal and Jacobson (1968) labeled the expectancy effect within the classroom the *Pygmalion effect*. In their landmark study, Rosenthal and Jacobson (1968) demonstrated through
experimental design that teachers’ expectations about their students can affect students’ academic achievement over the course of a school year and elementary school career. Teachers were given false information about certain students in their classrooms. They were told that based from results of a new academic test, certain students had the potential to be academic “spurters,” and were expected to improve dramatically in IQ points and academic achievement (Rosenthal & Jacobson, 1968). The academic spurters were in actuality chosen randomly by the experimenters, but the teachers believed these potential academic achievers were selected from test scores recorded from the previously mentioned academic achievement test. At the end of the school year, teachers expected the spurters to improve in IQ scores and academic achievement, and as a result, the spurters showed significantly more improvement than those students not labeled as spurters. However, some students not designated as spurters showed IQ gains as well, but the more these students gained, the more negatively they were rated by teachers in terms of behavior and likability. In contrast, the spurters were rated over-all as having more personality and better behavior than the non-spurters. This study showed a clear relationship between teacher expectations and student achievement outcome, and raised considerable attention for the self-fulfilling prophecy. Even though the Pygmalion effect was exposed in the classroom, many critics argued these types of experiments were unethical, controversial, did not show a large effect, and contained methodological flaws (Chow, 1994; Eden, 1984, 1990, 1996; White & Locke, 2000).

Despite the controversy surrounding the Rosenthal and Jacobson (1968) study on the Pygmalion effect in the classroom, research has continued within the academic environment showing the same type of affect (Jussim & Eccles, 1992; Raudenbush, 1984; Robinson, 1993), and has been conducted in other settings. Expectancy affect studies have shown impact of
expectancies from leader behaviors on subordinate behaviors, therapist and patients (Jenner, 1990; Meyer, Pilkonis, Krupnick, Egan, Simmens, & Sotsky, 2002), nurses and patients (Learman, Avorn, Everitt, & Rosenthal, 1990), managers and employees (Eden, 1988; McNatt, 2000; Natanovich & Eden, 2008; Sutton & Woodman, 1989), military instructors and trainees (Eden & Shani, 1982), and stereotype expectations (Cadinu, Maass, Frigerio, Impagliazzo, & Latinotti, 2003; McKown & Weinstein, 2002). Previous studies show the expectancy effect occurring when a subordinate’s performance is impacted from a leader’s expectations portrayed through behaviors. A coach is a leader of a team and the athletes are his subordinates, therefore, identifying a self-fulfilling prophecy within athletics has been a growing area of interest for researchers.

**Coach expectations.**

Traditionally, coaches base expectations about an athlete from three main sources of information: direct observation, third party feedback, and stereotypical information (Darley & Fazio, 1980). More specifically, research has indicated that coaches base their expectations about an athlete’s performance ability on impression cues (personal, performance, psychological) (Horn et al., 1998). Most research suggests the majority of impressions are made by coach observation of performance cues (skills tests, performance statistics) (Horn, 1984; Rejeski et al., 1979; Solomon et al., 1996), but recent research shows psychological cues (confidence, concentration) are commonly used to estimate athletic ability (Becker & Solomon, 2005; Horn et al., 1998; Solomon, 2001; Solomon 2002a, 2002b; Solomon & Rhea, 2008). Each one of these informational sources led to the coach forming either a high or low expectation about an athlete.

In general, a self-fulfilling prophecy occurs when a leader, or perceiver, forms an inaccurate high expectation based from false information and displays behaviors toward the
subordinate, or receiver, that projects the type of expectation to the receiver. The result of the interaction is the receiver’s behavior begins to fulfill the perceiver’s original expectation (Wilson, 2000). The self-fulfilling prophecy research mostly includes studies within the educational and management settings, and has been termed the Pygmalion effect within those domains (McNatt, 2000; Natanovich & Eden, 2008; Rosenthal, 1968, 1974). Within the last two decades, the growth of competitive sports participation and the nature of the self-fulfilling prophecy have ignited interest in the effects of a self-fulfilling prophecy, or expectancy effect, in relation to coaches and their athletes. A self-fulfilling prophecy functions in a cycle, and one cycle that has been adapted to fit the coach-athlete relationship is the expectation-performance process (Horn et al., 2006).

**Expectation-performance process.**

Horn et al. (1998) adapted the expectation-performance process into a four-step cycle to illustrate the expectancy affect within athletics. The original purpose of the development of the expectation-performance process was to educate coaches on how they can affect, both directly and indirectly, an athlete’s development. The four steps in the process occur through a cycle, and are discussed in further detail.

**Step one.**

In step one, the coach develops an expectation for an athlete based from impression cues (Horn et al., 1998; Solomon, 2010). The expectation will assist in predicting the level of performance and type of behavior the athlete will exhibit through the course of the year. The expectations formed in step one are essentially initial decisions or estimations of the athlete’s physical capability or sport potential. As mentioned previously, the coach bases the expectation from the impression cues (personal, performance, psychological) that are readily available to the
coach at the time of assessment. Personal cues include information regarding the athlete’s socioeconomic status, racial or ethnic group, family background, sex, physical attractiveness, body stature, and style of dress (Horn et al., 2006). Typically, personal cues are used less frequently than performance cues to develop an expectation about an athlete. Performance information includes the athlete’s scores on skills tests, past performance achievements, other teachers’ or coaches’ comments about the athlete’s performance ability, and direct observation of the athlete’s behaviors in practices or games. Research focused mainly on performance cues being the major contributor to expectation development (Horn, 1984; Rejeski et al., 1979; Solomon et al., 1996), but recent research has added the dimension of psychological cues as contributors to expectation formation (Becker & Solomon, 2005; Horn et al., 1998; Solomon, 2001, 2002, 2010; Solomon & Rhea, 2008). Psychological cues include the coach’s perception of the athlete’s confidence, anxiety, ability to be coached, and concentration level of the athlete.

A study by Solomon (2001) involved examining the influence of both performance and personality impression cues on coach expectations within college athletics. This study measured eight male and female head coaches and their respective athletes (n = 115) from a variety of Division I sports teams participating at eight different universities. Solomon (2001; 2002a; 2002b) assessed coaches’ expectations about athletes’ performance ability using the Expectancy Rating Scale (Solomon, 1993) and found the only significant predictor of athletes’ performances was the coach’s evaluation of the athletes’ confidence level about their performances. The coach’s evaluation of the athletes’ confidence was directly related to the athletes’ performance, but the athletes’ own evaluation of their confidence level was not. Another study by Solomon (2010) examined 34 male and female head and assistant track and field coaches, and their respective athletes (n = 210) from 17 junior colleges in California. One purpose of the study was
to determine what sources of information coaches used to form expectations about their athletes’ performance ability. Coaches were given the choice through the Expectancy Rating Scale (Solomon, 1993) to form expectations about athletes based from the athletes’ maturity level, physical ability, the ability to be coached, and being a team player. Of the four impression cues, the ability to be coached was rated as the most significant factor by coaches when forming expectations, followed by being a team player, physical ability, and maturity level.

Even though coaches form initial expectations from multiple sources, each coach differs in the value placed on each source of information. For example, the softball coach may value the opinion of the athlete’s former high school coach as a major source of information, but the soccer coach may place the most significance on the information gathered from watching the athlete participate in practices. Depending on the sources of information used to form the expectation, the coach’s initial evaluation of the athlete’s competence may be either accurate or inaccurate (Horn et al., 1998). Accurate assessments of the athlete typically do not create problems in behavior between the coach and the athlete; however, inaccurate assessments lead to inaccurate expectations (either too high or too low). Depending on the coach’s personality, and the source the coach used to form the initial expectation, the expectation can remain inflexible or can be altered through the course of the year (Horn et al., 1998). If the coach is willing to adapt the initial expectations based from observation of the athlete’s performances, then the initial inaccurate expectation does not create adversity. However, if the coach chooses to remain un-wavering in the initial expectation through the course of the year, the coach may not see the actual performance ability of the athlete, and the incorrect expectation can alter the manner in which the coach responds or reacts to that particular athlete. In the event that the coach does not
change an inaccurate initial expectation, and the coach’s behavior changes toward the athlete, then coach and the athlete move into the second step of the cycle.

*Step two.*

Step two of the expectation-performance process is the most researched step in the process (Solomon, 2010). This step involves the behavior of the coach toward the athlete being affected by the coach’s initial expectation about the athlete. The cycle does not progress to step two on the formation of an initial expectation unless the coach alters behaviors or responses toward the athlete because of the expectation the coach has of the athlete (Horn et al., 1998). As coaches develop expectations about athletes’ potential performance outcomes or ability, they often group athletes into high (ability) expectation or low (ability) expectation groups. Just within the sport environment, research has shown that some coaches do treat athletes differently based from the athletes’ expectation group membership (Krane et al., 1991; Rosenthal, 1974; Sinclair & Vealey, 1989; Solomon et al., 1996; Solomon, DiMarco, Ohlson, & Reese, 1998; Solomon et al. 1998; Solomon & Kosmitzki, 1996; Solomon & Rhea, 2008). The research on this subject has focused on the differences in feedback and instructional behaviors coaches issue to expectancy athletes. Particularly, high expectancy athletes have been observed receiving overall more and higher quality feedback then their low-expectancy counterparts in high school athletics (Solomon et al., 1998, 2008), in college athletics (Solomon, 2008; Solomon & Kosmitzki, 1996; Solomon et al., 1996), and in elite athletics (Sinclair & Vealy, 1989).

The research within the youth sport setting on differential feedback patterns has returned inconsistent results. Early research by Rejeski et al. (1979) on youth basketball players showed high expectancy athletes received more positive reinforcement, but low expectancy athletes received more general instruction (Amorose & Weiss, 1998). Horn (1984) found junior high
school basketball athletes received equal amounts and type of feedback during practice, but during games high expectancy athletes received more positive reinforcement while low expectancy athletes received more instructional feedback. Solomon (1998) examined youth basketball coaches and saw no differences in feedback patterns, type, or quality issued to high or low expectancy athletes. Even though feedback behaviors in youth sports have inconsistently supported the expectation-performance process, studies within the collegiate setting have returned stronger support.

Research on differential feedback among collegiate athletes and coaches is distinguished more clearly than youth athletes and coaches. Findings within the collegiate setting indicate a more clear distinction in feedback between high and low expectancy athletes. Krane et al.’s (1991) mixed methods case study used the Coaching Behavior Assessment System (Smith et al., 1979) to code behaviors of one Division I female assistant soccer coach to create a behavior intervention specifically aimed at increasing technical instruction. Although quantitative results were not substantial, interviews with the coach showed the intervention did help to increase the amount of technical instruction, but more importantly, the coach became more aware of her behaviors. A secondary result indicated low expectancy athletes received differential behavior. According to groupings of low and high expectancy players made by the coach and coded observed behaviors, low expectancy athletes did not receive as much technical instruction or encouragement after mistakes as high expectancy athletes, yet they did receive more positive reinforcement. In another study, Solomon (2008) used eight male and female head and assistant coaches and 23 male and female collegiate basketball players on Division I teams to examine expectation feedback by the coaches. Over the course of a 14-week season, high expectancy athletes received more praise feedback than their low expectancy teammates. Both expectancy
groups received the same amount of instructional feedback. These results are similar to Sinclair and Vealey’s (1989) study of elite level female field hockey athletes (n = 41). Coaches from three elite level women’s field hockey teams were assessed by their athletes on perceived feedback. The athletes were measured pre-, mid-, and post-season on the types of feedback they perceived to be receiving from their coach. Results indicated the high expectancy athletes received more overall feedback, and the type of feedback was more specific and evaluative than the feedback the low expectancy athletes received. Another interesting finding is head coaches, not assistant coaches, are the ones issuing differential feedback based on expectation level (Solomon et al, 1996).

Step two of the expectation-performance process indicates that a coach who differentiates behaviors toward an athlete based off the coach’s expectation, changes the frequency and quality of interactions with the athlete (Horn et al., 1998). The athletes perceived by the coach to be low expectancy athletes receive less interpersonal contact (social or skill-related) than high expectancy athletes. High expectancy athletes may receive more interpersonal contact and more approachable behaviors (e.g., smiling, personal contact). An even more hazardous behavior change could occur if the coach reduces the amount and/or quality of skill information or instruction given to the low expectancy athletes. The coach may even reduce the amount of time low expectancy athletes are allowed to practice drills, and the coach may be less persistent in helping these athletes succeed past a drill. As a result, the low expectancy athletes will not receive the same amount or quality practice and instruction as the high expectancy athletes. As previously mentioned, low expectancy athletes may not receive as much praise, reinforcement, or technical instruction after a successful performance than high expectancy athletes. If differential treatment from the coach consistently occurs between high and low expectancy
athletes in practices and games, and ultimately the coaching behaviors limit an athlete’s ability or opportunity to learn, then the coaching behavior and communication with the athlete is damaged, and the cycle continues to the third step (Horn et al., 2006).

*Step three.*

The third step of the cycle involves the coach’s expectancy-based treatment of the athlete affecting the athlete’s performance and psychological growth (Horn et al., 2006). As mentioned in the previous step, if a coach is consistently giving high expectancy athletes more quality time, instruction, and practice on skills than low expectancy athletes, then high expectancy athletes should be able to capitalize on their situation toward the advancement of their athletic performance. However, if low expectancy athletes repeatedly receive less, and poorer quality feedback, instruction, and practice time then they potentially will not show the same amount of skill improvement as the high expectancy athletes (Horn et al., 1998). If the two groups of athletes’ continuously receive different types of feedback over the course of a season, the low expectancy athletes may not progress as much or as quickly as the high expectancy athletes. In step three, the coach will attribute the skill differences between the two types of expectancy athletes as natural, inherent differences rather than differences brought about from differential treatment. The observable disparity in the coach’s behavior toward the two types of athletes indicates the coach’s original expectations about the athletes’ performance ability may not only predict, but determine the level of success the athletes’ will achieve. This occurrence enables a self-fulfilling prophecy initiating from the coach’s expectations.

A coach’s biased feedback behavior can create negative outcomes in skill development, rate of learning, and achievement level within expectancy groups, but differential behavior can have more meaningful negative effects on psychological growth (Horn et al., 1998). Research on
differential coaching behavior and the impact on athletes’ psychological maturation have revealed causes or changes in athletes’ self-concept (Smith & Smoll, 1990, 2002; Smith et al., 1995), perceived competence (Amorose & Horn, 2001; Black & Weiss, 1992; Horn, 1985, 1987), and level of competitive trait anxiety (Kenow & Williams, 1992, 1997) through the course of a season.

One focus of Hollembeak and Amorose’s (2005) study was to determine the affects of coaching behavior on perceived autonomy, competence, and relatedness. The study used 280 male and female Division I college athletes from a variety of sports. The athletes’ were measured on intrinsic motivation and perceived competence levels for their sport using the Sport Motivation Scale (Pelletier et al., 1995) and questions developed by Amorose (2003). The results showed that positive feedback was a significant predictor of perceived competence, yet perceived competence levels did not vary according to perceived coaching behavior. Amorose and Horn (2000) examined the affects of perceived coaching behavior on intrinsic motivation in 72 male and female Division I college athletes. This study showed strong support for the relationship between athletes’ perceptions of coaching behavior and changes in intrinsic motivation over the course of a season. Perceived competence was the strongest predictor variable for changes in athletes’ intrinsic motivation.

The type of feedback a coach gives to an athlete may affect psychological aspects because the coach communicates to the athlete how competent or skilled the coach thinks the athlete is in the athlete’s sport (Horn et al., 1998). Sometimes the coach will directly tell an athlete personal expectations, judgments, or beliefs about the athlete’s competence level, but the most often used type of communication comes in more indirect ways. For example, any feedback pattern a coach develops for an athlete when issuing reinforcement about performance, or the
types of behaviors the athlete performs that a coach rewards gives the athlete information about how skilled the coach thinks the athlete is at that behavior. A coach’s perceptions of an athlete’s competence can be communicated by the amount and frequency of corrective instruction the coach issues to the athlete. This finding was demonstrated in a study examining coaches’ feedback within junior high female athletics (Horn, 1984). Junior high softball coaches issued low expectancy athletes more reinforcement and praise in response to successful skill performances during games than the high expectancy athletes. When skill errors were committed, high expectancy athletes received more criticism and corrective instruction, but skill errors were ignored more often in low expectancy athletes. Research within educational psychology studies supports that differential feedback responses do supply the performer with ability information (Meyer, 1982). Performers who received more reinforcement than others for the same level of performance perceived themselves to have a lower ability. In instances where performers displayed the same performance mistakes, the performers who received more criticism perceived themselves to be more competent than those who received neutral mistake-contingent responses.

Differential feedback by coaches issued to low and high expectancy athletes may affect the athletes’ perceptions of their skill and performance competence. The messages communicated to the athletes by differential coaching behavior can affect athletes’ future performances and motivation to play their sport. Once athletes receive communication about their competence or ability via coaching feedback, the cycle progresses to the fourth and final step.
Step four.

The final stage in the expectation-performance process completes the self-fulfilling prophecy. To this point in the cycle the coach has formed and expectation about the athlete’s performance ability, has changed coaching behavior toward the athlete based on initial expectations, and has communicated the expectations to the athlete through verbal and non-verbal paths (Horn et al., 1998). The last step involves the athlete changing behavior and performances to conform to the coach’s original expectation. Once the athlete completes this step, and athlete behavior changes based off the communication received from the coach about performance ability and competence, the athlete confirms to the coach that the original expectation was accurate. When the coach sees the expectation confirmed by the athlete’s behaviors and performance outcomes, the coach may develop a false sense of judging ability. The coach may begin to believe that he or she is an accurate judge of talent, and this reinforcement may intensify the coach’s self-fulfilling prophecy characteristics. Once the coach receives confirmation about the judgment, the cycle begins again from step one. For a true self-fulfilling prophecy, or expectancy affect to occur, all four steps must occur in sequence.

The expectancy effect within athletics is well documented, but not all coaches or athletes are susceptible to expectation formation affects. In some instances, coaches form expectations about players, but they do not complete the cycle because they never proceed past step one of the expectation-performance process (Becker & Wrisberg, 2008; Wilson & Stephens, 2005). Most coaches may form expectations about their athletes, but they do not allow their behavior to change toward the athletes based from how well they believe the athlete will perform. If behavior does not change, then the cycle does not progress.
Studies on the expectancy effect, or self-fulfilling prophecy, have many limitations (White & Locke, 2000). Many questions need to be researched to understand the full scope of this effect. More research needs to be conducted to determine if the expectancy effect works consistently on both males and females because most studies are limited to the examination of female leaders’ behaviors toward subordinates (Kierein & Gold, 2000). A more limiting characteristic of research is most expectancy effect manipulations have been created through the use of deception (Eden, 1997). Past studies have supplied leaders with false information about their subordinates and have created expectations from false information (Jussim, Soffin, Brown, Ley, & Kohlhepp, 1992; Madon, 2001; Rosenthal, 1974). Research needs to continue on the attributions leaders give to subordinate performances so the effect can be studied without the element of deception. Finally, the expectancy effect appears to be stronger among new, unknown subordinates and the leader rather than established and known subordinates (Eden, 1990; Raudenbush, 1984). Although the expectancy effect has several limitations some coaches and athletes still experience the consequences of the process, and research needs to continue to contribute to the understanding of this phenomenon. The steps of the expectation-performance process help to illustrate how coaches can affect athletes’ intrinsic motivation to play their sport.

**Coach Expectations Affects on Athletes’ Intrinsic Motivation**

Self-determination theory indicates the three fundamental needs humans strive to achieve when performing a task (autonomy, competence, relatedness) for them to be intrinsically and more self-determined in their motivation to perform the action (Amorose & Horn, 2001; Deci & Ryan, 1985; Ryan & Deci, 2000, Vallerand & Losier, 1999). SDT (Ryan & Deci, 2000) contains sub-theories that address specific issues relating to the different types of motivation. SDT presents intrinsic and self-determined motivation as the drivers for positive outcomes, benefits,
and success within all types of environments, and particularly in the athletic arena (Deci & Ryan, 1991, 1995; Hein et al., 2004; Ryan, Plant, & O’Malley, 1995; Sheldon et al., 1997; Vallerand & Bissonnette, 1992). Cognitive evaluation theory suggests intrinsic motivation can be affected by extrinsic social and environmental factors that can enhance or diminish intrinsic and self-determined motivation. Conditions that are perceived by the individual to foster the three basic needs (autonomy, competence, and relatedness) can aid in the development of intrinsic motivation, but adverse conditions for development of the basic needs can have a negative impact on intrinsic and self-determined motivation (Ryan & Deci, 2000; Vallerand & Losier, 1999). One social factor that can determine conditions for motivational growth that is related to the CET is coaching behaviors in the form of feedback types.

The expectation-performance process illustrates a four step self-fulfilling prophecy that can occur between athletes and coaches (Horn et al., 1998). The steps are: 1) the coach forms an expectation, 2) the coach’s expectation about an athlete alters the coach’s behavior toward that athlete, 3) the coach’s behavior alters the athlete’s performance and behavior, and 4) the athlete’s altered performance confirms the coach’s original expectation about the athlete. Step two involves the coach issuing verbal and non-verbal feedback to the athlete which can be different depending on the expectancy group the coach has placed the athlete based on the coach’s perceived performance ability of the athlete (high or low) (Krane et al., 1991; Rosenthal, 1974; Sinclair & Vealy, 1989; Solomon et al., 1996; Solomon, DiMarco et al., 1998; Solomon, Golden et al., 1998; Solomon & Kosmitzki, 1996; Solomon & Rhea, 2008). Research on differential coaching feedback behavior has revealed changes in athletes’ self-concept (Smith & Smoll, 1990, 2002; Smith et al., 1995), perceived competence (Amorose & Horn, 2001; Black & Weiss,
1992; Horn, 1985, 1987), and level of competitive trait anxiety (Kenow & Williams, 1992, 1997) through the course of a season.

The changes in athletes’ perceived competence due to coach feedback is of particular interest. The link to increased intrinsic motivation has been related to the three basic needs of perceived autonomy, relatedness, and competence, but results have been mixed as to which need is the strongest predictor variable of intrinsic motivation (Hollembeak & Amorose, 2005; Noels, Clement, & Pelletier, 1999). However, perceived competence has been found to be the strongest predictor of intrinsic motivation in some studies (Amorose & Horn, 2000, 2001; Deci et al., 1999; Whitehead & Corbin, 1991). Research has shown increases in perceived competence by athletes have been attributed to positive feedback including technical-training instruction and praise (Amorose & Weiss, 1998; Noels et al., 1999; Smith & Smoll, 2002). According to the concepts of self-determination theory (Ryan & Deci, 2000), feedback is categorized as a social factor that can ultimately enhance or diminish perceived competence in the athlete. Perceived competence acts as a mediator between external forces, such as feedback, and motivation, and once the athlete’s perceived competence is altered by feedback a change in intrinsic motivation can occur (Hollembeak & Horn, 2005).

In conclusion, coaches that form an expectation about an athlete can potentially harm an athlete’s ultimate performance outcome and continuation in her sport if the expectation that is formed is inaccurately low in relation to the athlete’s true performance capability. Inaccurate, low expectations from a coach about an athlete can lead to coaching behaviors that indicate to the athlete what the coach thinks about their sport ability and competence. Because most athletes regard their coach as an important figure and reliable source of information in their athletic careers (Bell, 1997; Gallon, 1980; Wang et al., 2009), the coach’s behaviors can affect the
athlete’s intrinsic motivation toward sports due to the changes in perceived competence the athlete can experience. Many of the studies discussed assess coaching behavior in terms of leadership style (Amorose & Horn, 2001; Black & Weiss, 1992; Hollembeak & Amorose, 2004; Alamagro et al., 2010). This study obtained perceived coaching behaviors from the athletes in terms of feedback type. No existing research was found that examines the combined effect of coach expectations and resulting behavior on perceived competence and intrinsic motivation. The measures used for this study in combination are unique and contributes to the existing research. This study examined the effects of head coaches’ expectation formations and resulting perceived feedback toward athletes, and the impact of the coaches’ feedback on the athletes’ perceived competence about sport performance as a mediator to the athletes’ intrinsic motivation to play their sport.

Summary

This chapter provided relevant literature to illustrating the benefits and drawbacks to sport participation, specifically for female athletes. The literature presented introduces the theoretical foundation for the study, and issues associated with coaching behaviors. The next chapter discusses the research design, participant selection, and measures for analysis. A detailed description of procedures is presented and discussed. Both quantitative and qualitative procedures are discussed in separate sections.
CHAPTER III

Methods

This chapter provides information about study design, participants, procedures, instrumentation, research hypotheses, and data analysis. An introduction of this study and review of pertinent literature including information on the structural theories is provided in the preceding chapters.

This concurrent embedded mixed methods study examined coach expectations, athletes’ perceived competence and motivation levels, and athletes’ perceived coaching behaviors. Self-determination theory was used as a guide to distinguish between different types of motivation. Cognitive evaluation theory was used to guide the belief that feedback and actions from coaches, serving as external social factors, can influence the female athlete’s perceived competence about her athletic performance and subsequently impact the type of motivation the athlete will have toward her sport. Research hypotheses and questions are discussed within the appropriate sections.

Research design

This study was a concurrent embedded mixed methods design with emphasis on the quantitative portion. Quantitative dominant mixed methods research is characterized by the predominant quantitative, postpositivist view of the research process, while recognizing that the supplementation of qualitative data and approaches are expected to enhance and strengthen most research projects (Johnson, Onweugbuzie, & Turner, 2007). Mixed methods research is an old concept that is gaining momentum as the third largest method of conducting research (behind
quantitative and qualitative) in social science and sport psychology research (Biddle, Markland, & Giburn, 2001; Cresswell, 2009; Johnson et al., 2007).

The initial and dominant phase of the study involved a quantitative, non-experimental repeated measures survey design to gather information about coach expectations toward athletes, athletes’ perceived competence and motivation levels, and perceived coaching behaviors in a natural setting. The survey design was ideal for the quantitative portion of this study because of the low cost to administer, rapid turnaround for data collection, and access to a wider variety of restricted populations (Creswell, 2009; Knight, 2005). Another advantage of using surveys for data collection is the ability to identify attributes from a smaller sample of a large population (Babble, 1990; Fowler, 2002). The second and embedded phase involved the use of retrospective structured open-ended interview questions to enhance the quantitative data collected. Retrospective questions require the participant to retrieve information from recall of past events and experiences can be more accurate and reliable because individuals are forced to make inferences and form answers to general questions (Ericsson & Simon, 1993). Interview questions were standardized and structured according to guidelines in Patton (2002).

**Population and Sample**

This study examined a population consisting of female collegiate softball athletes and head coaches participating in Division I athletics for institutions located in the United States. All universities maintained membership in the National Collegiate Athletic Association (NCAA) Division I category for women’s athletics (NCAA, 2012a), and were located in urban and rural settings. Institutions for this study maintained female softball programs competing in 31 National athletic conferences recognized as Division I. The resulting sample included teams representing
15 of the 31 conferences recognized by the NCAA. A list of the conferences represented by this study and the number of participating institutions for each conference is located in Table I.

Table 1

**Softball Athletic Conference Representation**

<table>
<thead>
<tr>
<th>Conference Name</th>
<th>Number of Participant Institutions</th>
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<tbody>
<tr>
<td>Atlantic 10</td>
<td>1</td>
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<tr>
<td>Atlantic Coast</td>
<td>1</td>
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<tr>
<td>Big East</td>
<td>2</td>
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<tr>
<td>Big Ten</td>
<td>1</td>
</tr>
<tr>
<td>Colonial Athletic</td>
<td>3</td>
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<tr>
<td>Conference USA</td>
<td>1</td>
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<tr>
<td>Horizon League</td>
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**Participants**

The sample of participants was drawn from a cluster sample of intact Division I women’s softball teams recognized by the NCAA. Cluster sampling is a sampling technique involving the use of reasonably homogenous intact groups used to randomly select groups to represent the population within the clusters (Gall, Gall, & Borg, 2007). Cluster sampling for this study was conducted within a population of Division I women’s softball teams. Cluster sampling was appropriate to allow the researcher to examine the variables of this study with random selection within the chosen population. Results are generalizable to the Division I coaches and student athletes on participating softball teams. A random selection of 30 teams was chosen from the population (N = 290) with the final sample containing 20 teams (n = 20). The study began with 30 coaches giving verbal consent to participate. After the first survey was issued, four coaches
did not initiate the first survey and one coach requested to not participate after the first reminder email was issued. The first survey data collection point consisted of complete surveys from 25 coaches, but five coaches did not complete the second survey. The remaining 20 coaches with complete surveys at both time points were used for quantitative data analysis. Each participating team varied in the number of athletes on the roster, but typical roster size ranged between 18-22 athletes. A sample size of 148 female athletes (n = 148) was used to form expectancy groups, and a sample size of 174 athletes (n = 174) was used for analyses specific to motivation and perceived competence.

Quantitative Research Design

The quantitative portion of this study was a non-experimental survey design (Cresswell, 2009). Quantitative procedures used surveys to assess head coaches’ personal expectations about playing ability of each athlete on his or her roster. Surveys were used to measure each athlete on the selected teams for motivation and perceived sport competence type and perceived coaching behavior.

Research hypotheses.

The purpose of this study was to examine the effects of coach expectations on athletes’ self-determined motivation to play their sport. The Behavior Regulation in Sport (BRSQ; Lonsdale, Hodge, & Rose, 2008), Perceived Self Perception Profile (PSPP-SC; Fox, 1990), and the Coaching Behavior Assessment System-Perceived Behavior in Sport (CBAS-PBS; Cummings, Smith, & Smoll, 2006) were used to measure athletes’ motivation type and level, perceived sport competence level, and perceived coaching behaviors pre-to post-fall season. The Modified Expectancy Ratings Scale (MERS; Solomon, 2008) was used to measure coaches’
expectations about each athlete on his or her roster for the 2013 regular playing season. The quantitative analysis was guided by the following research hypotheses:

1. No distinct expectancy groups would emerge after the first data collection period that indicates coaches’ high or low expectations about the athletes. Coach expectancy scores were used as the independent and grouping variable for this hypothesis.

2. Perceived sport competence would not be correlated with intrinsic motivation or with self-determined extrinsic motivational types. Scores from the measure of perceived sport competence and motivation were the variables for this hypothesis.

3. Athletes would not experience a change in perceived sport competence or self-determined motivation over the course of the fall season. The independent variable for this hypothesis was cluster group membership. The dependent variables were scores from the perceived sport competence and motivation measures.

4. Athletes would not perceive different coaching behaviors based on group assignment during the fall season. The independent variable for this hypothesis was cluster group membership. The dependent variable was scores from the perceived coaching behavior measure.

A visual model of the independent and dependent variables is provided in Figure 2.

**Quantitative Procedures**

Permission to conduct the study was obtained from the researcher’s dissertation committee and the University of Mississippi Human Subjects Committee as part of the Institutional Review Board (IRB). A copy of the official IRB approval form may be found in Appendix A. The University of Mississippi’s IRB approved the study as an exempt study, but requested IRB consideration from each institution selected for participation prior to data
collection. The email sent requesting outside institution consideration is located in Appendix B. All institution’s IRB except one either approved the study or stated no further action was required. After email responses from each institution were received, responses were forwarded to The University of Mississippi’s IRB office before data collection began. Once email responses were received, surveys were issued to the approved institutions. Initial quantitative data collection began October 3, 2012 and ended November 4, 2012 during the fall practice season. Final quantitative data collection began January 7, 2013 and ended January 20, 2013 at the start of pre-season. Data collection occurred after the completion of a two-month long off-season to allow for adequate time for coaches to form sustainable expectations about each athlete on the team (Solomon, 2001; Wilson, Cushion, & Dawn, 2006)

Figure 2. A visual model illustrating the dependent and independent variables and possible relationships to one another.
Informed consent.

Informed consent forms were approved by the University of Mississippi’s Institutional Review Board conveying a basic description of the researcher and study, the demands of the study on the participant, what participants could expect from the study, the risks and benefits associated with participation in the study, and the guarantee of confidentiality to all participants. Informed consent forms provided the researcher’s contact information and asserted that participants may choose to withdraw from participation in the study at any point without penalty. Informed consent was indicated with electronic signatures indicated by selecting the option to participate in the study on the document from each coach participant in compliance with Human Subjects Committee requirements. A copyright notice was included on this form to grant permission to the researcher to reproduce written or oral direct comments from the participants without legal ramifications. The copyright statement informed the participant that by signing the copyright statement, he or she waived his or her rights to all future royalties (Patton, 2002). An electronic version of the coach consent form may be found in Appendix C, a copy of the electronic consent form athletes received may be found in Appendix D.

All participants were notified that before any data was collected informed consent form must be granted. Online informed consent was obtained electronically through the online survey software before the start of online data collection. All surveys were transferred into an online survey software, Qualtrics (accessible by visiting http://www.qualtrics.com), and were issued through emails containing links to the questionnaire site. Qualtrics is free software provided through the University of Mississippi Office of Research to all faculty, students, and staff, and was used to make data collection more attainable.
Data was collected in electronically for both player and coach participants. Typed copies of surveys were an option for coach participants, but all of the coach participants selected to receive surveys by email correspondence containing an electronic link to the survey. Athlete participants were asked to respond to surveys through on online survey. Lonsdale et al. (2006) conducted a study using competitive athletes (n = 214, mean age = 26.53 years) to compare survey response rates between traditional paper and pencil surveys and surveys answered through the Internet. The results indicated a noteworthy trend (p = .07, 2-tailed) toward more responses from the online survey takers (57%) than the traditional survey takers (47%). This study found online surveys contained less missing responses, and surveys were returned faster than the traditional handwritten method. Other studies have shown support for internet surveys as being more successful among younger participants with no difference in response rates among gender, and suggest people who are unhappy are more likely to respond through internet-based surveys than paper (Bech & Kristensen, 2009; Callas, Solomon, Hughes, & Livingston, 2010).

The online version of all participant surveys was reviewed and critiqued by an online research specialist employed at the University of Mississippi to ensure readability and function.

**Coaches.**

As soon as The University of Mississippi’s IRB approved the study on September 28, 2012, each head coach received a phone call from the researcher informing him or her about the study. The researcher wanted to establish a personal connection with the coaches with the desire to help the coach be more willing to participate when materials were issued. The phone call consisted of a scripted conversation (Appendix E) and informed the coach of the reasons for the study, verbal consent to participate, and the actions required to participate in the study. The researcher left a brief voicemail message, when necessary, asking for a return phone call if the
coach did not answer the first call. Voicemail messages did not contain information about the study, but were used as an attempt to make contact with the coach. Once contact was made, the conversation included a question of desired preference of a written copy or electronic copy of the coach questionnaire for ease of completion. All participants indicated the preference for electronic correspondence.

In the initial phone conversation the researcher asked the coach if he or she would forward an electronic link containing access to the athlete surveys to the athletes on his or her respective teams without coercing the athletes to complete the study. Teams were replaced according to one of two criteria: a) if the coach refused participation, or b) if the coach could not be reached after a total of ten attempts (voicemail, phone calls, and emails). Replacement teams were randomly selected from the original 290-team population until a coach was successfully contacted and willing to distribute the email link to his or her athletes. Replacement teams were selected sixteen times. Unsuccessful contact attempts resulted in fourteen replacements, and two requests not to participate resulted in two replacements. One refusal occurred during the initial phone call, and one refusal occurred after verbal consent had been obtained and the first reminder email for data collection was issued.

Once initial data collection began, starting the week of October 3, 2012, coaches received and electronic link to a coach survey (Appendix F) consisting of an informed consent form, demographic information, and a copy of the Modified Expectancy Rating Scale (MERS) (Solomon, 2008). Each coach was asked to complete a MERS questionnaire for each athlete listed on his or her roster for the 2013 playing season. Coaches were asked to complete the survey at their convenience, and surveys were designed so coach participants could start and finish later if needed. Coaches were told the survey would close on Sunday, November 4, 2012
in the second reminder email. To enhance response, as demonstrated in Lonsdale et al. (2006), reminder emails (Appendix G) were sent every 8-10 days to the coaches who had not responded to remind him or her of the study in progress. No more than three reminder emails were sent as suggested by Cook, Heath, and Thompson (2000) to avoid participants feeling harassed. The researcher numbered all coach surveys for matching purposes. No names were present on the response surveys.

Participating coaches were asked to forward links to electronic surveys to the athletes on his or her team within one-week of reception. The week of January 1, 2013, all coach participants received a reminder email (Appendix H) that was forwarded to the athletes reminding the athletes of the upcoming data collection point. Four weeks before the regular playing season, the week of January 7, 2013, coaches received a second copy of the MERS questionnaire (Appendix I). Each coach was asked to complete the MERS questionnaire about each athlete on which he or she reported in the first survey. The reported athletes’ initials and jersey numbers were inserted into the electronic survey so coaches would know which athletes to complete responses. Athletes could leave or join a team at any time point. Coaches were asked to complete and return the surveys as soon as possible, and the survey close data of January 20, 2013 was mentioned in all email communications. If completed surveys were not received within the one-week period after initial issuing, a reminder email (Appendix I) was issued every 8-10 days for no more than three emails to remind the coach of the study in progress (Cook et al., 2000; Dillman & Bowker, 2001). Surveys were issued during the fall practice off-season and pre-season in hopes of enhanced response rates as opposed to during the playing season when coaches and athletes are stressed and traveling for competitions. During the time of data
collection, coaches and athletes were not traveling, and the atmosphere was not as hectic as during the playing season.

**Athletes.**

Athletes received a forwarded electronic link to an electronic version of the player questionnaire through email. Athletes’ head coaches forwarded an email to each player listed on the 2013 softball roster starting October 3, 2012. The first athlete survey contained demographic information, email contact information, a copy of the Behavior Regulation in Sport Questionnaire (BRSQ) (Lonsdale, Hodge, & Rose, 2008), a copy of the Physical Self-Perception Profile-Sport Competence subscale (PSPP-SC) (Fox, 1990), and a copy of the Coaching Behavior Assessment Scale-Perceived Behavior Scale (CBAS-PBS) (Cummings, Smith, & Smoll, 2006). A copy of the athlete survey may be found in Appendix J. Surveys asked for the athlete’s school issued email and birth day and month for researcher identification purposes to match responses pre- and post-study, and so the researcher could send all further interview and final survey links directly to the athlete. After the first athlete survey was returned, all surveys were numbered for matching purposes only.

Athletes were asked to respond to the survey within one-week of receiving the email link. To enhance response return a reminder email (Appendix H) was sent to the head coach of team every 8-10 days for no more than three emails (Cook et al., 2000; Dillman & Bowker, 2001). No team had 100% response rate so each team received reminder emails at three time points. Athletes were informed the survey would close on November 4, 2012 in each reminder email. Participating athletes provided university issued email addresses by answering the first survey, so the researcher could directly email athletes the second athlete survey the week of January 7, 2013 approximately four weeks prior to the beginning of the regular playing season. The second
survey consisted of the PSPP, BSRQ, and CBAS-PBS, and was the same as the first questionnaire without demographic information. Athletes were asked to respond within one-week of initial reception, and the closing date of January 20, 2013 was typed in each email. If responses were not collected within the one-week period, a reminder email (Appendix G) was sent to the athlete directly every 8-10 days for no more than three emails to remind the athletes of the study in progress (Dillman & Bowker, 2001).

*Potentially sensitive information.*

Each university selected had separate pre- and post-study survey blocks created within the Qualtrics system. Creating separate surveys for each data collection time-period along with identifiers located on the surveys, allowed the researcher to match responses for both data collection points to appropriate participants. All electronic versions of the surveys were reviewed and critiqued by an expert in the higher education field. The expert had extensive knowledge of the Qualtrics software and creating and implementing surveys for higher education research. The coach survey asked for the athlete’s first and last initial and jersey number to allow the researcher to identify responses at both time points for individual athletes. The athlete survey asked for month and day of birth date for researcher identification and survey matching purposes. Athletes were asked to provide a university issued email address if they chose to participate in the study. The email addresses were used for researcher to athlete direct communication for data collection and response matching only. No other identifying information was available on the survey.
Instrumentation

Demographic information.

The form eliciting demographic information included questions for coaches and athletes on participant age, gender, and race. Coach demographic information included questions pertaining to overall coaching experience and coaching experience at the current institution and may be found in Appendix K. Athlete demographic information additionally included questions pertaining to overall playing experience, official classification, position played, time period playing for current head coach, and perceived starting role (i.e., starter or non-starter) and can be found in Appendix L. The question asking for racial identification included the options of “Caucasian,” “African American,” “Hispanic,” or “Other.” Demographic information for the qualitative portion was taken from the demographic form on the first survey. A short list of racial identifiers was used for ease on both the coach and athlete demographic information: however, “Latina” or “Latino” could have been included as more inclusive identifiers. Participants selecting “Hispanic” may have identified more appropriately to “Latina.”

Physical Self-Perception Profile: Sport Competence Subscale (PSPP; Fox, 1990).

Fox (1990) developed the Physical Self-Perception Profile through a complex sequence of pilot studies to assess physical self-perceptions. The PSPP is a multidimensional scale that consists of five 6-item subscales. Four of the five subscales test for perceptions of specific sub-domains of physical self-perception (i.e., sports competence, physical condition, body attractiveness, physical strength). The fifth subscale is used to measure general overall physical self-worth. In this investigation, only participants completed the sports competence subscale.

The PSPP items are presented in a structured alternate format to avoid socially desirable responses. The questionnaire begins by asking the participant to mark the response that best
describes him or her as a person. An example of a question is, “Some people do not usually have a high level of stamina and fitness BUT others always maintain a high level of stamina and fitness.” Participants must choose which alternative most closely describes them and indicate the extent to which that alternative fits them by making an answer of “Really True for Me” or “Sort of True for Me” for that item. The response format is translated into an item score by placing half of the items in the instrument in reverse so that the lowest-scoring descriptor is placed first, and items from each of the sub-domains are placed in sequence within the complete profile. For example, for items number 1, 11, and 21 (the questions relating to sport competence), the boxes on the left side of the question scored 1 then 2 respectively. The boxes on the right side of the question scored 3 then 4 respectively. The opposite is true for the remaining questions, numbers 6, 16, and 26. More detail about the scoring can be found in the Physical Self-Perception Profile Manual (Fox, 1990).

The PSPP was developed through a complex sequence of pilot studies, instrument trials, and modifications. Participants for the pilot studies included 589 university male and female students attending required general education English and communication classes at the University of Illinois along with an extended sample of students from a college in Missouri. Internal consistency reliability was established using Cronbach’s alpha for each of the subscales for both male and female students (alpha= .81 to .92). All items contributed consistently well to the functioning of the subscale because they returned a mean corrected item-total correlation score for all subscales of .69 for females and .63 for males. For test re-test reliability, the PSPP was re-administered to 40 participants after a 16-day period and to another 36 participants after a 23-day time span. The tests re-test reliability correlation coefficients ranged from .74-.89 indicating responses are stable over a 2-3 week period.
Factor analyses of the PSPP subscales reveal a strong factor structure, which explained 68.9% of the variance in females, and 63.5% of the variance for males. Item loadings were closely reproduced in further principal components analysis with a second sample. In addition, a confirmatory factor model that represented four correlated latent variables was tested using LISREL VI on the data from the second sample. Goodness of fit indices demonstrated that the items in the PSPP were well represented by the four-factor solution. This same structure has held strongly with other samples as well in a modified version (Fox, 1990). The original questions from the PSPP-SC subscale have been modified by the researcher to allow for more personalized questions. Expert opinion led to this decision because the wording of the original statement may confuse athletes. For example, the original statement reads, “Others feel they are not that good at sports.” The modified statement reads, “I feel I am not that good at sports.” A copy of the PSPP can be found in Appendix M.

Coaching Behavior Assessment System Perceived Behavior Scale (CBAS-PBS; Cumming, Smith, & Smoll, 2006).

The original Coaching Behavior Assessment System (CBAS; Smith, Smoll, & Hunt, 1977) was created as a system for observing and recording coaching behaviors during games and practices. The CBAS has been used in several studies in Youth Little League Baseball. Smith et al. (1977) found the coding system of this tool to be very affective in capturing an outsider’s perspective of coaching behaviors. Smith et al. (1979) found however, that the coaches themselves tended not to be entirely aware of behaviors they were displaying toward their athletes. The CBAS has been used mostly in studies for assessment on positive reinforcement and feedback from coaches (Smith et al., 1977, 1979, 1995).
The original CBAS contains 12 behavioral categories subdivided into reactive and spontaneous categories. The reactive behaviors are potential responses to situations that are easy to relate to. Reactive behaviors include reinforcement or non-reinforcement responses to athletes’ positive behaviors or effort, mistake-contingent technical instruction, ignoring mistakes as responses to mistakes and errors, and keeping control as a response to misbehaviors. Spontaneous behaviors include general technical instruction, general encouragement, organization, and general communication. The CBAS training program was derived empirically from a preliminary investigation involving 51 Little League coaches and 542 of their players (Smith et al., 1978). Procedure involved in-depth interviews with players and coaches, coach training sessions, and extensive external observation and coding of coaching behavior during competition. A control group was used for comparison among behaviors. A stepwise discriminant analysis of behavioral ratings made by the control group and experimental group revealed significant difference in group centroids based on the 12 behaviors (Wilks’ Lambda = .91, p < .002). Between the two groups, F tests revealed that there was a significant difference between how athletes under the direction of CBAS trained coaches perceived their coaches’ behavior compared to how athletes under un-trained coaches viewed behaviors. More support for the reliability and stability of the CBAS can be found in Smith et al. (1979).

The CBAS Perceived Behavior Scale was developed as a 12-item measure to assess athletes’ perceptions of their coach’s behaviors. The CBAS-PBS uses a definitional approach by providing a description of each of the original CBAS categories as a separate question. The athlete indicates the frequency with which the coach behaved in that manner. A sample definitional item (mistake-contingent encouragement) taken from the CBAS training manual is: “Sometimes players goof and make mistakes. Some coaches give their players support and
encouragement after they make a mistake. For example, they may say, “That’s okay, don’t worry about it, you’ll get them next time. Other coaches encourage you after you make mistakes.”

Athletes indicate how frequently their coaches engage in each class of behavior on a 7-point Likert scale with 1 (never) to 7 (almost always). A slightly modified version of the CBAS-PBS can be used to measure coaches’ perceptions of their own behaviors. For this study, the CBAS-PBS was used to assess the athletes’ perceptions of their coaches’ behaviors. A copy of the CBASS can be found in Appendix N.

**Behavioral Regulation in Sport Questionnaire-6 (BRSQ-6; Lonsdale, Hodge, & Rose, 2008).**

The Behavioral Regulation in Sport Questionnaire (BRSQ) was developed as a new alternative to measure competitive athletes’ amotivation, extrinsic, and intrinsic motivation (Lonsdale, Hodge, & Rose, 2008). The BRSQ exists as two versions (BRSQ-8 and BRSQ-6) and uses Self-determination theory (Deci & Ryan, 1985; 2000) as a model for conceptualization. This measure was developed to specifically challenge a previous measure, the Sport Motivation Scale (SMS; Pelletier et al., 1995) because of recent criticism over the psychometric properties of the SMS.

The BRSQ-6 is a 24-item measure used to assess six types of motivation in competitive athletes. The subscales of the BRSQ-6 fall along a continuum based of Ryan and Deci’s (1985; 2000) Self-determination theory. Each of the six subscales contain four items designed to measure amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation. The stem statement for each item is “I participate in my sport…” Athletes respond to the extent each item is true for them using a 7-point Likert scale ranging from 1 = not at all true, 4 = somewhat true, to 7 = very true. For this study, the BRSQ-6
will be used to assess six types of motivation, grouping intrinsic motivation as a general subscale, in competitive female athletes. Development of the items for both versions of the BRSQ consisted of a small pilot study followed by four larger studies to establish reliability and validity.

*Pilot study.*

The first pilot study involved creation of a pool of items the developers thought replicated the constructs of the SDT behavioral regulations (Ryan & Deci, 2002), but reflected the three types of intrinsic motivation suggested by Vallerand (1997). Vallerand argues three types of intrinsic motivation exist (i.e., motivation to experience stimulation, toward accomplishment, and to know). Other criteria for the items selected were definitions were significant to competitive athletes, items were short, items were easy to read, and no items held double meanings. After all criteria were met, 80 items were left for further review. Seven experts with peer-reviewed published articles on the SDT were asked to blindly review all 80 items. Each reviewer was asked to indicate to which subscale of the SDT each item corresponded most strongly, and to indicate any potential problems with items. Forty-two items were unanimously supported, and left six subscales comprised of five items and two subscales comprised of six items. After the 42 items were chosen, a small sample of 10 athletes was asked to complete the 42-item version of the BRSQ to establish ease of comprehension of directions and item definition. The athletes involved in the pilot study indicated the directions were easy to follow and the items were easy to understand meaning this version was ready for psychometric evaluation with a larger sample.
Study one.

The purpose of the first study was to eliminate cross-loading and low ranking items, and to explore the internal consistency and factorial validity of scores produced from the initial 42-item questionnaire. A diverse sample of elite athletes (N = 382) from New Zealand participated in the first study via written or electronic surveys. Confirmatory factor analysis (CFA) was conducted in three stages, and items were only allowed to load on one factor that had been hypothesized. Factors were allowed to freely correlate, error terms were not permitted to correlate, and factor variances were established at one. Stage one factor analysis analyzed each subscale separately. Items that appeared to be sufficient indicators of the latent variable were kept for the second stage analysis. Stage two involved pairing each subscale with other subscales in a series of two-factor CFAs. Items with a poor model fit, large standardized residuals, error terms correlating to other items, low factor loading, or cross-loading with an unintended latent variable were removed from the pool resulting in a 32-item scale. Stage three consisted of assessing the multiple-goodness-of-fit indexes (i.e., the CFI for normal, the TLI for non-normal, and the RMSEA for absolute). Factorial validity of the scores was determined by the item-factor loadings, and resulted in removing 10 items due to poor model fit and low factor loading. All remaining items suggested a very good model fit (RMSEA = .05, RMSEA 90% CI = .04 - .05, DI = .96, TLI =.96). Remaining items produced item-factor loadings from .58 to .91. Discriminant validity of the factor scores was determined by using the 95% confidence intervals of the interfactor correlations, and all confidence intervals ranged from .01 to .77. . Lastly, Cronbach’s alpha coefficients were examined to determine the internal consistency of scores for each subscale, and all alpha coefficients for each subscale ranged from .71 to .91 and were sufficient.
Study two.

The second study was used to scrutinize reliability and validity of scores obtained from the two modified versions of the BRSQ. The first version (labeled BRSQ-8) was the scale resulting from study one which included eight subscales and divided the intrinsic motivation subscale into three types of motivation from Vallerand’s (1997) work. The second version (labeled BRSQ-6) grouped intrinsic motivation into one general category as one subscale.

A large number and a diverse set of elite athletes (including some athletes from study one) participated in the second study (N = 571). The BRSQ-6 version containing a general intrinsic motivation subscale contained six factors that ranged from .63 to .91 for standardized loadings. Further analysis attempting to merge factors revealed this original version of the BRSQ-6 had the best fit to the data according to first-order CFA results, and provided additional evidence of validity for the factor structure. All alpha coefficients were greater than .78; however, the six factors did not appear to be ordered along a continuum consistent with SDT because some types of external motivation were correlated with each other resulting in four levels rather than six.

The BRSQ-8 version divided intrinsic motivation items into three types of intrinsic motivation. Items for the BRSQ-8 were adapted from statistically sound surveys, the Behavioral Regulation in Exercise Questionnaire (Mullan, Markland, & Ingledew; 1997) and the Self Regulation Questionnaire (Ryan & Connell, 1989). The lowest loading intrinsic motivation items from Study one were eliminated leaving each subscale on the new scale with four items. Cronbach alpha coefficients for intrinsic motivation scores ranged from .80 to .91, and standardized factor loadings ranged from .63 to .90.
Study three.

The purpose of the third study was to assure the BRSQ versions could be used to measure behavior regulation not only with elite athletes but also with all types of competitive athletes including non-elite athletes. A second purpose was to further examine the nomological validity of the BRSQ scores, and a third purpose was to directly compare the psychometric properties of the BRSQ to the SMS (Pelletier et al. 1995) and a newer version of the SMS, the SMS-6 (Mallett, Kawabata, Newcombe, Otero-Forero, & Jackson, 2007). A sample of non-elite undergraduate athletes \( n = 316 \) from a New Zealand university participated in this study. All participants completed the BRSQ (combining the BRSQ-6 and BRSQ-8 items), the SMS with the added items from the SMS-6 dispersed within the original SMS questionnaire, and a questionnaire assessing athlete burnout. The results of this study produced evidence of equal or superior internal consistency and factorial validity of the BRSQ scores when compared to the SMS and SMS-6 scores.

Study four.

The fourth study used a sample of competitive adult athletes \( N = 34 \) to evaluate the test-retest reliability of the BRSQ subscale scores. Athletes completed the BRSQ before training sessions at the start of the study and again at the end of the study which consisted of a seven day lapse. A minor period was used to ensure a small change (if any) in behavior regulation so a true measure of reliability could be assessed. Intraclass coefficients for all subscale scores ranged from .73 to 90. The acceptable coefficients supported the test-retest reliability of the BRSQ.

The BRSQ was designed specifically for competitive sport athletes. The authors do not suggest using this scale for other behavior regulations in other contexts. By including intrinsic motivation as a general subscale, the BRSQ-6 was more strongly related to motivated
consequences than the BRSQ-8 that divides intrinsic motivation into three subscales. The four studies the authors used show support for the reliability and validity of the BRSQ scores for both versions. A version of this questionnaire can be found in Appendix O.

**Modified Expectancy Rating Scale (MERS; Solomon, 2008).**

Limitations in expectancy research are a product of the lack of a precise measure of coach expectations for athletes’ performance abilities (Becker & Wrisberg, 2008). Expectancy measurements originated with a rank-order system that allowed coaches to rank athletes based on individual perceptions of the athlete’s ability (i.e., low or high ability) (Sinclair & Vealy, 1989; Solomon, DiMarco et al., 1998; Solomon & Kosmitzki, 1996; Solomon et al., 1996). The hierarchical ranking of the athletes from most skilled to least skilled were based most strongly on the athlete’s physical skills, and did not take into consideration any other characteristics that may contribute to an expectation formation (i.e., psychological abilities) (Solomon, 2001). The ranking system did not allow coaches to rank athletes equally if the coach perceived the athletes to possess the same performance ability.

Solomon (1993) created the Expectancy Rating Scale (ERS) with the intent of alleviating some of the limitations of the rank-order method. The ERS is a 5-item measure that presents the coach with short statement sentences about individual athletes’ independent from each other. The ERS requires the coach to assess the degree of truth the statement holds for that particular athlete. A sample question from the ERS is *this athlete possesses sound basketball fundamentals*. The coach is then asked to respond using a 5-point Likert scale ranging from 1 = *Not True* to 5 = *Very True*. Coaches are able to assign athletes equal rankings because of the independence the scale allows, however the ERS is still limited in that it places the most emphasis on evaluation of
athletes’ physical abilities disregarding the importance of other characteristics that coaches may use to form expectations (Solomon, 2001).

Solomon (2008) developed the Solomon Expectancy Sources Scale (SESS) to identify the most dominant characteristics coaches use to assess athletic ability. The fundamental purpose of the initial 30-item SESS was to quantitatively measure the degree of importance coaches placed on psychological and physical characteristics of athletes when developing and expectation about the athlete. The Delphi method involving three sport psychologist experts and three Division I coaches confirmed content validity (Solomon, 2001). Alpha reliability coefficients (\(r = .79\)) were acceptable (Solomon, 2002), and Solomon (2001) resulted in adequate sample reliability (\(r = .76\)). Becker and Solomon (2005) used the SESS to study Division I head basketball coaches, and six predominant characteristics emerged as primary sources of information the head coaches referred to when forming expectations about their athletes. The emerging characteristics were: *Work Ethic, Receptivity to Coaching, Willingness to Learn, Love of Sport, Willingness to Listen*, and *Competitiveness*. The results of this study prompted Becker and Wrisberg (2008) to add three items to the original ERS to include items that would allow coaches to assess psychological characteristics when forming expectations about athletes. The resulting measure is the 8-item Modified Expectancy Rating Scale (MERS) (Solomon, 2008).

The MERS contains the same question structure and 5-point Likert scale assessment as the original ERS. Content validity for the original MERS was obtained through three sport psychology expert’s feedback and consensus (Becker & Wrisberg, 2008). Initial test-re-test reliability was found to be acceptable (\(r = .77\)) using a small sample size over the course of a collegiate basketball season. A copy of this questionnaire can be found in Appendix I.
Quantitative data analyses.

The statistical analysis of data was produced in seven phases. First, alpha coefficients were calculated on all multi-item measures to evaluate internal consistency of measurement. Second, descriptive statistics of all variables were reported. Third, cluster analysis was used to determine whether groups of athletes could be distinguished based on the coach expectation scores from the MERS questionnaire.

Hypothesis one.

The first hypothesis stated no expectancy groups would form based on coach expectations about athlete ability. This hypothesis was examined through inferential statistics to determine if pre-season mean cluster groups differed. Both initial and final MERS scores were averaged to form one variable representing MERS initial scores and one representing final scores. A dependent t-test was used to examine if there was a significant difference from pre- to post-study MERS scores using the new variables. The dependent t-test is useful to examine the differences in means of groups that are correlated with each other (Gall et al., 2007). The sample fit the requirements for a dependent t-test because the same individuals were measured two different times, and the desire was to observe a difference in MERS scores at the two time points.

Cluster analysis is used to form homogenous subgroups based on consistent patterns in variables among participants. Cluster analysis is an exploratory statistical test that allows for grouping of individuals based on common characteristics but does not explain why those characteristics exist (Tan, Steinbach, & Kumar, 2005). Cluster analysis maximizes between-group variability while minimizing within-group variability. Two forms of cluster analysis were used to establish cluster groups based on MERS initial and final ratings. First, Ward’s method, a
common hierarchical method using the squared Euclidean distance as the similarity measure was used to obtain an overall sense of number of clusters, and was an appropriate initial analysis because the number of clusters was unknown. Ward’s method is considered an efficient method because cluster membership is determined by the total sum of squared deviations from the mean of a particular cluster, and cases are assigned to clusters one time only during the analysis. Cluster membership is granted if the case produces the smallest possible increase in the error sum of squares (Norusis, 2011). Ward’s method was run using both raw scores and z-scores to ensure cluster number was accurate. Variables used for this study were measured with the same scale, so standardizing scores was not necessary but was completed to ensure accuracy of results. Observation of both raw and z-scores from Ward’s method resulted in the same number of suggested clusters. The suggested number of clusters was used to run the second clustering method, k-means clustering. This is a similar method of cluster analysis procedure performed in Weiss and Amorose (2005). Based on the recommendations from Hair and Black (2000) and following procedure of Weiss and Amorose (2005), cluster solutions along with raw mean scores and z-scores were examined to ensure the number of clusters chosen was representative of the data.

The second and final clustering method, k-means clustering, is a nonhierarchical method using the squared Euclidean distance, similar to Ward’s method, as the similarity measure. K-means method requires prior knowledge of the number of clusters, and was an appropriate follow-up clustering method to Ward’s method. K-means clustering functions differently from hierarchical methods because cases are continuously assigned to clusters repeatedly during the analysis (Norusis, 2011). Initial cluster centers are calculated first. Initial cluster centers are used as the benchmark for case assignment. Cases are assigned to clusters based on the distance from
the initial cluster centers. Cluster centers are computed again after all cases are assigned to a cluster using all cases. Cases are assigned again using the updated cluster centers. Cases are assigned and cluster centers updated until the cluster centers do not change. The initial analysis was run with the suggested number of clusters from Ward’s method to determine initial cluster means. K-means method was completed a second time using the initial cluster means from the first output to obtain final cluster membership. Two runs of this method were sufficient because cluster means did not differ much from the first run to the second run.

**Hypothesis two.**

The second hypothesis stated there would be no correlation between perceived sport competence and self-determined types of motivation. The fifth phase of analysis involved a Pearson correlation ($r$) to examine the relationship between perceived sport competence and motivational types. Pearson $r$ (i.e., product-moment correlation coefficient) is used to show the strength and direction of relationships between two variables when both variables are continuous (Gall, Gall, & Borg, 2007). Pearson $r$ is the most commonly used bivariate correlation statistic used especially in education because most measures return continuous scores, and because Pearson $r$ has a small standard error.

**Hypothesis three.**

The third hypothesis stated no change in perceived sport competence or self-determined types of motivation would be evident from beginning to end. The original suggestion was to perform a one-way multivariate analysis of variance (MANOVA) to obtain a general, overall conclusion about all dependent variables in relation to cluster group. MANOVA is an extension of analysis of variance (ANOVA), and emphasizes mean differences and significant differences between groups when more than one dependent variable is present (Tabachnick & Fidell, 2007).
MANOVA is an omnibus test that will determine if the mean differences between groups with multiple dependent variables occurred by chance, and will give an overall conclusion about the effects of group membership on perceived coaching behavior and perceived sport competence and motivation levels. MANOVA is extremely sensitive to outliers, normalcy, and interdependence between dependent variables. The data set was explored for outliers, and outliers were removed; however, the cluster group samples for motivation and sport competence failed the assumption of equal covariances and independence. In addition, several variables within this sample failed the assumption of homogeneity of variance, which excluded MANOVA as an option for the sport competence and motivation variables (Field, 2009).

The sixth phase used a repeated measures ANOVA analyses for stable variables to test hypotheses two and four. ANOVA tests are used to compare the amount of variance in individual scores between-groups and the amount of variance within-groups (Gall et al., 2007). ANOVA is more robust to the assumption of normality, and offers adjustments for variables with unequal variances (Field, 2009). One-way ANOVAs were performed on the three variables that failed the assumption of homogeneity of variance. Welch’s $F$ test was used as the adjusted $F$ statistic for these variables. The Games-Howell procedure was used for any necessary post-hoc analysis to determine which specific groups were significantly different because sample sizes were unequal and several variables failed Levene’s test of homogeneity of variance, and all post-hoc analysis used a Bonferroni corrections to control for inflation of Type I error rate for results where equal variances were assumed (Field, 2009). One-way ANOVA results were followed by a Kruskal-Wallis non-parametric analysis to validate results of the three variables in question. Kruskal-Wallis is an alternative to one-way ANOVA, and is robust to normal distribution and unequal variances (Field, 2009). This test analyzes the dependent variable’s population median to see if it
remains the same across all levels of an independent variable. A Mann-Whitney U test was used as a post-hoc analysis to the Kruskal-Wallis to help determine which groups differed significantly. The Mann-Whitney U test is a non-parametric version of a t-test used when a sample does not have normal distribution, and assess if the distributions of the samples differ. It test for the difference in population median scores and spread between groups and was an appropriate follow-up analysis to the Kruskal-Wallis (Johnson, Vihn, & Phelps, 2004).

Hypothesis three, concerning the change in perceived sport competence and motivation by group membership, the dependent variable was standardized pre- and post-study perceived competence score and the independent variable was cluster group membership. A second repeated measures ANOVA was used to determine differences in group membership and motivation levels by using a standardized pre- and post-study motivation score as a dependent variable. A power analysis using G*Power (Faul et al., 2012), recommended a sample size of 132 participants for the statistical tests and analysis used for this portion of the study.

**Hypothesis four.**

The fourth hypothesis stated there would be no difference in perceived coaching behaviors between groups from pre- to post-fall season. The samples for the coaching behavior variables met the assumption for homogeneity of variance and the equality of covariance. Two separate one-way MANOVAs were used on all initial coaching behavior data and final coaching behavior data. All pre- and post-data was analyzed in separate analyses to maintain the assumption that the variables were independent of each other. MANOVA assessed mean differences among cluster group membership and subscales (i.e., type of coaching behavior) of the CBAS. A Type I error adjustment was used for unequal sample sizes, and the recommended test statistic that is reported for this situation is Pillai’s Trace (V) test to determine the level of
significance, and Games-Howell post-hoc analysis for significant results (Gall et al., 2007). A power analysis using the online free statistical software, G*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2012), recommended a sample size of 87 participants for the statistical tests and analysis used for this portion of the study. Repeated measures ANOVA was used to examine hypothesis four concerning group membership and perceived coaching behaviors in more detail. Similar to the ANOVA used for hypotheses three, the independent variable was cluster group membership. The dependent variable was standardized scores from the pre- and post-study CBAS measure assessing perceived coaching behavior.

For this study, partial eta squared estimate evaluations were reported. This study utilizes benchmarks presented by Cohen (1988) partial eta-squared evaluations as proposed by Cohen (1988) are: .01 equates to a small affect, .06 equates to a moderate affect, and .14 equates to a large affect. Partial eta squared represents the proportion of the variance that is explained by a particular variable that other variables in the analysis do not explain (Field, 2009). All results were computed using SPSS 20 (IBM, 2012).

A procedural diagram is helpful in illustrating the complexities of a mixed methods design. A design map uses geometric shapes, lines, and arrows to show the progression of a study. Using the guidelines presented in Cresswell and Clark (2011), a design map of this study is illustrated in Figure 3.
Figure 3. Study diagram depicting the use of quantitative research methods integrated with qualitative research methods in a concurrent embedded mixed methods design.

Note: QUAN = quantitative; qual = qualitative
Qualitative Research Design

Structured, open-ended interview questions were used to gather the perspective of athletes representing 18 of the final 20 participating teams. Participants volunteered to participate in an interview on the first athlete survey, and the sample resulted in an emergent sample (Patton, 2002). The researcher remained open to all participant responses, and allowed information to unfold as the study continued.

Research question.

The qualitative analysis was conducted concurrently to add to the depth of the quantitative portion of the study. The qualitative analysis was guided by the research question: How do athletes perceive their head coaches to affect their intrinsic motivation to continue playing softball for their current team? Specifically, what types of coaching behaviors do athletes perceive to alter their motivation to play softball?

Qualitative procedure

Athlete interview method and questions.

Athletes were asked on the initial survey if they would participate in a brief phone or email interview during the months of October, November, and December during the softball fall practice season. A follow up email was administered to participating athletes to arrange for time and delivery method of the interview (Appendix P). The researcher conducted each interview phone interview (n = 22) ranging from 13 to 21 minutes. Nineteen athletes indicated a preference for an email interview. The scripted phone interview protocol was adjusted by removing script and emailed to participants. Interviews consisted of 12 structured, open-ended questions to add depth to the quantitative data collected from the athlete measures, and to attempt to gather information from the athletes’ perspective. The first question asked athletes to describe their
softball background and was used as a way to build repertoire with the athletes. The remaining questions were designed to directly and indirectly assess the athletes’ views of the affects their head coach has on their intrinsic motivation to play softball. A detailed interview protocol was followed for all interviews to ensure all participants receive the same questions (Patton, 2002). Three experts in the field of sport psychology reviewed each question to enhance content validity (Cresswell & Clark, 2011). A pilot study was conducted using three female collegiate athletes from non-participating institutions to ensure the questions were understandable and asked what the researcher intended. The complete interview protocol may be found in Appendix Q.

Pilot study.

Three female Division I collegiate athletes participated in a pilot study to develop the interview questions. The athletes were two soccer athletes and one softball athlete from non-participating institutions. One athlete was interviewed face-to-face by the researcher, and two athletes participated in individual phone interviews conducted by the researcher. Each athlete was given an explanation of the study, right to withdraw, and confidentiality was explained according to the participant information sheet found out the beginning of the athlete survey in Appendix D. Participants were informed of the purpose of their participation as helping the researcher develop interview questions in a clear and concise manner. Participants responded to the question asked, and then discussed with the researcher if clarification should be made concerning question structure. Interviews were recorded on an audio recording device, and the researcher transcribed all conversations. A summary of the responses to the interview questions was sent to each participant for member checking (Patton, 2002). Slight modifications to interview questions were made according to participant suggestion.
Interview question modifications.

Question two of the original protocol defined both competence and motivation then asked participants to describe factors in their environment they felt affected competence and motivation toward softball. Pilot study participants suggested this question be divided up into two separate questions: one asking about competence and one asking about motivation. The final question number two was separated into two questions to better receive the athletes’ perceptions pertaining to competence and motivation. Question six of the original protocol asked participants to reflect on a time they felt most motivated to play softball then asked participants to explain any changes in motivation from that moment. The definition of motivation from question two was moved to the beginning of this question. The end of the question was altered to ask participants to explain why they played softball at their most motivated moment. A second probe question was added asking participants to compare their most motivated moment to the present time and explain, if at all, how their motivation had changed. The adjustment to question six was made by the researcher based on flow of the interview with pilot study participants. Pilot study participants agreed all other questions were clear and easy to understand. The final protocol can be found in Appendix Q.

Ethical considerations.

Each athlete was informed of the nature of the study and how individual responses will contribute to the overall findings. Athletes were assured participation was strictly voluntary, participation withdrawal was permitted at any time during the interview and responses were kept confidential. Summarized content of the interview data was emailed to each athlete directly for member checking. Member checking is a method used to ensure the interview has captured the intended meaning of the interviewee’s responses (Gall et al., 2007; Patton, 2002). Athletes were
asked to confirm the information for accuracy in content and intention. The athlete was instructed to remove or edit any information she desires.

Although the researcher knew identifying information about the athlete (i.e., email address or phone number), the information was permanently deleted from all documents. All identifying information was removed to maintain the anonymity of the participant (Patton, 2002). The researcher made a conscious effort to not refer to the participant by her real name, only by her pseudonym, through all communication. The researcher tracked all participant correspondence by referencing email addresses and pseudonyms. Interviews were recorded on a hand-held voice-recording machine. The researcher transcribed all interviews for confidentiality and accuracy. All recorded data was stored in a locked safe purchased by the researcher for the duration of the study. After completion of the study, all voice recordings were erased permanently. All interview and survey data will be stored in a safe, secure location known only to the researcher for seven years for the dissertation requirements. After the appropriate time-period has elapsed, all saved data and information will be permanently destroyed.

**Role of the researcher.**

I have over seven years of coaching experience and four years of playing experience in the population chosen for this study. One reason I chose this population is there is little research specific to this population. Many studies involve a variety of athletes from different types of sports, but no one study focuses on collegiate women’s softball athletes or coaches. Another reason I chose this population is I have witnessed both positive and negative effects of coaching behavior on female softball athletes. I have seen coaches who were successful statistically in the game, but the relationship between the coach and athletes was poor. I have seen coaches who are considered expert coaches because of success on the field, but who consistently lose athletes to
transfer or termination. I have witnessed coaches who are considered average in coaching ability, but who have athletes who are happy and love to play the game. These coaches maintain lasting relationships with their athletes long after athletes graduate. I have seen coaches who are highly successful in both coaching ability and relationship building with their athletes. I needed to be constantly aware of my personal feelings toward coaches concerning their coaching style and personality type. I have been removed from coaching for two years, and there is a possibility I knew some of the coaches selected for the study. I needed to make sure previous experiences or information does not hinder my neutrality toward the situation.

My intention in using this study was to not only contribute to the existing literature on coaching behaviors and athlete motivation, but to provide results that coaches and athletes in this population can relate to their personal situations. Although my intentions are positive, I had to take precautions to remain unbiased when interpreting results. One way I controlled for my personal biases was to employ two external coders that are explained in the data analysis section. Another way I controlled for personal biases was to keep a subjective audit journal to record any responses that arouse strong negative or positive responses within me (Patton, 2002). A subjective audit allowed me to track areas that may affect my perceptions and biases about certain topics.

**Qualitative data analyses.**

Each tape-recorded interview was administered and transcribed verbatim by the researcher within two days of the interview so the researcher could fully understand the data (Patton, 2002). Recorded interviews were accompanied by notes taken by the interviewer to capture special meaning or emphasis placed on certain words in an effort to ensure the entire meaning of the words were understood. Once recorded interviews were thoroughly transcribed,
the researcher used an inductive content analysis procedure by analyzing the words for patterns and themes that emerged within responses (Patton, 2002).

Several coding steps were used to form themes. First, all transcripts were read three times in their entirety with no analyses to understand the data in the entirety (Patton, 2002). Second, an initial coding sheet was developed and codes were tallied during a fourth reading of each transcript to give the researcher a starting code framework. Third, the code tally was refined and codes adjusted as necessary by identifying convergent and divergent codes on three separate occasions (Patton, 2002). Fourth, responses were grouped according to the question asked, and each response category was evaluated to form an overarching theme until each response was grouped into an appropriate category (code). Each participant’s responses were reviewed and compared to all other participants to identify emerging themes. After themes were assigned, relating quotes and themes were assessed for thematic validity by a third party (Gall et al., 2007; Patton, 2002). If any discrepancy was found, the researcher and the third party discussed until an agreement was obtained. A thematic framework was developed as codes emerged that guided the analysis.

SDT and existing literature were used to compare emerging themes to help protect against researcher bias (Cresswell, 2009; Patton, 2002). The results of the qualitative data analyses were integrated with the results of the quantitative data analyses to enhance the overall results of the study (Cresswell & Clark, 2011).

**Coders.**

Two external coders were used in conjunction with the researcher. The nature of this study required knowledge of both theory and coaching experience. Because of the nature of the interview questions for this study, one coder was a recent doctoral graduate in sport psychology
with experience working with qualitative data. The second coder was a retired expert softball coach with no research experience, but with over 30 years of collegiate softball coaching experience. The researcher served as the third coder. After the researcher transcribed all phone interviews, the researcher completed the first four steps of the coding process to ease the responsibilities of the other coders. All three coders completed the final coding steps, and consensus was met between the three coders to enhance reliability (Patton, 2002). An external auditor was used for third party checking to assess the accuracy of the codes and conceptual framework.

**Rigor.**

In qualitative research, rigor involves various strategies used to enhance the quality and credibility of a qualitative study (Patton, 2002). This study used methods triangulation as one avenue to establish rigor. Methods triangulation involves the use of comparing and integrating data from both quantitative and qualitative sources. This study was a mixed methods design and achieved methods triangulation through quantitative measurements integrated with qualitative interviews. Another method used to establish rigor was the use of member checking. Member checking involved sending summaries of interview data to members to verify the appropriate meanings and themes were recorded (Gall et al., 2007). Participants reviewed responses for accurateness and completeness, and were asked to correct factual errors if any were noticed. Third-party checking was used gain an outside perspective of the correctness of theme coding (Gall et al., 2007). The third party used for this study was an experienced researcher with a terminal degree in higher education and experience with qualitative research methods. The third party had no personal interest or other involvement in this study. Finally, the researcher recorded thoughts through a reflective audit journal. Gall et al. (2007) suggest the use of a reflective audit
as a method to keep the researcher aware of potential biases that may affect objective data analyses.

Summary

This chapter offered a detailed description of the data analyses necessary for the purpose of this study. The emphasis of this mixed methods study was on the quantitative data analyses, and qualitative analyses were used to enhance the quantitative results. The next chapter presents the results gathered from the analyses of quantitative data. Results of qualitative data is presented in Chapter V. Integration of the results are discussed in Chapter VI.
CHAPTER IV

Quantitative Results

The purpose of this concurrent embedded mixed methods study was to examine the effects of coach expectations, displayed through feedback and behaviors, on female collegiate athletes’ intrinsic motivation to play softball. The study emphasized quantitative methods in the form of self-report surveys enhanced by qualitative methods in the form of structured interview responses. The results and findings for the quantitative and qualitative portions of this study are reported separately and integrated in the discussion chapter. Overall descriptive statistics are presented, and specific results are discussed within sections labeled by the appropriate hypothesis.

Hypotheses

The quantitative portion of this study was guided by the following four hypotheses expressed in null form:

1. No distinct expectancy groups would emerge from the first time point that indicates coaches’ high or low expectations about the athletes.

2. Perceived sport competence would not be correlated with intrinsic motivation or with self-determined extrinsic motivational types.

3. Athletes would not experience a change in perceived sport competence or self-determined motivation over the course of the fall season.
4. Athletes would not perceive different coaching behaviors based on group assignment over the course of the fall season.

**Measures**

Scale reliability was examined for multi-item measures used in this study. Cronbach’s alpha was reported for the Modified Expectancy Ratings Scale, the Behavior Regulation in Sport Questionnaire, and The Physical Self Competency Profile-Sport Competence subscale. Table 2 provides reliability statistics for all measures used in this study. Examination of this table will reveal that the observed alpha values exceeded Cohen’s (1988) minimum criterion of .70 in most instances with a substantial portion in the .8 to .9 range indicating good reliability. The PSPP-SC subscale returned an alpha value less than .70 ($\alpha = .63$). Two of the six items returned weak correlations below .30 between each item and the total questionnaire score as indicated in the Corrected Item-Total Correlation Range column. Neither of these items would have increased the overall alpha level if they had been discarded. All items on the PSPP-SC subscale for the initial survey were kept despite the resulting reliability score. Field (2009) discusses Cronbach’s alpha being sensitive to the number of items in the measure, and explained the more items in a measure can increase the alpha value. The original PSPP contains five subscales, but this study required the use of one subscale. The sport competence subscale contained six items. The low number of items could cause the alpha value to be lower. Descriptive statistics pertaining to each measure are presented within the appropriate hypothesis section.
Table 2

*Internal Consistency Coefficients for all Measures*

<table>
<thead>
<tr>
<th>Measure</th>
<th># of Items</th>
<th>Cronbach’s α</th>
<th>Corrected Item-Total Correlation Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modified Expectancy Ratings Scale</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>8</td>
<td>0.88</td>
<td>.52 - .80</td>
</tr>
<tr>
<td>Final</td>
<td>8</td>
<td>0.92</td>
<td>.64 - .81</td>
</tr>
<tr>
<td><strong>Behavior Regulation In Sports Questionnaire</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic</td>
<td>4</td>
<td>0.93</td>
<td>.81 - .87</td>
</tr>
<tr>
<td>Integrated</td>
<td>4</td>
<td>0.82</td>
<td>.60 - .69</td>
</tr>
<tr>
<td>Introjected</td>
<td>4</td>
<td>0.86</td>
<td>.53 - .81</td>
</tr>
<tr>
<td>Identified</td>
<td>4</td>
<td>0.77</td>
<td>.54 - .64</td>
</tr>
<tr>
<td>External</td>
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<td>0.90</td>
<td>.70 - .86</td>
</tr>
<tr>
<td>Amotivation</td>
<td>4</td>
<td>0.89</td>
<td>.54 - .64</td>
</tr>
<tr>
<td>Final</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic</td>
<td>4</td>
<td>0.94</td>
<td>.83 - .89</td>
</tr>
<tr>
<td>Integrated</td>
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<td>.69 - .82</td>
</tr>
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<tr>
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<td>Amotivation</td>
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<td>0.63</td>
<td>.27 - .49</td>
</tr>
<tr>
<td>Final</td>
<td>6</td>
<td>0.74</td>
<td>.25 - .57</td>
</tr>
</tbody>
</table>

*Note: The PSPP contains five subscales. Only the sport competence subscale was used for this study.

**Participants**

**Coaches.**

The coaches involved with this study consisted of head coaches of varsity level, women’s softball teams at universities competing at the Division I level of collegiate athletics. Coach participants were both male and female with varying levels of coaching experience, ranging in age from approximately 25 to 60 or more years. Each team selected consisted of one female or
male head coach. A total of 30 head coaches were asked to participate with their team for this study, and of the original 30 coaches, 20 completed both measures. To achieve a 95% confidence interval allowing for 4% error, a response rate of 12 was suggested (Fincham, 2008; IAR, 2007). Demographic information about the coach participants is provided in Table 3.

Examination of Table 3 reveals 95% of participants were Caucasian, and 70% of participants (n = 14) were female coaches. Coach participants’ average age was between 35-39 years (m =4.9, sd = 1.9). Coach participants were Division I college softball coaches with a variety of previous coaching background. Overall coaching experience included any previous coaching involving a variety of athletes, sports, and at levels of competition (e.g., collegiate, high school, recreational). Coach participants averaged between 15-19 years of overall coaching experience (m =5.0, sd = .94). The majority of participants (n = 12) reported coaching experience for between 10-19 years accounting for 60% of coach participants. All coach participants had more than five years of overall coaching activity, and provided an experienced sample of head coaches. The majority of coaches (n = 10) reported coaching at all institutions between 1-9 years and represented 50% of coach participants. Participants averaged between 5-9 years of experience (m =3.4, sd = 1.6) at all institutions. Coaching experience at all institutions included any coaching experience within any NCAA recognized competitive conference at any institution, coaching any sport, and in any role (e.g., assistant coach, volunteer coach, head coach). Four participants were in the first year as the new head coach at their current institution. Most participants, and the average for coaches, reported coaching at their current institution between 5-9 years (n = 6, m =2.9, sd = 1.5). The majority of coach participants (n = 15) had coached at their current institution for less than nine years.
## Table 3

*Coach Participant Demographic Information*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent (%)</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
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<td>95.0</td>
<td>95.0</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
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<td>5.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
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<td>30.0</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>70.0</td>
<td>70.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-29 years</td>
<td>1</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>30-34 years</td>
<td>3</td>
<td>15.0</td>
<td>15.0</td>
<td>20.0</td>
</tr>
<tr>
<td>35-39 years</td>
<td>8</td>
<td>40.0</td>
<td>40.0</td>
<td>60.0</td>
</tr>
<tr>
<td>40-44 years</td>
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<td>10.0</td>
<td>10.0</td>
<td>70.0</td>
</tr>
<tr>
<td>45-49 years</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>50-54 years</td>
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<td>20.0</td>
<td>20.0</td>
<td>90.0</td>
</tr>
<tr>
<td>55-59 years</td>
<td>1</td>
<td>5.0</td>
<td>5.0</td>
<td>95.0</td>
</tr>
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<td>5.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total Years Coaching</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Sports</td>
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</tr>
<tr>
<td>20 plus years</td>
<td>7</td>
<td>35.0</td>
<td>35.0</td>
<td>100.0</td>
</tr>
<tr>
<td>All Institutions</td>
<td></td>
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</tr>
<tr>
<td>&lt; 1</td>
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<td>10.0</td>
</tr>
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<td>1-4</td>
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<td>70.0</td>
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<td>15-19</td>
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<td>15.0</td>
<td>15.0</td>
<td>85.0</td>
</tr>
<tr>
<td>20 plus years</td>
<td>3</td>
<td>15.0</td>
<td>15.0</td>
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<tr>
<td><strong>Total Years Head</strong></td>
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<td></td>
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<tr>
<td>At Current Institution</td>
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<td>15-19</td>
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<td>15.0</td>
<td>15.0</td>
<td>95.0</td>
</tr>
<tr>
<td>20 plus years</td>
<td>1</td>
<td>5.0</td>
<td>5.0</td>
<td>100.0</td>
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</tbody>
</table>
Athletes.

Athletes used for this study consisted of collegiate undergraduate female softball athletes participating at the Division I level of intercollegiate athletics in the United States. Athletes were active members of a varsity women’s softball team representing 20 of the 290 universities with Division I athletic status recognized by the NCAA (NCAA, 2012a). Athletes ranged in age from 18 to 22 years. The original cluster sampling method was used to randomly select 30 softball teams from the 290 recognized by the NCAA. Approximately 560 female softball athletes were asked to participate in this study. The final sample size consisted of 174 female collegiate softball athletes.

The total number of athlete participants varied by measure and analyses. Expectancy group formation required coach expectancy ratings about each athlete and athlete demographic information. The final sample for expectancy group analyses was 148 athletes (n = 148). Analyses requiring information on sport competence and motivation required information from athlete participants only. A final sample of 174 athletes (n = 174) was used for motivation and competence analyses. After the first data collection point, the study included 25 participating head coaches. Some athlete participants from the five coaches that were dropped responded to both surveys and their responses were retained for a more in-depth examination of motivation change and perceived coaching behaviors. Demographic information about all athlete participants (n = 174) can be found in Table 4. A 60% response rate for survey responses is considered acceptable (Fincham, 2008; IAR, 2007). To achieve a 95% confidence interval allowing 4% error the suggested response rate was 232 participants.
Table 4

**Athlete Demographic Information**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent (%)</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
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<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>144</td>
<td>32.1</td>
<td>82.8</td>
<td>82.8</td>
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<td>Hispanic</td>
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<td>4.5</td>
<td>11.5</td>
<td>96.6</td>
</tr>
<tr>
<td>African American</td>
<td>4</td>
<td>0.9</td>
<td>2.3</td>
<td>85.1</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>1.3</td>
<td>3.4</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Age</strong></td>
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<td></td>
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<tr>
<td>18 years</td>
<td>53</td>
<td>11.8</td>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>19 years</td>
<td>36</td>
<td>8.0</td>
<td>20.7</td>
<td>51.1</td>
</tr>
<tr>
<td>20 years</td>
<td>49</td>
<td>10.9</td>
<td>28.2</td>
<td>79.3</td>
</tr>
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<td>21 years</td>
<td>29</td>
<td>6.5</td>
<td>16.7</td>
<td>96.0</td>
</tr>
<tr>
<td>22 years</td>
<td>7</td>
<td>1.6</td>
<td>4.0</td>
<td>100.0</td>
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<td>0.6</td>
<td>0.6</td>
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<td>2</td>
<td>0.4</td>
<td>1.1</td>
<td>1.7</td>
</tr>
<tr>
<td>5-9</td>
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<td>8.0</td>
<td>9.8</td>
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<tr>
<td>10-14</td>
<td>98</td>
<td>21.9</td>
<td>56.3</td>
<td>66.1</td>
</tr>
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<td>15+</td>
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<td>33.9</td>
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<td><strong>Total Years Completed At Current Institution</strong></td>
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<td>43.1</td>
<td>43.1</td>
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<tr>
<td>1</td>
<td>38</td>
<td>8.5</td>
<td>21.8</td>
<td>64.9</td>
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<tr>
<td>2</td>
<td>32</td>
<td>7.1</td>
<td>18.4</td>
<td>83.3</td>
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<td>3</td>
<td>29</td>
<td>6.5</td>
<td>16.7</td>
<td>100.0</td>
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<tr>
<td><strong>Total Years Under Current Head Coach</strong></td>
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<td></td>
<td></td>
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<td>99</td>
<td>22.1</td>
<td>56.9</td>
<td>56.9</td>
</tr>
<tr>
<td>1</td>
<td>42</td>
<td>9.4</td>
<td>24.1</td>
<td>81.0</td>
</tr>
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<td>2</td>
<td>24</td>
<td>5.4</td>
<td>13.8</td>
<td>94.8</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>2.0</td>
<td>5.2</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Primary Playing Position</strong></td>
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<td></td>
</tr>
<tr>
<td>Pitcher</td>
<td>33</td>
<td>7.4</td>
<td>19.0</td>
<td>33.9</td>
</tr>
<tr>
<td>Catcher</td>
<td>26</td>
<td>5.8</td>
<td>14.9</td>
<td>14.9</td>
</tr>
<tr>
<td>First Base</td>
<td>17</td>
<td>3.8</td>
<td>9.8</td>
<td>43.7</td>
</tr>
<tr>
<td>Second Base</td>
<td>26</td>
<td>5.8</td>
<td>14.9</td>
<td>58.6</td>
</tr>
<tr>
<td>Third Base</td>
<td>12</td>
<td>2.7</td>
<td>6.9</td>
<td>74.1</td>
</tr>
<tr>
<td>Short Stop</td>
<td>15</td>
<td>3.3</td>
<td>8.6</td>
<td>67.2</td>
</tr>
<tr>
<td>Outfield</td>
<td>45</td>
<td>10.0</td>
<td>25.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>
An examination of Table 4 reveals most of the sample was comprised of 18-year old Caucasian females with 10-14 years of softball playing experience. Twenty participants identified as Hispanic, four as African American, and six as Other. Athletes range in age from 18-to 22-years old ($m = 20, sd = 1.2$), with the majority of participants reporting in the 18-year old category. Athletes had an average of 1-4 years of total softball playing experience ($sd = .82$), and the majority of athletes (56.3%) had 10-14 years of total experience. Total softball playing experience included playing softball at any age for any type of team before the time of the study. Athletes had completed an average of one year ($sd = 1.1$) at the institution of enrollment at the time of the study. Most athletes ($n = 75$) had played at their current institution for less than one year and represented 43% of the participants. Participants who completed one year or less ($n=113$) at their current institution comprised 65% of the sample. Athletes were not asked to report completed academic status, but the descriptive statistics allude to a sample containing mostly freshman and sophomores. Athletes reported playing under their current head coach for an average of 1.7 years ($sd = .90$) Interestingly, the majority of athletes had played for their current head coach for less than one year ($n = 99$).

Participants were asked to report their primary playing position for their current team. Playing positions indicated all infield positions (e.g., pitcher, catcher, first base, second base, short stop, and third base) and grouped the three outfield positions into one category. Examining playing positions individually reveals outfielders represent 26% of all participants with pitchers following at 19%. If all infield positions are grouped together similarly to the outfield category, participants who played an infield position represent 74% ($n = 129$) of all participants.
Hypothesis one.

The first hypothesis was no distinct expectancy groups would emerge from the first time point that indicated coaches’ high or low expectations about the athletes. Coach expectancy scores from the MERS measure were averaged to obtain and average MERS initial score and average final score for each participant. The averaged variables were used to form cluster groups. Descriptive statistics for the coach expectancy ratings are reported in Table 5. Examination of Table 5 shows the mean coach expectancy ratings for initial surveys were higher descriptively than mean expectancy ratings for the final survey. The Likert scale range for the MERS survey was “1” to “5” with lower scores indicating lower expectations. An average expectancy rating would fall in the “3” category. Both initial and final average ratings were above the average rating for expectations.

Table 5

*Descriptive Statistics for the MERS variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>4.05</td>
<td>.76</td>
<td>1.75</td>
<td>5.00</td>
</tr>
<tr>
<td>Final</td>
<td>3.90</td>
<td>.82</td>
<td>1.00</td>
<td>5.00</td>
</tr>
</tbody>
</table>

A paired samples t-test was conducted to compare means from the MERS initial and final average scores to determine if the there was a significant difference between time points. There was a significant difference between MERS initial and MERS final ratings and a small effect size with $t(147) = 2.11, p = .05, d = .17$. Cohen’s $d$ (1988) was reported for this portion of hypothesis one analysis.

Cluster analyses.

Univariate and multivariate outliers can interfere with cluster analysis results, and outliers should be examined before conducting cluster analysis (Field, 2009). All data was examined for
outliers before cluster analysis was performed. The data contained some outliers, but examination of all clusters revealed outliers did not affect results. The means and ‘5% Trimmed Means’ were similar for each cluster. The similarity in means indicate outliers did not alter data enough to discard outlier cases. Information about outliers is reported in Table 6.

Table 6

Data Exploration for Outliers of Cluster Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cluster</th>
<th>Mean</th>
<th>5% Trimmed Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MERS Initial</td>
<td>1</td>
<td>2.76</td>
<td>2.76</td>
<td>.56</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4.59</td>
<td>4.60</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.70</td>
<td>3.70</td>
<td>.41</td>
</tr>
<tr>
<td>MERS Final</td>
<td>1</td>
<td>2.39</td>
<td>2.43</td>
<td>.57</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4.52</td>
<td>2.43</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.66</td>
<td>3.67</td>
<td>.37</td>
</tr>
</tbody>
</table>

The Ward’s clustering method provided guidance for the number of clusters represented in the data. Agglomeration coefficients resulting from this method for both raw and z-scores showed a noticeable change in percentage when moving from three clusters to four clusters suggesting a three-cluster solution was the most appropriate for the sample (n = 148). After the third cluster, the next cluster added noticeably less to distinguishing among cases.

Agglomeration coefficients are presented in Table 7. Agglomeration coefficients were examined starting with the final coefficient as suggested by Norusis (2011).
Table 7

Agglomeration Coefficients for Raw and Z-scores Using Ward’s Method

<table>
<thead>
<tr>
<th>No. of Clusters</th>
<th>Agglomeration last step (Raw Scores)</th>
<th>Coefficients this step</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>294.00 (169.85)</td>
<td>127.95 (84.30)</td>
<td>166.05 (85.55)</td>
</tr>
<tr>
<td>3</td>
<td>127.45 (84.30)</td>
<td>81.24 (45.42)</td>
<td>46.21 (38.88)</td>
</tr>
<tr>
<td>4</td>
<td>81.24 (45.42)</td>
<td>56.16 (37.42)</td>
<td>25.08 (8.00)</td>
</tr>
</tbody>
</table>

Note: Z-scores are reported first and raw scores results are shown in parentheses.

A three-cluster solution was implemented in the k-means cluster method. The initial k-means analysis produced final cluster centers for the three clusters. The cluster centers generated from the first k-means analysis were used as the initial cluster centers for the second k-means analysis as suggested by Norusis (2011). The cluster centers from the first to second k-means analyses did not change indicating cluster centers were stable and clusters were reliable. The final analysis resulted in three clusters. Table 8 displays cluster composition and characteristics.

Table 8

Cluster Composition and Characteristics

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Expectancy Label</th>
<th>n</th>
<th>MERS Initial</th>
<th>MERS Final</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low</td>
<td>17</td>
<td>2.76</td>
<td>2.39</td>
<td>11.5</td>
</tr>
<tr>
<td>2</td>
<td>High</td>
<td>70</td>
<td>4.59</td>
<td>4.56</td>
<td>47.3</td>
</tr>
<tr>
<td>3</td>
<td>Average</td>
<td>61</td>
<td>3.70</td>
<td>3.66</td>
<td>41.2</td>
</tr>
</tbody>
</table>

Note: MERS information is the final distance from the cluster center established by the second k-means analysis and serves as the mean rating for each cluster.

The resulting three clusters divided athlete participants by mean initial and final expectancy ratings. The MERS scale rates players from one to five with a midpoint rating of three. MERS ratings below three are used to describe low expectancy athletes. MERS ratings in
the three to four range are used to describe average expectancy athletes. MERS ratings in the four to five range are used to describe high expectancy athletes. Cluster two, athletes with average expectancy ratings, represent the largest cluster. A noticeable difference is evident between high expectancy and low expectancy clusters based on descriptive information. Cluster one contains 17 participants and was noticeably smaller than the other two clusters: however, the difference in MERS means should be mentioned. The formation of three cluster groups based on expectancy ratings scores did not necessarily indicate coaches formed expectations about athletes’ playing ability. Cluster analysis does not determine if there is a significant difference between clusters, nor does the analysis provide reasoning for why the characteristics exist (Tan, Steinbach, & Kumar, 2005), but the significant results of the dependent t-test on the MERS initial and MERS final ratings and the descriptive differences observed in Table 8 assist in determining coaches did form expectations about athletes’ performance ability. The null hypothesis for hypothesis one was rejected.

**Hypothesis two.**

The second hypothesis stated perceived sport competence would not be correlated with intrinsic motivation or with self-determined extrinsic motivational types. Scores from the measure of perceived sport competence and motivation were the variables for this hypothesis. To obtain a better understanding between perceived competence and motivation, the complete sample of athlete data was used for analysis (n = 174). Pearson correlation coefficients calculated to test hypotheses three are presented in Table 9. The commentary on these coefficients is subsequently organized under appropriate headings.
Table 9

*Pearson Correlations for Perceived Sport Competence & Motivation*

<table>
<thead>
<tr>
<th>Variable</th>
<th>PSPP-SC</th>
<th>Intrinsic</th>
<th>Integrated</th>
<th>Introjected</th>
<th>Identified</th>
<th>External</th>
<th>Amotivation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PSPP-SC</td>
<td>--------</td>
<td>.13</td>
<td>.13</td>
<td>-.16*</td>
<td>.02</td>
<td>-.17*</td>
<td>-.15</td>
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<tr>
<td>Intrinsic</td>
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<td>--------</td>
<td>.71**</td>
<td>-.42**</td>
<td>.44**</td>
<td>-.54**</td>
<td>-.49**</td>
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<tr>
<td>Integrated</td>
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<td>.71**</td>
<td>--------</td>
<td>-.15*</td>
<td>.59**</td>
<td>-.24**</td>
<td>-.28**</td>
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<tr>
<td>Introjected</td>
<td>-.16**</td>
<td>.42*</td>
<td>-.15*</td>
<td>--------</td>
<td>.01</td>
<td>.76**</td>
<td>.55**</td>
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<td>.59**</td>
<td>.01</td>
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<td>-.04</td>
<td>-.25**</td>
</tr>
<tr>
<td>External</td>
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<td>-.54**</td>
<td>-.24*</td>
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<td>.29**</td>
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<td>--------</td>
<td>.75**</td>
<td>-.39**</td>
<td>.55**</td>
<td>-.42**</td>
<td>-.58**</td>
</tr>
<tr>
<td>Integrated</td>
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<td>.75**</td>
<td>--------</td>
<td>-.23**</td>
<td>.66**</td>
<td>-.26**</td>
<td>-.44**</td>
</tr>
<tr>
<td>Introjected</td>
<td>-.25*</td>
<td>-.39**</td>
<td>-.23**</td>
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<td>-.04</td>
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<tr>
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<td>.59**</td>
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<tr>
<td>Amotivation</td>
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<td>-.58**</td>
<td>-.44**</td>
<td>.52**</td>
<td>-.34**</td>
<td>.59**</td>
<td>--------</td>
</tr>
</tbody>
</table>

*p < .05 (2-tailed)

**p < .01 (2-tailed)
**Sport competence.**

Perceived sport competence had a weak negative correlation with both introjected and external regulation at the first time point. At the second time point, sport competence showed a weak positive correlation with intrinsic motivation, integrated, and identified regulation. A weak negative correlation resulted between sport competence and introjected and external regulation, and amotivation. According to SDT, the three types of motivation considered self-determined are intrinsic, integrated, and identified regulation. Perceived sport competence showed a weak positive correlation with all three of the more self-determined types of motivation at the final data collection point indicating a rejection of hypothesis. Perceived sport competence was correlated to a degree with intrinsic motivation and self-determined types of motivation.

**Intrinsic motivation.**

Initially, intrinsic motivation had a strong positive correlation with integrated regulation. A moderate positive correlation was shown for identified regulation. Intrinsic motivation was moderately negatively associated with introjected and external regulation and amotivation at the first time point. At the final collection point, intrinsic motivation had a strong positive correlation with integrated and identified regulation. A weak positive correlation was reported with sport competence. Intrinsic motivation was moderately negatively correlated with introjected and external regulation, and showed a strong negative correlation with amotivation.

**Integrated regulation.**

At the initial time point, integrated regulation had a strong positive correlation with intrinsic motivation, and a moderate positive correlation with identified regulation. A weak negative correlation was observed between integrated regulation and integrated and external regulation and amotivation. The final time point showed integrated regulation had a strong
positive correlation with intrinsic motivation and identified regulation, and a weak positive correlation with sport competence. The negative correlations included a moderate correlation with amotivation, and weak correlations with introjected and external regulation.

**Introjected regulation.**

Introjected regulation had strong positive correlations with external regulation and amotivation, and a moderate positive correlation with intrinsic motivation at the beginning of the study. A weak negative correlation was observed at the initial time point with sport competence and integrated regulation. At the final collection time point, introjected regulation showed a strong positive correlation with external regulation and amotivation. A moderate negative correlation was observed with intrinsic motivation, and a weak negative correlation with sport competence and integrated regulation was recorded.

**Identified regulation.**

Initially, identified regulation had a strong positive correlation with integrated regulation, and a moderate positive correlation with intrinsic motivation. Identified regulation and amotivation shared a weak negative correlation. By the final time point, identified regulation maintained a strong positive correlation with integrated regulation and increased the strength of the correlation with intrinsic motivation. Sport competence and identified regulation shared a weak positive correlation, and amotivation had a weak negative correlation with identified regulation.
**External regulation.**

At the initial time point, external regulation showed a strong positive correlation with introjected regulation and amotivation. A moderate negative correlation was observed with intrinsic motivation, and a weak negative correlation was observed with sport competence and integrated regulation. At the final time point, external regulation maintained a strong positive correlation with both introjected regulation and amotivation. A slightly weaker, but still moderate correlation with intrinsic motivation existed, and slightly stronger but still weak correlations with sport competence and integrated regulation persisted.

**Amotivation.**

The initial time point revealed a strong positive correlation between amotivation and both external and introjected regulation. A moderate negative correlation was observed with intrinsic motivation, and a weak negative correlation with sport competence, integrated, and identified regulation was observed. The strong positive correlation with external and introjected regulation maintained to the final time point. The correlation with intrinsic motivation increased to a strong negative correlation. A moderate negative correlation was observed with both integrated and identified regulation, and a weak negative correlation remained with sport competence.

**Hypothesis three.**

The third hypothesis stated athletes would not experience a change in perceived sport competence or self-determined motivation over the course of the fall season. The independent variable for this hypothesis was cluster group athletes were assigned. The dependent variables were scores from the perceived sport competence and motivation measures. Table 10 contains descriptive statistics for sport competence and motivation measures at both time points.
Table 10

Descriptive Statistics for Athlete Self-perception Variables by Expectancy Group

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Average</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Sport Competence</td>
<td>2.83 (.31)</td>
<td>2.82 (.35)</td>
<td>2.83 (.31)</td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic</td>
<td>5.95 (1.19)</td>
<td>5.39 (1.76)</td>
<td>6.43 (.71)</td>
</tr>
<tr>
<td>Integrated</td>
<td>5.68 (.84)</td>
<td>4.75 (1.77)</td>
<td>6.30 (.65)</td>
</tr>
<tr>
<td>Identified</td>
<td>5.48 (1.05)</td>
<td>5.07 (1.24)</td>
<td>6.32 (.74)</td>
</tr>
<tr>
<td>Introjected</td>
<td>3.20 (1.84)</td>
<td>4.29 (1.98)</td>
<td>3.48 (1.77)</td>
</tr>
<tr>
<td>External</td>
<td>2.30 (1.23)</td>
<td>3.15 (1.86)</td>
<td>2.42 (1.56)</td>
</tr>
<tr>
<td>Amotivation</td>
<td>1.90 (1.13)</td>
<td>3.32 (.85)</td>
<td>1.95 (1.02)</td>
</tr>
</tbody>
</table>

Descriptive statistics of athlete self-perception variables show interesting findings.

Descriptively, perceived sport competence remained constant across all expectancy groups at both time points. The high expectancy group had higher means at both time points than the average and low expectancy group for intrinsic motivation, integrated, and identified regulation. Mean scores for all types of motivation were noticeably lower for the low expectancy group. The average expectancy group had similar mean scores as the low expectancy group for introjected regulation and amotivation. Descriptively, amotivation mean scores increased from beginning to end for all groups with the low expectancy group increasing the most overall. Overall, all athletes reported higher mean scores for the three most self-determined types of motivation.
(intrinsic, integrated, and identified regulation) suggesting the sample was more self-determined in motivation to play softball than externally motivated.

Data for this hypothesis was examined for outliers, and outliers were removed to enhance robustness of the ANOVA analyses (Field, 2009). Pillai’s Trace alpha value and Games-Howell post-hoc analysis are reported for this study because sample sizes were unequal and were appropriate adjustment statistics to use in these instances (Field, 2009). Effect sizes for one-way ANOVA analysis are reported using eta-squared ($\eta^2$), and explain the proportion of variance in the dependent variable that can be attributed to the effect of the independent variable (Field, 2009). Effect sizes for repeated measures ANOVA are reported using partial eta squared ($\eta_p^2$), a variation of eta-squared, and is “the proportion of variance that a variable explains that is not explained by other variables” (Field, 2009, p. 790). Table 11 displays the significant differences between groups for all one-way ANOVA analyses.

Table 11

*Significant One-Way ANOVA F Values, Effect Size, Alpha Values, and Standard Deviations for Initial and Final Motivation Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Expectancy Group</th>
<th>F</th>
<th>p</th>
<th>$\eta^2$</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(df)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>Low</td>
<td>4.86</td>
<td>.02</td>
<td>.11</td>
<td>5.38</td>
<td>1.08</td>
<td>6.22</td>
<td>.80</td>
<td>6.31</td>
<td>.73</td>
</tr>
<tr>
<td></td>
<td>Average</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
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<td>High</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amotivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>Low</td>
<td>9.52</td>
<td>.00</td>
<td>.13</td>
<td>2.29</td>
<td>1.24</td>
<td>2.17</td>
<td>1.07</td>
<td>1.47</td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td>Average</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amotivation</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>Low</td>
<td>4.67</td>
<td>.02</td>
<td>.07</td>
<td>2.85</td>
<td>1.49</td>
<td>2.36</td>
<td>1.41</td>
<td>1.84</td>
<td>1.23</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Welch’s F test statistic reported.*
**Intrinsic motivation.**

The intrinsic motivation variable failed the assumption of homogeneity of variance for the initial data collection. A one-way ANOVA using the adjusted Welch’s $F$ statistic followed by a Kruskal-Wallis test were used for this variable. The results of the one-way ANOVA returned a non-significant difference between groups initially with a Welch’s $F(2, 30.45) = 3012, p > .05$, $\eta^2 = .06$, and a non-significant difference between groups at the final time point, Welch’s $F(2, 29.51) = .84, p > .05, \eta^2 = .01$. The Kruskal-Wallis test confirmed the one-way ANOVA results with non-significant results initially, $H(2) = 5.45, p > .05$, and at the final data collection point, $H(2) = 2.19, p > .05$.

**Integrated regulation.**

Initial scores for integrated regulation failed the assumption for homogeneity of variance. A one-way ANOVA analysis showed a non-significant difference between groups at the final time point, Welch’s $F(2, 36.43) = 2.88, p > .05, \eta^2 = .06$. A significant difference between expectancy groups was observed for the initial time point, Welch’s $F(2, 36.36) = 4.86, p = .01, \eta^2 = .11$. Games-Howell post-hoc analysis showed a significant difference between the low expectancy and average expectancy groups ($p = .02$) and between the low expectancy and high expectancy groups ($p = .03$) at initial data collection. A Kruskal-Wallis analysis confirmed the results of the ANOVA with a non-significant result for final scores, $H(2) = 4.46, p > .05$, and a significant differences between groups for initial scores, $H(2) = 10.54, p = .01$. A post-hoc follow up to the Kruskal-Wallis test was the nonparametric Mann-Whitney U Test.

Mann-Whitney results confirmed a significant differences between low and average expectancy groups, ($U = 244, p = .00$), showing a mean rank for the low expectancy group one as 24.77 and for the average expectancy group as 39.57. Mann-Whitney analysis also confirmed a
significant difference in initial scores between the low and high expectancy groups (U = 220, \( p = .00 \)) with the mean rank of the low expectancy group being 22.67 and the mean rank of the high expectancy group being 45.91. All final scores showed non-significant differences between groups using the Mann-Whitney test. Although these analyses do not offer an interaction effect, the results indicate significant differences between groups in how athletes experienced integrated regulation. Initially, the low expectancy group reported significantly lower mean scores at the initial time point than the average and the high expectancy groups. The average and high expectancy groups had similar mean scores. Figure 4 shows the mean differences between groups for initial integrated regulation.

![Mean differences between expectancy groups for initial integrated regulation](image)

**Figure 4.** Mean differences between expectancy groups for initial integrated regulation.
Identified regulation.

Identified regulation had a non-significant main effect for time, \( F(1, 141) = 1.76, \eta_p^2 = .01, p > .05 \) and a non-significant group interaction effect, \( F(2, 141) = 2.96, \eta_p^2 = .04, p > .05 \). A significant main affect for group was observed with a non-existent effect size, \( F(1, 141) = 9.94, \eta_p^2 = .12, p = .01 \). Post-hoc analysis showed a significant difference between the low expectancy group and both the average \((p = .02)\) and high expectancy groups \((p = .01)\). All athletes perceived identified regulation similarly at both time points, but reported significantly lower scores than both average and high expectancy athletes. The expectancy group effect may be examined in Figure 5.

![Identified Regulation](image)

*Figure 5.* Estimated marginal means for the significant main effect for group for identified regulation.
**Introjected regulation.**

Introjected regulation had a non-significant main effect for time, $F(1, 143) = 3.23$, $\eta_{p}^{2} = .02$, $p > .05$ and a non-significant group interaction effect, $F(2, 143) = 0.28$, $\eta_{p}^{2} = .00$, $p > .05$. A significant main effect for group with a very small effect size was observed, $F(2, 143) = 3.55$, $\eta_{p}^{2} = .05$, $p = .03$. Games-Howell post-hoc analysis revealed a significant difference between average and high expectancy groups. High expectancy athletes reported significantly lower scores for introjected regulation at both time points than average expectancy athletes. Low expectancy athletes reported higher mean scores at both time points, but the difference was not significant. The group effect is illustrated in Figure 6.

*Figure 6.* Estimated marginal means for the significant main effect for group for introjected regulation.
**External regulation.**

External regulation had a non-significant main effect for time, $F(1, 139) = 1.25, \eta^2_p = .01, p > .05$, a non-significant group interaction, $F(2, 139) = .30, \eta^2_p = .00, p > .05$, and a non-significant main effect for group, $F(2, 139) = 1.06, \eta^2_p = .02, p > .05$.

**Amotivation.**

Initial amotivation scores failed the assumption for homogeneity of variance. One-way ANOVA results returned a significant difference between expectancy groups at the initial time point, Welch’s $F(2, 33.36) = 9.52, \eta^2 = .13, p = .00$, and a significant difference at the final time point, Welch’s $F(2, 43.42) = 4.67, \eta^2 = .07, p = .02$. Games-Howell post-hoc analysis showed a significant difference initially between the average and high expectancy groups ($p = .00$), and at the final time point between the low and high expectancy groups, ($p = .04$). Kruskall-Wallis analysis confirmed the ANOVA results with significant differences between groups initially, $H(2) = 17.21, p = .00$, and at the final time point, $H(2) = 11.98, p = .00$. A Mann-Whitney follow up analysis clarified a significant difference between the average and high expectancy groups initially ($U = 1112, p = .00$) with the average expectancy group having a mean rank of 73.64 and the high expectancy group having a mean rank of 50.11. Mann-Whitney analysis confirmed a significant difference at the final data collection point between the low and high expectancy groups, ($U = 304, p = .01$) with the low expectancy group having a mean rank of 58.12 and the average expectancy group mean rank as 36.88. Both the parametric and non-parametric analyses indicate a significant difference between expectancy groups on how athletes experienced amotivation at the initial and final data collection point.

Figure 7 illustrates the mean differences between expectancy groups for amotivation at the initial time point, and Figure 8 shows the difference in means for expectancy groups at the
final time point. Figure 7 shows the high expectancy group reported lower mean scores for initial amotivation levels than the average expectancy group. The average and low expectancy group reported similar levels of amotivation at the start of the study. Figure 8 shows low expectancy athletes reported significantly higher mean scores for amotivation at the end of camp than the high expectancy group. The average expectancy and high expectancy athletes reported similar levels of amotivation at the final time point.

Figure 7. Mean difference between expectancy groups for initial amotivation.
Perceived sport competence had a non-significant main effect for time, $F(1, 132) = 2.00$, $\eta^2_p = .02$, $p > .05$, a non-significant group interaction, $F(2, 132) = .33$, $\eta^2_p = .01$, $p > .05$, and a non-significant main effect for group, $F(2, 132) = 1.83$, $\eta^2_p = .03$, $p > .05$. Although no significant differences between groups or over time were found, descriptive analysis of the PSPP scores was interesting for each group. Responses of the PSPP initial and final scores are displayed in Table 12. Examination of Table 12 reveals high expectancy athletes perceived to be the most competent across all six elements of the scale both pre- and post-study, and low and average expectancy athletes were similar in perceived sport competence levels. Low and average expectancy athletes reported similar scores at both times. One interesting trend, although non-significant, shows all athletes were not the most confident taking part in sports activities at the
beginning of the study, but high expectancy athletes reported feeling more confident by the end of the study. Another interesting note is low expectancy athletes originally perceived they were among the slowest to learn new skills, but by the end of the fall practice season they perceived to be among the quickest to learn new skills.

In summary, there were no significant changes in motivation level or perceived sport competence within any expectancy group from the beginning of the fall season to the conclusion of the off-season. There were significant differences between groups concerning integrated regulation, introjected regulation, identified regulation, and amotivation. Expectancy groups experienced these types of motivation significantly differently throughout the course of the study. For the purpose of this hypothesis, a decision of fail to reject the null hypothesis remains because groups did not show a significant difference in motivation or sport competence levels from the beginning to the end of the study.
Table 12

*Average PSPP Responses by Question per Expectancy Group*

<table>
<thead>
<tr>
<th>PSPP Question</th>
<th>Low (M)</th>
<th>High (M)</th>
<th>Average (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Good at sports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>not very (2.47)</td>
<td>really good (3.00)</td>
<td>not very (2.50)</td>
</tr>
<tr>
<td>Final</td>
<td>not very (2.41)</td>
<td>really good (3.12)</td>
<td>not very (2.68)</td>
</tr>
<tr>
<td>2: Best athletic ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>not best (3.13)</td>
<td>among best (2.69)</td>
<td>not best (3.05)</td>
</tr>
<tr>
<td>Final</td>
<td>not best (3.12)</td>
<td>among best (2.82)</td>
<td>not best (3.10)</td>
</tr>
<tr>
<td>3: Confidence taking part</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>not most (2.24)</td>
<td>not most (2.85)</td>
<td>not most (2.56)</td>
</tr>
<tr>
<td>Final</td>
<td>not most (2.59)</td>
<td>most (3.12)</td>
<td>not most (2.43)</td>
</tr>
<tr>
<td>4: Best joining in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>not best (3.47)</td>
<td>best (2.81)</td>
<td>not best (3.14)</td>
</tr>
<tr>
<td>Final</td>
<td>not best (3.00)</td>
<td>best (2.82)</td>
<td>best (2.95)</td>
</tr>
<tr>
<td>5: Learning new skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>slowest (2.59)</td>
<td>quickest (3.25)</td>
<td>slowest (2.90)</td>
</tr>
<tr>
<td>Final</td>
<td>quickest (3.00)</td>
<td>quickest (3.30)</td>
<td>slowest (2.87)</td>
</tr>
<tr>
<td>6: First to join</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial</td>
<td>first (2.65)</td>
<td>first (2.30)</td>
<td>first (2.41)</td>
</tr>
<tr>
<td>Final</td>
<td>first (2.82)</td>
<td>first (2.39)</td>
<td>first (2.86)</td>
</tr>
</tbody>
</table>

*Note:* PSPP-SC subscale questions numbers 2, 4, and 6 have reverse scoring. Responses for all expectancy groups included the prefix of “sort of true for me.”

**Hypothesis four.**

Hypothesis four stated athletes would not perceive different coaching behaviors based on group assignment over the course of the fall season. The independent variable for this hypothesis was cluster group membership. The dependent variable was scores from the perceived coaching behavior measure. Descriptive statistics for perceived coaching behaviors are found in Table 13.

Examination of Table 13 shows most observations of coaching behaviors remained stable across time. Organization, instructions, corrective instruction, and general communication show small descriptive gains from time one to time two. Organization averaged the highest observed
frequency with instructions and general communication the next most frequent. Corrective instruction paired with punishment, ignoring mistakes, and punishment were observed less frequently overall. Reward and encouragement after mistakes were observed on average “sometimes.”

Table 13

*Descriptive Statistics for Perceived Coaching Behaviors at Both Time Points*

<table>
<thead>
<tr>
<th>CBAS Subscale</th>
<th>Initial</th>
<th></th>
<th>Final</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Reward</td>
<td>4.78</td>
<td>1.37</td>
<td>4.69</td>
<td>1.16</td>
</tr>
<tr>
<td>Non-reward</td>
<td>3.00</td>
<td>1.31</td>
<td>3.06</td>
<td>1.19</td>
</tr>
<tr>
<td>Encouragement After Mistakes</td>
<td>4.26</td>
<td>1.54</td>
<td>4.24</td>
<td>1.24</td>
</tr>
<tr>
<td>Corrective Instruction</td>
<td>5.45</td>
<td>1.33</td>
<td>5.20</td>
<td>1.36</td>
</tr>
<tr>
<td>Punishment</td>
<td>2.95</td>
<td>1.45</td>
<td>2.95</td>
<td>1.26</td>
</tr>
<tr>
<td>Corrective Instruction &amp; Punishment</td>
<td>2.19</td>
<td>1.35</td>
<td>2.55</td>
<td>1.46</td>
</tr>
<tr>
<td>Ignore Mistakes</td>
<td>2.85</td>
<td>1.31</td>
<td>2.93</td>
<td>1.34</td>
</tr>
<tr>
<td>Keeping Control</td>
<td>4.45</td>
<td>1.35</td>
<td>4.49</td>
<td>1.29</td>
</tr>
<tr>
<td>Instructions</td>
<td>5.54</td>
<td>1.32</td>
<td>5.30</td>
<td>1.25</td>
</tr>
<tr>
<td>Encouragement</td>
<td>5.37</td>
<td>1.23</td>
<td>5.03</td>
<td>1.24</td>
</tr>
<tr>
<td>Organization</td>
<td>6.08</td>
<td>.98</td>
<td>5.89</td>
<td>1.18</td>
</tr>
<tr>
<td>General Communication</td>
<td>5.51</td>
<td>1.24</td>
<td>5.25</td>
<td>1.22</td>
</tr>
</tbody>
</table>

Descriptive information for perceived coaching behavior by expectancy group is found in Table 14. Examination of Table 14 shows some small descriptive changes between expectancy groups. The Likert scale asked participants to score from one to seven on how frequently they perceived their coach to participate in the defined behavior. The response labels need to be mentioned in relation to this discussion. The above table shows small descriptive differences with the frequency of rewarding behaviors. Low expectancy athletes had lower mean scores at both time points, and all groups reported lower frequencies from beginning to end.
Table 14

*Expectancy Group Means and Effect Sizes for Coaching Behavior Variables*

<table>
<thead>
<tr>
<th>CBAS Subscale</th>
<th>Initial Low M (SD)</th>
<th>Initial Avg. M (SD)</th>
<th>Initial High M (SD)</th>
<th>Final Low M (SD)</th>
<th>Final Avg. M (SD)</th>
<th>Final High M (SD)</th>
<th>$\eta^2_p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reward</td>
<td>4.29 (1.61)</td>
<td>4.90 (1.34)</td>
<td>4.81 (1.27)</td>
<td>4.06 (.97)</td>
<td>4.62 (1.19)</td>
<td>4.90 (1.13)</td>
<td>.01</td>
</tr>
<tr>
<td>Non-reward</td>
<td>3.88 (1.50)</td>
<td>2.92 (1.16)</td>
<td>2.87 (1.33)</td>
<td>3.82 (1.13)</td>
<td>3.02 (1.23)</td>
<td>2.91 (1.13)</td>
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Note: Low expectancy group (n = 17), high expectancy group (n = 70), and average expectancy group (n = 59).
The average scores indicate all athletes reported experiencing rewarding behaviors “sometimes.” Low expectancy athletes reported to experience non-rewarding behaviors on average more often than average or high expectancy athletes, but all athletes reported observing this behavior either “hardly ever” or “seldom.” Low expectancy athletes’ mean score for frequency of encouragement after mistakes increased slightly from beginning to end. The average response range for this behavior indicated all athletes experience encouragement after mistakes either “seldom” or “sometimes.” Corrective instruction was reported less frequently by low expectancy athletes with the response range indicating low expectancy athletes experienced this behavior “sometimes” compared to average and high expectancy athletes experiencing this behavior “quite often.” Punishment and ignoring mistakes average scores were higher for low expectancy athletes overall, but average responses indicate this behavior, and corrective instruction accompanied by punishment, was perceived to occur by all athletes either “hardly ever” or “seldom.” Low expectancy athletes reported encouragement less frequently, and mean scores for all groups were slightly lower from beginning to end, but average expectancy athletes reported encouragement more frequently at both time points. Similar to corrective instruction, low expectancy athletes reported experiencing encouragement “sometimes” and the other two groups reported experiencing this behavior “quite often.” General communication showed a similar pattern as encouragement, but low expectancy athletes reported general communication to occur more frequently at the second time point.

A one-way MANOVA analysis was performed separately on the initial and final variables for the CBAS-PBS scale. All variables for the CBAS-PBS initial and final measure met the assumption of homogeneity of variance, but homogeneity of covariance was violated with the final data sample. The decision was made to continue with a MANOVA analysis because
homogeneity of variance was assumed, and the analyses was an exploratory approach.

MANOVA results for initial variables returned a significant multivariate effect indicating expectancy group membership did have a significant effect on a combination of perceived coaching behaviors, $V = .02, F(24, 268) = 1.77, \eta^2_p = .14$. The between-subjects results indicated significant group differences with the behaviors of non-reward, encouragement, and general communication. A Games-Howell post-hoc analysis revealed significant differences between low expectancy athletes and other expectancy groups with initial reports of non-rewarding behaviors, encouragement, and general communication. Non-rewarding behavior was experienced significantly more by low expectancy athletes than high expectancy athletes ($p = .05$). Low expectancy athletes experienced less encouragement than high expectancy athletes ($p = .05$) and average expectancy athletes ($p = .03$). General communication was experienced less often by low expectancy athletes than high expectancy athletes ($p = .04$).

MANOVA results for the variables of the final CBAS-PBS measure returned a significant multivariate effect, $V = .02, F(24, 268) = 1.79, \eta^2_p = .14$. Between-subjects results indicated significant group differences with the final reports of reward, non-reward, and corrective instruction. Games-Howell post-hoc analyses revealed low expectancy athletes reported significantly less observations of reward than high expectancy athletes ($p = .01$). Non-rewarding behaviors were perceived significantly more often by low expectancy athletes than both high ($p = .02$) and average ($p = .04$) expectancy athletes. Finally, low expectancy athletes perceived less corrective instruction than both high ($p = .02$) and average ($p = .05$) expectancy athletes. MANOVA analyses offered an omnibus result of the effect of expectancy group on perceived coaching behaviors, and results were followed by repeated measures ANOVA to examine group differences more thoroughly.
The following section discusses the results of the repeated measures ANOVA analyses on each subscale of the CBAS-PBS. All subscales met the assumption of homogeneity of variance, but because sample sizes were unequal, post-hoc analyses are reported by the Games-Howell statistic.

**Reward.**

The coaching behavior of reward had a non-significant main effect for time, $F(1, 145) = 1.12, \eta_p^2 = .01, p > .05$. The group interaction effect was non-significant, $F(2, 145) = 1.27, \eta_p^2 = .01, p > .05$, and the main effect of the group was non-significant, $F(2, 145) = 2.86, \eta_p^2 = .04, p > .05$. The results of the MANOVA indicated a significant difference between low and high expectancy athletes at the final data collection point, but the results of the ANOVA indicated no significant group differences.

**Non-reward.**

Non-reward had a non-significant main effect for time, $F(1, 145) = 0.05, \eta_p^2 = .83, p > .05$, and a non-significant group interaction effect, $F(2, 145) = 0.10, \eta_p^2 = .90, p > .05$. There was a significant main effect for group, $F(2, 145) = 6.06, \eta_p^2 = .08, p = .00$, but the effect size was miniscule. Post-hoc analysis revealed a significant difference between low expectancy and high expectancy groups ($p = .01$), and a significant difference between low and average expectancy groups ($p = .02$). All groups experienced non-reward similarly at both time points. Low expectancy athletes reported experiencing non-rewarding behavior more frequently than the average expectancy athletes and the high expectancy athletes. Average and high expectancy athletes perceived non-reward similarly. Figure 9 shows the group differences between expectancy groups.
MANOVA results indicated a significant difference between low and high expectancy athletes at both the initial and final time points, and these results are consistent with the ANOVA results.

![Graph showing estimated marginal means for non-reward with significant group effect.](image)

**Figure 9.** Estimated marginal means for non-reward with significant group effect.

**Encouragement after mistakes.**

Encouragement after mistakes had a non-significant main effect for time, $F(1, 145) = 0.01, \eta^2_p = .00, p > .05$, a non-significant group interaction effect, $F(2, 145) = 1.13, \eta^2_p = .02, p > .05$, and a non-significant main effect for group, $F(2, 145) = 0.63, \eta^2_p = .01, p > .05$.

**Corrective instruction.**

The coaching behavior of corrective instruction had a significant main effect for time, $F(1, 145) = 7.10, \eta^2_p = .05, p = .01$, but a non-significant group interaction effect, $F(2, 145) = 2.58, \eta^2_p = .03, p > .05$. The main effect for group was significant, $F(2, 145) = 3.18, \eta^2_p = .04, p$
Tukey’s post-hoc results indicated a significant difference between the low and average expectancy groups ($p = .04$), however, the Games-Howell post-hoc results used for this study returned a non-significant difference between low and average expectancy groups ($p = .06$). Expectancy groups experienced a change from the initial to the final time point with how frequently they experienced corrective instruction. Low and average expectancy athletes experienced less corrective instruction, and high athletes experienced the same amount, but according to the post-hoc analysis appropriate for this data, the extent of change was not significant across expectancy groups. The significant main effect for time is visible in Figure 10. MANOVA results indicated a significant difference between final perceptions of low expectancy athletes to both high and average expectancy athletes, but this result was not supported by ANOVA results.

**Punishment.**

This coaching behavior returned all non-significant results. Punishment had a non-significant main effect for time, $F(1, 145) = .15, \eta^2_p = .00, p > .05$. The group interaction was non-significant, $F(2, 145) = .75, \eta^2_p = .01, p > .05$. The main effect for group was non-significant, $F(2, 145) = 1.38, \eta^2_p = .02, p > .05$. 
Corrective instruction and punishment.

Corrective instruction and punishment returned all non-significant results. A non-significant main effect for time was observed, $F(1, 160) = 6.17, \eta^2_p = .04, p > .05$. The group interaction was non-significant, $F(2, 160) = .52, \eta^2_p = .01, p > .05$. The main effect for group was non-significant, $F(2, 160) = .15, \eta^2_p = .00, p > .05$.

Ignoring mistakes.

No significant results were observed for ignoring mistakes. A non-significant main effect for time, $F(1, 145) = .36, \eta^2_p = .00, p > .05$. The group interaction was non-significant, $F(2, 145)$
= .16, $\eta_p^2 = .01, p > .05$. The main effect for group was non-significant, $F(2, 145) = .30, \eta_p^2 = .02, p > .05$.

**Keeping control.**

This coaching behavior returned all non-significant results. Keeping control had a non-significant main effect for time, $F(1, 145) = .00, \eta_p^2 = .00, p > .05$. The group interaction was non-significant, $F(2, 145) = 2.93, \eta_p^2 = .04, p > .05$. The main effect for group was non-significant, $F(2, 145) = .25, \eta_p^2 = .00, p > .05$.

**Instructions.**

Giving instructions had a non-significant main effect for time, $F(1, 144) = 3.03, \eta_p^2 = .02, p > .05$. The group interaction was non-significant, $F(2, 144) = .22, \eta_p^2 = .00, p > .05$. The main effect for group was non-significant, $F(2, 144) = 1.95, \eta_p^2 = .03, p > .05$.

**Encouragement.**

Perceived encouragement showed a significant main effect for time, $F(1, 144) = 4.30, \eta_p^2 = .03, p = .04$, but had an very small effect size. The group interaction effect was non-significant, $F(2, 144) = 1.17, \eta_p^2 = .02, p > .05$ and the main effect for group was non-significant, $F(2, 144) = 2.38, \eta_p^2 = .03, p > .05$. High and average expectancy athletes experienced a decrease in encouragement from the initial time point to the final time point. The extent of change did not differ significantly between groups. The main effect for time can be observed in Figure 11. MANOVA results indicated a significant difference between initial perceptions of low expectancy athletes and both high and average expectancy athletes, but this finding was not supported by the ANOVA results.
Figure 11. Estimated marginal means for encouragement with a significant main effect for time.

*Organization.*

The perceived coaching behavior of organization had a non-significant main effect for time, $F(1, 144) = .67$, $\eta_p^2 = .01$, $p > .05$, and a non-significant group interaction effect, $F(2, 144) = 1.02$, $\eta_p^2 = .01$, $p > .05$. There was a significant main effect for group, $F(2, 144) = 3.15$, $\eta_p^2 = .04$, $p = .04$, but an extremely small effect size. Post-hoc analysis revealed a significant difference between the frequency of observed organization between average and high expectancy groups. Average expectancy athletes perceived this behavior more often at both time points than high expectancy athletes. There was not a significant difference to how often this behavior was observed from initial to final points. Figure 12 displays the group differences.
General communication.

General communication had a non-significant main effect for time, $F(1, 143) = .33, \eta_p^2 = .00, p > .05$, and a non-significant group interaction effect, $F(2, 143) = 2.82, \eta_p^2 = .04, p > .05$. There was a significant main effect for group, $F(2, 143) = 3.70, \eta_p^2 = .05, p = .03$ with an extremely small effect size. Post-hoc analysis revealed a significant difference between the frequency of general communication between low and high expectancy groups. High expectancy athletes perceived this behavior less often at both time points than average expectancy athletes. Low expectancy athletes reported lower instances of general communication than high expectancy athletes at both data collection points, but descriptively, reported the behavior more frequently at the final time point. There was not a significant difference to how often this

Figure 12. Estimated marginal means for organization with a significant main effect for group.
behavior was observed from initial to final points for any group. Figure 13 illustrates the group differences. MANOVA results indicated a significant difference for initial perceptions between the low expectancy high expectancy groups, and this result was supported by the ANOVA results.

![General Communication Graph](image)

**Figure 13.** Estimated marginal means of general communication with a significant group effect.

Overall, there were no significant findings over time or between expectancy groups for the coaching behaviors of reward, encouragement after mistakes, punishment, corrective instruction coupled with punishment, ignoring mistakes, keeping control, and giving instructions. Significant findings were discovered with the coaching behaviors of non-reward, corrective instruction, encouragement, organization, and general communication. Significant differences between expectancy groups were found concerning the coaching behaviors of non-reward,
organization, and general communication. Because group differences were observed, hypothesis four is rejected.

Low expectancy athletes experienced non-rewarding behaviors more frequently than either average or high expectancy athletes. Average and high expectancy athletes perceived non-reward similarly to each other and less often than low expectancy athletes. Low expectancy athletes differed in frequency of perceived general communication compared to high expectancy athletes. Low expectancy athletes received significantly less general communication from their coach at both points. High expectancy athletes perceived organizational behaviors to occur less often than average expectancy athletes at both initial and final time points. Low and average expectancy groups experienced a change in perception of how frequently they were issued corrective instruction, and high and average athletes for encouragement from the initial to the final time point, but the extent of change did not differ significantly between groups.

Summary

This section provided quantitative analysis and results pertaining to the four hypotheses that guided this study. Hypothesis one, three, and four were rejected. Coaches did form expectations about athletes’ performance ability. Although there were no significant changes in motivation or sport competence level by expectancy group over time, there were significant differences in motivation by expectancy group. Perceived sport competence was correlated with the most self-determined types of motivation, and athletes did experience coaching behaviors differently based on expectancy group membership. The qualitative findings are presented in the following chapter, Chapter V.
CHAPTER V

Qualitative Findings

The qualitative analysis was conducted concurrently to add to the depth of the quantitative portion of this study. The qualitative analysis was guided by the research question: How do athletes perceive their head coaches to affect their intrinsic motivation to continue playing softball for their current team? Specifically, what types of coaching behaviors do athletes perceive to alter their motivation to play softball? This section provides information about participant demographic and characteristic information, participant profiles, and a summary of the major and minor themes discovered.

Participants

All participants for this portion of the study attended an institution maintaining membership with the NCAA (2012) in one of the 31 athletic conferences recognized as Division I. All participants were female softball athletes included on the official playing roster for the 2012-2013 Division I softball season. Forty-one female athletes participated in the qualitative portion of this study, and represented 18 of the original 25 teams. At the time of the interviews, athletes ranged in age from 18 to 22 years, and all reported having a minimum of five years softball playing experience. Athlete demographic information and individual profiles are provided in the following sections.
Participant characteristics.

Participants were asked to complete demographic information on the first athlete survey as part of the quantitative portion of this study (Appendix L). Demographic questions requested information about each participant’s age, ethnicity, total years of softball playing experience, total completed years of softball playing experience at the current institution, total completed years of playing experience under the direction of the current head coach, and primary position played. Additional characteristic information pertaining to individual sport background was obtained through interview questions.

Participants were asked before the start of the audio recording or interview process to select a pseudonym, and participants were encouraged to select a name that would not have personal significance (e.g., nicknames, family member names) and would not be easily used to identify the participant’s identity. Pseudonyms were used to identify the participants throughout the interview and data analysis process. Pseudonyms help to secure participant identity, but the researcher should be conscious to avoid including other identifying information such as the name of past and current teams, name of the current conference membership, and institution mascot representations (Henn, Weinstein, & Foard, 2009). All of the above identifying information was deleted and substituted with bracketed word replacements.

Participant demographic information and pseudonyms are displayed in Table 14. As the table explains, the 41 participants ranged in age from 18 to 22 years old. The majority of participants at the time of the interview reported being 20-years old (32%). Participants reporting the age of 18 and 21-years old each comprised 27% of respondents, and fewer participants reported being 19-years old (10%) and 22-years old (5%). The majority of participants identified with being Caucasian (88%), four identified as Hispanic (10%), and one participant identified as
African American (2%). Most participants reported having 15 or more years (46%) of overall softball playing experience including pre-collegiate softball experience, with a slightly fewer number of participants reported 10 to 14 years of overall softball playing experience (44%), and four participants reported five to nine years (10%) of overall softball playing experience. Table 15 displays the number of years each participant has played softball at her current institution and the number of years she has played for her current head coach. These numbers may be observed in specific detail in Tables 16 and 17. Information about participants’ primary playing position may be found in Table 18.

Table 15

*Participant Demographic Information*

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<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Sadie</td>
<td>21</td>
<td>C</td>
<td>15+</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Alyssa</td>
<td>21</td>
<td>C</td>
<td>15+</td>
<td>3</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Colleen</td>
<td>21</td>
<td>C</td>
<td>15+</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Peyton</td>
<td>21</td>
<td>C</td>
<td>15+</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Melinda</td>
<td>22</td>
<td>C</td>
<td>10-14</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Nesa</td>
<td>22</td>
<td>H</td>
<td>15+</td>
<td>&lt; 1</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

*Note.* Participant race has been abbreviated. Caucasian is represented by “C”; Hispanic is represented by “H”; African American is represented by “AA.” Total years current institution column represents the total years completed playing at the current institution. Total years current coach represents the total years completed playing for the current head coach.

Table 16 illustrates the participants by number of softball playing years completed at the institution of attendance at the time of the interview. The majority of participants reported playing softball for their current institution for less than one year (41%). Eleven of those participants reported being in their freshman year and 18-years old. Six of those participants reported being in their sophomore year or more and 20-years old or older. Ten participants (24%) reported completing three years of playing experience at their current institution, nine participants (22%) reported completing two years, and five participants (12%) reported completing one year at their current institution.
Table 16

**Participants’ Playing Years Completed at Current Institution**

<table>
<thead>
<tr>
<th>Years Completed at Current Institution</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td>Nesa, Melissa, Tory, Ashley, Mary Ann, Tiffany, Bethany, Sally, Jackie, Christy, Tracey, Jenn, Jamie, Emma, Jane, Kellie, Angela</td>
</tr>
<tr>
<td>1 year</td>
<td>Nicole, Brecken, Rylie, Shawna, Peyton</td>
</tr>
<tr>
<td>2 years</td>
<td>Rosemary, Jaclyn, Kayla, Kara, Hannah, Brooke, Sara, Jill, Jessica</td>
</tr>
<tr>
<td>3 years</td>
<td>Teresa, Elena, Chloe, Ginny, Allison, Melinda, Sadie, Alyssa, Colleen, Alicia</td>
</tr>
</tbody>
</table>

Table 17 shows participants playing experience under the head coach at the time of the interview. The majority of participants had played softball for the current head coach for less than one year (59%), and 32% reported being in their freshman year. Of those participants, 11 were in their sophomore year or older (27%); five of the older participants were currently playing for a head coach that had been at the institution for more than one year (12%), and eight were playing for a head coach that was hired at the start of the current academic year (20%). Of the eight older participants playing for a new head coach, six of the respondents played for the same new head coach, and the remaining two respondents played for the same new head coach. Eight participants (20%) reported completing two years under the current head coach, six participants (15%) completed one year, and three participants (7%) completed three years of
playing under the current head coach. Table 17 provides a more detailed division of participants who played for the same team and coach.

Table 17

*Participants’ Playing Years Completed for Current Head Coach*

<table>
<thead>
<tr>
<th>Years Completed Under Current Head Coach</th>
<th>Participant</th>
<th>Sophomore or Older Under New Coach</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1</td>
<td>Nesa</td>
<td>Tory</td>
</tr>
<tr>
<td></td>
<td>Kara</td>
<td>Mary Ann</td>
</tr>
<tr>
<td></td>
<td>Tiffany</td>
<td>Bethany</td>
</tr>
<tr>
<td></td>
<td>Hannah</td>
<td>Jackie</td>
</tr>
<tr>
<td></td>
<td>Christy</td>
<td>Jenn</td>
</tr>
<tr>
<td></td>
<td>Jamie</td>
<td>Nicole</td>
</tr>
<tr>
<td></td>
<td>Alyssa</td>
<td>Brecken</td>
</tr>
<tr>
<td></td>
<td>Rylie</td>
<td>Kellie</td>
</tr>
<tr>
<td>1 year</td>
<td>Sara</td>
<td>Ginny</td>
</tr>
<tr>
<td></td>
<td>Sadie</td>
<td>Shawna</td>
</tr>
<tr>
<td>2 years</td>
<td>Rosemary</td>
<td>Jaclyn</td>
</tr>
<tr>
<td></td>
<td>Chloe</td>
<td>Brooke</td>
</tr>
<tr>
<td></td>
<td>Jessica</td>
<td>Alicia</td>
</tr>
<tr>
<td>3 years</td>
<td>Teresa</td>
<td>Allison</td>
</tr>
</tbody>
</table>

Table 18 provides information identifying participants who played on the same team for the same head coach. Team 1 had six team members participate and account for 15% of the total responses. Teams 2 and 4 each are responsible for 12% of total responses. Of the 41 participants, 39% of participation came from three teams. The remaining 15 teams combined provided 61% of the total participation. Information pertaining to participants’ reported primary playing position is provided in Table 19.
Table 18

*Athletes Grouped by Team*

<table>
<thead>
<tr>
<th>Team 1</th>
<th>Team 2</th>
<th>Team 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nesa</td>
<td>Kara</td>
<td>Jenn</td>
</tr>
<tr>
<td>Melissa</td>
<td>Tiffany</td>
<td>Jamie</td>
</tr>
<tr>
<td>Teresa</td>
<td>Elena</td>
<td>Emma</td>
</tr>
<tr>
<td>Rosemary</td>
<td>Bethany</td>
<td></td>
</tr>
<tr>
<td>Tory</td>
<td></td>
<td>Hannah</td>
</tr>
<tr>
<td>Jaclyn</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Team 4</th>
<th>Team 5</th>
<th>Team 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicole</td>
<td>Angela</td>
<td>Mary Ann</td>
</tr>
<tr>
<td>Alyssa</td>
<td>Shawna</td>
<td>Sally</td>
</tr>
<tr>
<td>Brecken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rylie</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Team 7</th>
<th>Team 8</th>
<th>Team 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloe</td>
<td>Christy</td>
<td>Tracey</td>
</tr>
<tr>
<td>Brooke</td>
<td>Sara</td>
<td>Ginny</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Team 10</th>
<th>Team 11</th>
<th>Team 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allison</td>
<td>Melinda</td>
<td>Peyton</td>
</tr>
<tr>
<td>Jill</td>
<td>Sadie</td>
<td>Alicia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Team 13</th>
<th>Team 14</th>
<th>Team 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kara</td>
<td>Ashley</td>
<td>Jackie</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Team 16</th>
<th>Team 17</th>
<th>Team 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kellie</td>
<td>Jessica</td>
<td>Colleen</td>
</tr>
</tbody>
</table>

Table 19 shows participants’ primary playing position at the time of the study. The majority of participants played an infield position (78%). Specifically, nine participants reported playing an outfield position (22%), eight played second base (20%), seven participants played short stop (17%), six played pitcher (15%), five played catcher (12%), and three participants played the third base position (7%).
Table 19

Participants by Position Played

<table>
<thead>
<tr>
<th>Position</th>
<th>Participant 1</th>
<th>Participant 2</th>
<th>Participant 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitcher</td>
<td>Kayla</td>
<td>Ashley</td>
<td>Brecken</td>
</tr>
<tr>
<td></td>
<td>Peyton</td>
<td>Alicia</td>
<td>Christy</td>
</tr>
<tr>
<td>Catcher</td>
<td>Sally</td>
<td>Chloe</td>
<td>Jill</td>
</tr>
<tr>
<td></td>
<td>Jane</td>
<td>Shawna</td>
<td></td>
</tr>
<tr>
<td>First Base</td>
<td>Teresa</td>
<td>Melinda</td>
<td>Nicole</td>
</tr>
<tr>
<td>Second Base</td>
<td>Nesa</td>
<td>Rosemary</td>
<td>Kara</td>
</tr>
<tr>
<td></td>
<td>Bethany</td>
<td>Hannah</td>
<td>Brooke</td>
</tr>
<tr>
<td></td>
<td>Jackie</td>
<td>Jenn</td>
<td></td>
</tr>
<tr>
<td>Third Base</td>
<td>Jaclyn</td>
<td>Sadie</td>
<td>Emma</td>
</tr>
<tr>
<td>Short Stop</td>
<td>Tiffany</td>
<td>Elena</td>
<td>Tracey</td>
</tr>
<tr>
<td></td>
<td>Jamie</td>
<td>Alyssa</td>
<td>Kellie</td>
</tr>
<tr>
<td></td>
<td>Angela</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outfield</td>
<td>Melissa</td>
<td>Tory</td>
<td>Mary Ann</td>
</tr>
<tr>
<td></td>
<td>Sara</td>
<td>Ginny</td>
<td>Allison</td>
</tr>
<tr>
<td></td>
<td>Rylie</td>
<td>Jessica</td>
<td>Colleen</td>
</tr>
</tbody>
</table>

Annotated narratives.

The participants for this portion of the study were forthcoming about their motivation, confidence, and perceived coaching behavior. Although participants who chose the phone interview provided more thick, rich descriptions, useful information was gathered from all interview responses. Annotated narratives for phone and interview participants are provided below. Each narrative contains information about participant’s sport background, a brief
summary of her perceptions of individual competence, motivation, and perceived coaching behaviors. Each narrative includes remarks characteristic of each participant’s experience.

Nesa.

Nesa is a 22-year-old Hispanic athlete who has played multiple sports for the past 16 years. The second baseman transferred into her current institution and had played less than a year at her current institution; however, she anticipated earning a starting position for the upcoming season. Nesa believed her ability to learn new skills quickly improved her competence, and she attributed her coach’s feedback when she performed skills correctly as improving her competence. Her confidence has decreased since joining her current team because she feels there uncertainty in the philosophies from the ones she follows and the ones her coach follows. “If anything changed, I think my confidence has gone down, because there are many different philosophies and I am still getting to know what the coaches here at [my institution] prefer.” Her confidence is affected by the uncertainty of knowing if she is thinking about the game the same way her coach is thinking about the game.

Despite the difference in philosophies, Nesa appreciates her coach’s “straight forward” approach with her coaching style, and when her coach avoids yelling and instead offers constructive input on performance, Nesa’s confidence in her playing ability increases. Nesa did not feel her coach hurt her confidence, but rather felt her lack of confidence was an inner struggle with her perceptions of her performances. Nesa is loves to play softball for the enjoyment she receives from playing. “The biggest thing with me is the love for the game. I think that teammates and coaches add to the mix, but even if those things were not good, I would still play because I love to do it.” Her motivation has changed for the positive because she is returning to the field after an injury and she realizes she only has one year left to play.
Her motivation to play for her current team comes from her internal drive, but she is motivated by her “coach’s passion” and her coach’s clear expectations about each player. Nesa is motivated to play because she knows exactly what she needs to do to earn a starting position on the field because her coach clearly communicates with her and her teammates. “From what I have learned so far, we have a similar philosophy, and that motivates me because than I know exactly what I need to do in order to get a spot on the field.” Nesa elaborated about her coach’s open communication style by adding, “Because I feel like my coach is so honest with us, I think [motivation and competence] increases because I can focus on specific things that I know she is looking for, and then we can discuss if I am fulfilling my duties and in what ways I need to fix.”

Nesa perceives her coach forms expectations about each athlete individually by assessing athletes’ strengths and weaknesses. She rated herself as one of the best on the team, but she did not notice any difference in treatment or behaviors toward other skill level athletes on the team.

**Melissa.**

Melissa is an 18-year-old Caucasian athlete who has played softball since she was 7-years old. As a freshman at her current institution, she does not anticipate she will start as an outfielder for her team this season. She feels confident in her softball abilities because of her ability to be coached and her work ethic:

By no means do I think I’m the best on the softball field, but I think I’m one of the most hard working out there. I think that I’m very good at, I’m a very coachable athlete. I’m usually able to change what I do in order to make my coaches happy. If they tell me to do stuff differently than I do it differently, but I think I’m pretty good at being able to take in new things and adjust what I’m doing.
Melissa feels her coach affects her confidence in her ability in a positive way because her coach communicates with her about her performance with immediate feedback. The coach affects her perception of how quickly she learns new skills and how valued she feels as a member of the team. “My coach usually tells me if I’m doing a good job or not. If I do something wrong, by no means does she tell me that I’m doing a bad job. She tells me I’m doing okay, but she tells me what little things I can do to make it even better than just okay.”

Melissa is the most motivated to play softball right now in her career. She is learning new skills and aspects about the game that she did not realize existed. Her motivation has changed from when she was being recruited, but she is her motivation is just as strong now as it was when she was going through recruitment. She desires to be the best player in Division I softball. She realizes she will need to work hard to earn the position she wants, but her coach motivates her to keep working by implementing a positive approach and feedback. Her coach does not display behaviors that hurt her confidence or motivation, but Melissa notices her coach does not communicate with her when her performance is poor. However, Melissa feels the lack of communication is an indicator of an area for improvement. Running for punishment does not motivate her to play or practice but she believes punishment conditioning is part of the game of softball.

Melissa perceives her coach forms expectations about her and her teammates as individuals. Her coach communicates what her expectations are through comments to Melissa and drills performed at practice. The coach structures drills at practice so Melissa knows if she did not execute the drill correctly then she is not meeting the coach’s expectation. Melissa rated herself as an average player in comparison to her teammates. She notices teammates who are not
as skilled received more instruction time and more patient behaviors from her coach than herself or the more skilled athletes on the team:

I think that she is a little bit nicer to them, and let’s them get away with a lot more things then I would get away with. I think she is a lot more patient with them, and stands there and describes certain things when she’ll just say one thing and expect me to know what she’s talking about.

The highly skilled athletes seem to receive no communication unless they perform well, but they are used in demonstrations to the team more often to show how the coach prefers a skill performed.

**Teresa.**

Teresa is a 21-year old Caucasian athlete who has played softball since she was 6-years old. The first baseman has played at her current institution and for her head coach for three complete seasons, and she anticipates maintaining her starting position from last season. Her work ethic and her coaches both have an effect on her confidence in her playing abilities:

I guess would say my work ethic is probably one of the biggest things that affects my confidence. I guess knowing that I’m working as hard as I can to be as good as I can, and so it gives me confidence that I will succeed. My coaches are also a big part of my confidence I would say. I guess the information they give me, and that kind of stuff plays a part in how well I think I can play or do or how much confidence I have in myself.

Her confidence is increased when her head coach holds individual meetings and explains her expectations while at the same time emphasizing the good things Teresa does on and off the field. High fives and praise from her coach immediately after a good performance also increases
her confidence. When her coach does not communicate with her, she perceives she is not performing well, but the lack of communication hurts confidence:

I guess I would say sometimes when you aren’t playing so well, it kind of goes the opposite way in which she’ll almost ignore you. And that can kind of hurt your confidence just because you don’t know what she’s thinking or what she feels about how things went. Just no communication verbal or nonverbal I feel like can hurt confidence a lot.

Teresa was the most motivated to play softball during your sophomore year in college. She worked hard and had several great successes. Her motivation is slightly different now because her focus has shifted from motivation to play for personal successes to motivation to play for her teammates and fill a leadership role. She understands this is her year, and she wants to lead the younger girls on the field and leave the team in a good position. Her coach motivates her to practice and play by setting goals for her to work toward each game. Her coach has a positive approach that adds to Teresa’s motivation to play. She appreciates the coach acknowledging her efforts through communication. Sometimes she feels less motivated when her coach focuses more on the overall results and does not acknowledge the small successes accomplished despite a failed overall result.

Teresa perceives her head coach has expectations about her and her teammates as individuals. She knows her coach has expectations because she tells her what the expectations are during routine meetings throughout the year. Teresa feels these meetings and verbal explanation of expectations can affect her confidence if she knows she is not meeting the expectations and she perceives she is disappointing her coach. She believes when the coach makes perceivably unattainable expectations her confidence is hurt. Teresa rated herself as one
of the better players on the team. She notices sometimes the players who may not be considered the best on the team are left out in practice. For example, the same players are always used for base runners and do not get the same amount of practice time at a position as players who may be better skilled:

I guess I notice it in the actual physical communication between them and the coach. I know in practices little stuff like that it can be hard sometimes because if there’s a lot of people on your team, the she doesn’t necessarily get everybody in to play a position. Some people are always base runners and aren’t really getting the same chances that other people are on the field. So I would say that’s one big difference. And kind of the same thing I see, you know if you’re on the bench she doesn’t always acknowledge any what you’re doing to help the team. You kind of feel like you’re not a part of the team kind of thing.

She also notices the better players seem to have a longer time to correct mistakes than other players. For instance, better players may be allowed to stay in the lineup longer despite their lack of production at the plate. However, overall she believes her coach is a positive, motivating individual.

*Rosemary.*

Rosemary, a 21-year old Caucasian athlete, has played softball since she was 8-years old. The starter has played second base for her current institution and head coach for the past two years. She chose to go to her university mainly for the academic major and because the coach she liked took over as the new head coach at the time of her recruitment. She feels her teammates’ perceptions of her performance effects her confidence in her ability the most:
I would say my teammate’s perceptions of me and their actions toward stuff during practices. Like if their reactions and their encouragement or reactions just toward my performance and also definitely my coaches. How they perceive what I’m doing. If they are giving me positive or negative feedback. That definitely affects if I think I’m being successful and able to learn new skills.

Their reactions toward her abilities help her gauge where she ranks in comparison with her teammates. She appreciates the positive feedback and reinforcement from both her teammates and coach to help her feel more confident in her ability. Her coach’s patient and positive approach helps her learn skills more quickly. Rosemary notices her coach’s body language is usually positive (and encouraging), but there are times when it gets closer to season that she projects a more negative energy. She feels this may be from her stress level or she wants to see who will produce so she can form the line up for the upcoming game. Sometimes she feels she and her teammates struggle because there is confusion about what role each player serves, but she thinks the confusion comes from teammates over thinking this concept and not from her coach trying to create a negative environment.

Rosemary was most motivated to play her sophomore year in college. She played mostly for her mother because she wanted her mother to see her dedication and support was appreciated. She is slightly less motivated this year, and while she plays for her mother, she plays more for her coach because she wants to continuously prove to her that she deserves to be in the starting line up each game:

I think that now that I am a starter that not, not that I’m not playing for my mom, but because I definitely still am and want to make her proud. But I think that I’ve actually switched to my coach to continuously proving to her that I deserve to be in the starting
line up every game. So that is always kind of in the back of my head. Is that I’m
motivated just to like prove to my coach that I’m the best, and that I still do deserve to be
hitting fourth, I still do deserve to have that starting position.

She is motivated to play for this team mostly because of her teammates. She admires how
difficult they work and their work ethic motivates her to improve. Her coach motivates her with
positive reinforcement, but also with “big picture” goals. Her coach does not make her less
motivated, but she admits sometimes she does not want to go to practice because she would rather
be studying.

Rosemary perceives her coach forms expectations about her playing ability from
watching her play during the recruiting phase and now. The one problem she sees on the team is
her coach’s lack of communication of what expectation she has for each player. She sometimes
feels confused because she does not know what is expected of her. Not knowing what her
coach’s expectations and goals for her is frustrating and can negatively affect her confidence and
motivation at times:

For most of us, if we don’t know what’s expected of us from our coaches then we don’t
really have a motivation because we don’t know what our goal is. If they have you know
goal A for us and we don’t know that’s our goal then it’s hard for us to reach it. And if
you don’t have the type of personality where you’re comfortable enough to go and talk to
her about it then you’ll never know what you’re expected to do, and then you’re
confidence is all messed up because you might be doing something and you might feel
great, but then the coaches are obviously not happy but you don’t know because they
don’t communicate that with you.
Rosemary perceives her head coach gives more technical instruction to weaker players, and shorter general instructions to the better players, so there is a difference in the type of instruction given between these two types of players. She notices her coach has different expectations for different players based on the type of feedback, or absence of, after certain plays. She will tell a better player to make the play, but may not say anything to the average player on the same play. She feels there are players who are permitted to make more mistakes, but she does not believe this is related to talent level.

**Tory.**

Tory is an 18-year old Caucasian athlete with fifteen or more years of softball playing experience. She began her softball career in kindergarten because she had fun playing the sport. The outfielder realized she wanted to play softball in college her junior year in high school. The freshman athlete does not anticipate she will hold a starting position for the upcoming season. She appreciates and enjoys positive verbal feedback from both her teammates and coaches when she does something well, but she places more value on praise from her coach:

She influences it a lot cause I mean I look at my coaches as my authority figures in softball, so just you know having them telling me “good job” and stuff makes me realize I’m good, I’m good enough to be here, they picked me out they wanted me here. So, I you know I trust them with all my heart and their judgment.

She feels when her coach acknowledges her good work the coach notices her and Tory’s effort pays off when she starts for a game. She trust her coach completely, and her coach’s positive, honest, and calm demeanor makes Tory more confident in her ability to learn new skills and know she is good at softball. Her coach increases Tory’s confidence when the coach fights for athletes during games, and expresses clear confidence in each athlete’s ability. The only
behavior Tory noticed to make her feel less confident is when the coach ignores her because she does not like the absence of communication between herself and her coach. “I think when she doesn’t acknowledge me at all is when I feel least confident.” Tory was the most confident in her ability her senior year in high school because she knew the opposing team was intimidated by her. She is slightly less confident right now because she is an underclassman in Division I softball and she feels the opposing team sometimes thinks they can beat her because she is new and one a less experienced player.

Tory is naturally driven and motivated with a desire to win and compete the same now as she was during her senior year in high school. She may have been slightly more intense in her motivation her senior year in high school because she wanted to win the state championship, and winning the championship was a realistic goal. Right now she wants to win and compete, but winning the Women’s College World Series (WCWS) seems distant because of the time of year and because her team has not actually won the series yet. Her teammates and her learning new skills and concepts each day motivate her to play for her team. She is the most motivated by the way her coach can balance serious, normal, and joking behavior to relieve tension and show she is “normal”. Similar to confidence, the only behavior that Tory notices to make her feel less motivated is when her coach ignores her because ignoring makes Tory feel the coach does not care about her.

Tory perceives her coach has both team and individual expectations. The coach communicates her expectations by directly telling the athletes through meetings and private conversations. Her coach was a motivational speaker and Tory finds her speeches very motivating:
She’s such a great person to talk to. I could literally just sit there and talk to her for 10 minutes and be completely pumped up for a game. I would, yeah nonverbal things she does like you know like clapping or the raise of tone in her voice when she gets excited that’s what really inspires me to play.

Tory rated herself as average in skill level compared to her teammates, and she did not notice a difference in treatment by her coach to her teammates. She feels the coach knows the athletes who are not working as hard, and she makes comments regarding hustle or poor play to those athletes, but Tory feels the comments are made because those athletes are not putting in enough practice time and hard work. The best players do receive positive enforcement, and it may seem like more positive enforcement than other teammates, but Tory believes the difference is because those athletes are the ones working extra and making the great plays consistently. The best players are often used in demonstrations, but this does not affect her motivation or confidence in her abilities.

**Jaclyn.**

Jaclyn is a 20-year old Caucasian athlete who has played softball since she was 10-years old. As part of a national championship travel summer ball team, the third baseman knows how to win and expects to maintain her starting position this season. She has played at her current institution and for her head coach for two years. She uses people in her immediate environment (e.g., teammates, parents, coaches, and friends) to form her competence about her softball abilities. Her coach influences her feelings of competence through verbal feedback and her reactions toward Jaclyn after a performance.

Jaclyn was the most confident playing softball during high school because she believed she was one of the best on her team. Her confidence has changed since high school based on the
results she has produced during performances. Her coach improves her confidence through her visible excitement and “positive emotion” she displays to her athletes. Jaclyn’s coach can hurt her confidence when shakes her head or is observed “mumbling under her breath in the dugout when something bad happens.” Jaclyn felt the most motivated to play softball during high school. She explains, “I played it because I loved the sport and it was what I was good at. I loved being around a team and I got a rush every time I played. I liked being a leader.” Her motivation has changed since high school because, “I don’t feel recognized as much anymore. College softball is a lot of work and time and I feel like it has become more of a chore than a game, although it is still fun for me.” She is motivated to play for her current team for her teammates and university representation. Her coach motivates her through motivational speeches and goal setting strategies, but when her coach repeats the same stories Jaclyn becomes less motivated.

Jaclyn perceives her coach forms expectations about each player individually, and she forms her expectations based on each athlete’s previous performances and experiences. Jaclyn’s coach openly communicates with the athletes about individual expectations. Jaclyn rated herself as an average player compared to her teammates, and noticed the more highly skilled athletes receive more positive behaviors and pushing to reach expectations. “She is a little bit more positive toward them but also pushes them when she knows they can do something.”

Kayla.

Twenty-year-old Kayla is a Caucasian athlete with 10 to 14 years of playing experience. Kayla has pitched at her current institution for two years, and she expects to continue in a starting role this season. She is highly motivated to play because she loves the game and loves to win. She loves her coaches and teammates, and she likes when her coach communicates with her
when she performs well. Her coach’s positive feedback and instruction on new or less developed skills increase her confidence in her ability. She does not like to make him mad and if he stops communicating with her, her confidence could be affected. She is more confident in her abilities now than she has been previously because she is learning new skills and mastering old skills.

She is motivated to play softball most of the time, but if she had to choose the one most motivated moment, it would be this past summer. Her team lost the conference championship, and she is more motivated right now because she wants to win conference this year:

Well we just got done with fall season and now we’re going into off-season, so now I’m even more motivated because season’s even closer and I like want to get better. I’d say probably the most motivated I’ve ever been because I really want to win conference this year.

Her coach motivates her by keeping a positive atmosphere at practice and she looks forward to practice each day despite what has happened in her day otherwise. Although her coach does not actually make her less motivated, she sometimes struggles if he does not communicate with her or if she feels she does not understand what her coach is explaining. “I mean I like can motivate myself, but it’s hard sometime if like we don’t communicate or like aren’t not on the same page. Or if I don’t know where he’s coming from, it’s hard for me to like not be motivated by like that would affect my motivation level.”

Kayla believes her coach has expectations about each athlete on an individual basis. She perceives he forms these expectations by assessing the weaknesses of the team as a whole, and by how he has seen each athlete perform in practice and games. He verbally tells athletes his expectations and he holds each athlete accountable for their actions, and Kayla feels this behavior helps her know exactly what he expects. Kayla rated herself as one of the better players
on the team. One difference in her coach’s behaviors toward other teammates Kayla notices is he offers struggling players more instruction and feedback because he wants to help them master the task. “I mean if you’re not the best and you need a lot of work he’ll like maybe be on you more to get things right. Like showing you how to do stuff so you do it right if you do it wrong. Like giving you like feedback so you can fix it, so yeah stuff like that.”

Kara.

Kara is a 20-year old Caucasian second baseman that has played softball since she was 8-years old. She has experienced many different types of coaches, and after two years of playing at her current institution, she suffered a career ending injury. She maintains her team membership by serving as a volunteer manager, and her team has recently added a new head coach. Kara has worked with her current head coach for less than one year. Kara believes her coach’s feedback type and approach is a major factor in her competence level:

She is definitely a positive reinforcer [sic]. She rarely, if ever, says negative things. For example, she will say “Come through the ball” instead of “Don’t stay back.” Her thought is that if she puts the wrong thought into your mind that is what you will do, instead of the proper thing. I think it’s very logical and very beneficial.

Kara has continued to learn how to master skills, and she feels more confident now in her abilities, despite her injury, then she has in the past. Her coach influences her confidence level through her feedback type and demeanor:

My coach gives a lot of praise, even for the little things. She is very big on doing things right, and when we do, she’s the first to say good job. She’s very positive and inspiring, and even when she’s instructing, correcting, or just plain frustrated and mad at us, very
rarely do we see her lose her composure and say overly negative things. Some coaches fly off the handle when things aren’t going well, but she manages to keep her cool.

Kara is motivated to play softball for several reasons, but the most influential factor to her motivation is her love for the sport of softball. “Primarily that I just love the game. Softball is a sport of not only raw ability and talent but also smarts, and I find that combination so amazing. I am very passionate and competitive, and putting on the jersey on game day is one of the best feelings in the world.” She enjoys having the opportunity to represent her university and her team on the field. Kara’s motivation is increased by her coach’s constant inspiration to improve each day. Her coach implements strenuous conditioning every day, and the large volumes of conditioning hamper Kara’s motivation.

Kara believes her coach forms expectations about her and her teammates’ playing ability by observing individual athlete’s work ethic and potential. Her coach clearly communicates her expectations to each athlete. Kara rated herself as average compared to her teammates. She perceives her coach’s behaviors express higher expectations for the best athletes on the team compared to herself.

Ashley.

Ashley, a 20-year old Caucasian athlete, started playing softball when she was 5-years old. Her love for the sport began through involvement in tee-ball and grew through high school. She transferred to her current institution and has played for her current head coach for less than one year. Although she was a starting pitcher for her previous team, she does not anticipate serving in a starting role for her current team. Ashley’s perceptions of her sport competence are shaped partially by her observations of her teammates’ talent level. She compares her perceived
talent level to her teammates and does not feel she is one of the best on this team. When asked what factors in her environment she feels affect her competence, Ashley responded:

I would say like the athletic ability of the other girls on my team. I know at my last school I was one of the best players and so I felt like I was able to pick things up very well, and just over all like a very good player, and now I’m not one of the better players on the team. So I, I guess that kind of lowers my confidence a little bit.

Ashley feels her coach is another factor in her perceptions of sport competence. When her coach gives positive feedback about her performance and recognizes her hard work Ashley’s confidence increases. Her coach hurts her confidence when she ignores Ashley’s performances and does not offer constructive feedback, and when Ashley observes her interacting with the returning players on the team because she notices a different type of interaction between herself and those players. Ashley’s confidence is lower now compared to high school:

I guess I would say I was confident mostly because [my high school team] were just like blowing people, blowing everybody away. And now, like with my pitching I was just either striking people out or getting them to pop up, but now I’m facing a lot better batters. And I think that has made my confidence dropped some. Because I’m kind of realizing maybe I wasn’t as great of a pitcher as I thought I was, maybe it was just the competition wasn’t as good.

Her previous coach offered constant reassurance she was the number one pitcher, but her current coach does not offer the same re-assurance. Ashley uses her current circumstance as a goal to work to improve, but she sometimes feels “pulled down” by not being the starting pitcher.
Ashley felt the most motivated to play softball last year at her previous institution because her team was successful and she was pitching well. She is slightly less motivated now because she does not know how successful her current team will be. When Ashley has moments of low motivation, she remembers she attends an institution with solid academic programs, and she still loves to play softball to help enhance her motivation for the moment. She is most motivated to play for her team because of the level of competition. Her coach motivates her to play by setting small goals daily that help her think about one aspect at a time instead of being overwhelmed with the big picture. She enjoys and is motivated by her coach’s inspirational speeches:

Sometimes she’ll give us like little speeches and kind of like pumps us up. Or like something to like help us focus on something specific for either that practice or that week of practice. And I think like focusing on specific goals helps to kind of like put everything in a smaller context so it’s easier to focus on that then an overwhelming amount of things to focus on.

Ashley becomes less motivated to practice when her coach does not communicate with her, or when her body language projects that she’s had a bad day or is in a bad mood. Ashley perceives her coach forms expectations about athletes individually based on past performances. Her coach communicates her expectations sporadically, but Ashley feels her coach projects her expectations to Ashley by how she responds to other teammates. Ashley, who rated herself as an average athlete, perceives her coach sometimes holds her to a lower standard than some players on the team by the type of feedback or correction she receives compared to other teammates. Ashley’s perception of her coach’s behavior lowers her confidence and motivation because she expects to be held to the same high standard as the best athletes on the team. She noticed in the
past below average teammates received instruction, but also received more negative behaviors (e.g., yelling, frustrated words) compared to higher skilled teammates. Ashley notices the better teammates seem to receive more instruction and positive feedback than herself or below average teammates.

*Mary Ann.*

Mary Ann is a 21-year old Caucasian athlete who has played softball since she was 7-years old. The outfielder transferred to her current institution from a junior college, and has played for her current head coach for less than one year. She was in a starting position last season at her previous institution, and she anticipates earning a starting role this season at her current institution. Her coach has a positive, encouraging demeanor she feels improves her confidence. Mary Ann particularly appreciates how he never yells at her, rather if she is performing a skill incorrectly, he re-directs her to try the skill a different way. She feels her coach makes an effort to tell her and her teammates he sees how hard they are working in practice, in their academic studies, and in the community. His positive comments make her feel like a valued member of her team because he makes a conscious effort to tell her personally, when she has done something well. She does not recall her coach ever giving any negative feedback (verbal or nonverbal), and she notices how he compliments her on the process of the task as opposed to the outcome of the task. This behavior encourages her and she feels more confident in her capabilities to perform the skill correctly the next time:

Well, I think that our coach is very encouraging. And he does, I mean, every play even if we don’t make the catch or make the play, he says 'Hey, that was hustle, a great job, great throw, way to get there.' I think that really helps because it makes you feel better and then you feel more confident and then the next time you will actually make that catch or
make that play, and he says stuff like that all the time. It’s never negative, it’s always positive, he never yells, he is very encouraging.

Mary Ann has experienced a change in her confidence this season because she is transitioning from serving in a role as a starting athlete, and she is currently working to earn a starting position on her new team. Her confidence is less, but she feels her goal of becoming a starter is a motivating goal.

Mary Ann was the most motivated to play softball last year when she tried out and earned a position on the team. She had previously decided to quit softball after her two years of junior college, but her love of the game made her miss playing. “I love the game of softball and the months that I took off over the summer, I was really missing it, so that was like the biggest motivation for me.” When she made this team, she was motivated even more to play for her coaching staff and teammates. Her coach motivates her to play by making practice fun by incorporating a game-like atmosphere into each practice. Her coach’s behaviors do not make her less motivated because she is self-motivated, but she uses other’s approval for motivation at times:

I just love the sport. So for me, as long as my coaches are happy and they are good at motivating me and encouraging me to be better, to give it your all and go 100% and play hard, but I just love the sport, so I wouldn’t say that there really is anything that my coach does that motivates me to not want to play anymore.

Mary Ann perceives her coach has expectations for individuals and for the team as a whole. Her coach clearly communicates his expectations for individuals and for the team. Mary Ann appreciates knowing exactly what her coach expects from her, and the clear communication positively affects her motivation and confidence. She rates herself as one of the best players on
the team, and notices small differences in treatment among different skill level of players. She feels her coach offers more instructions to teammates who are not the strongest on the team. Some girls on the team who are the best athletes seem to receive noticeably more praise, but she feels they deserve more praise because they are working hard and performing the skill correctly.

_Tiffany._

Tiffany is an 18-year old Caucasian athlete who has played softball since the age of four. She plays the shortstop position and the freshman has played for her current coach and institution for less than one year. Tiffany’s sport competence is shaped by her performance. Although her confidence is usually high, she is a non-scholarship athlete and she feels she has to prove to her team and coach she is talented enough to play on this team:

Since I am a walk-on and one of the youngest on the team, I feel like I have a lot to prove. I usually have pretty high confidence because I know I am on the team for a reason and the coaches saw something in me. However, when I start to make a few mistakes in a row at practice, my self-confidence drops very quickly.

Her coach affects her perceived sport competence positively by her encouragement and focus on the process of performing a skill rather than the outcome of the skill performance. Tiffany sometimes feels she does not learn skills as quickly as her teammates and her confidence is hurt when she perceives she is taking too long to understand. “Sometimes I feel slower than the rest of the girls. For example, I will need her to explain things twice or it will take me a few tries to get the new skill down. This does not make me feel very smart or confident.” Despite her feeling she is slower to grasp concepts, Tiffany feels the most confident in her abilities now because she is learning new skills and techniques to help her perform at a higher level than before.
Her coach has a positive, encouraging demeanor that helps raise Tiffany’s confidence, and Tiffany is sensitive to her coach’s perceptions and wants her coach’s approval for her to feel confident. “I dove for a ball at practice and got it. I was proud of myself, but she said I could have gotten it without diving. That kind of killed my moment. Like I said, I was very pleased with myself, but then I felt put down.” Tiffany is motivated to play for many reasons, and she is motivated to play for this team to earn a starting position and an athletic scholarship. Her coach motivates her by helping Tiffany believe she is making improvements, but the required conditioning for the team makes her less motivated to practice.

Tiffany perceives her coach has expectations about both athletes individually and the team, and the coach gives each athlete a written handbook to outline all of the expectations for the team. Tiffany is unclear what the expectations for her performance are because her coach does not clearly communicate with Tiffany on this issue. Tiffany rated herself as an average teammate. She notices the coach makes negative comments to the other coaches about teammates who Tiffany perceives to be below average in skill level. She notices these teammates generate more yelling and mumbling or swearing from her coach. Tiffany perceives her teammates who are the best on the team receive more friendly and respectful interactions from the coach, and she can tell these teammates are held to a higher standard:

When the best people on the team mess up, the coach lets it go. Similarly, when they make an outstanding play, it is not as exciting as it would be if I made an outstanding play. In regards to casual conversation, the coaches talk to the best players on the team like they are on their level. When I get spoken to, I feel very inferior and low on the totem pole.
Elena.

Elena, a 21-year old Hispanic athlete, transitioned into softball from baseball in the eighth grade. She did not enjoy softball until she reached high school. She did not begin her career in a competitive summer softball league until she was 16-years old. She has played and started in the shortstop position for her current university for the past three years, but she has played less than one year under the new head coach. She believes her teammates and her coaches affect her feelings of sport competence, and she feels she is one of the best on the team because her coach has established her as a leader on the team complimented by a starting position. Elena feels the most confident in her abilities now compared to other times in her career. She feels confident because she believes she has mastered her skills against high-level competition. Her coach improves her confidence by giving her high fives after each inning and offering encouragement and reinforcement consistently. “After every inning in a game our coach comes out of the dugout and gives high fives no matter how the inning went. Her verbal cues just come from confidence reinforcements on whether I am up to bat or in the field.”

Elena’s motivation to play softball developed through the course of her career, and her previous coaches and performance successes helped to motivate her to improve. Her coach and teammates are two major factors that motivate her to play for her current team. Her coach enhances her motivation by setting clear, realistic expectations for Elena. “My coach set expectations that she knows we/I can achieve. She believes that we are better than we think we are, and it motivates us to push to be that great. She makes our time together as a team worthwhile.” Elena perceives her coach holds expectations for athletes individually and as a team, and her coach discusses her expectations with each athlete. Her coach’s clear communication of expectations motivates Elena to work hard. “They affect my motivation by
making me push harder because I know that someone sees more in me, sees the great in me.”

Although Elena rated herself as one of the best athletes on the team, she does not notice any differential treatment from her coach to other teammates.

*Bethany.*

Bethany is an 18-year old Caucasian athlete who started playing softball at a young age because her older sister and several friends played. The second baseman is a freshman and new to her current team, but she anticipates she will earn a starting position for the upcoming season. She was the most confident in her playing abilities her sophomore year in high school because she believed she was starting to master several skills. After a major life event that paused her playing career, she feels she is starting to regain her peak confidence and performance similar to her sophomore year in high school. She thinks her coach does influence her perceived sport competence by maintaining a positive approach and overall demeanor:

She really builds us up. This fall she was a new coach, and she kind of was just feeling around, seeing where everyone played. Even though we were making errors it wasn’t like she was yelling at us. She was like, “Even though you were making errors you were trying your hardest to get that ball.” She just like builds us up, and whenever we did something good, she’d be like, “Yeah that a way!” She would make a point to stand up and speak to us and not in a yelling in a negative way, but in a positive way like, “Yeah you’re like doing really good! Keep it up.”

Her coach is extremely uplifting and positive, and she improves Bethany’s confidence by her positive and vocal communication. Her coach does not portray behaviors that hurt her confidence. Bethany was the most motivated to play softball after returning to softball after her major life event. Her motivation is currently the same because she observes her teammates’
enthusiasm and hard work, and knows they are all great players and want to be there for the same reasons as Bethany. “It [her motivation] hasn’t changed. It’s actually um now I’m even more motivated. Like when I see, like travel ball you get some girls that go DI, DII, DII, but like here everyone’s here to play, and you kind of get that motivation from watching the individuals around you.” Her coach motivates her by her encouragement, but also by the mission and vision statement she has created for the team. Bethany’s coach offers daily team performance assessments in a unique format, and her coach’s assessments motivate Bethany because she her coach clearly communicates areas for improvement or offers praise.

Bethany perceives her coach forms expectations about playing ability on an individual basis, and she thinks her coach forms expectations by evaluating previous performances and by creating limit-testing drills in practice. Bethany does not notice any difference in coaching behavior between skill level of athletes on her team except she sometimes notices the coach provides more instruction to lower skilled athletes. Bethany believes the extra instruction is because those athletes may need more time to learn the skill.

Hannah.

Hannah is a 20-year old Caucasian athlete with more than 10 years of softball playing experience. The starting second baseman has played for her current team for two years, but has played for the new head coach for less than one year. Her experiences with the previous head coach were hard, and she is encouraged and excited about the team opportunities with her new head coach. Hannah recognizes her coach and the type of feedback she receives is a major influence on her perceived competence. “Coaching definitely is a factor that affects how I feel about how I am doing in softball. Ultimately, in my mind, I’m working to show the coaches I’m capable of performing at this level. So if I’m getting a lot of negative feedback from the coaches
then it can cause me to play worse sometimes because I’m not confident in my ability.” Hannah is the most confident when she is performing well and receiving positive feedback from her coach. She is sensitive to her coach’s reactions and behaviors. Hannah’s confidence is lowered if her coach ignores her performance attempt or issues negative feedback. These behaviors cause her to doubt her ability to play softball.

If I’m not doing well then little by little my confidence weakens. Over the past two years though, the change in my confidence has been significant because of reactions from my coaches. Their disappointment in my performance just made me stress more about it, causing me to over think every part of the game. This lead to more failure and less and less confidence.

Hannah was the most motivated to play softball after recovering from an injury because she wanted to compete with her teammates for a starting position and “shatter everyone’s expectations” of her. She is motivated to play for her current team because she wants to win the conference championship. Her motivation is inhibited if her coach displays a poor attitude, and she feels her teammates feel the same. “If my head coach comes to practice or games with a poor attitude then I’m less motivated to play. If she doesn’t want to be there then I think that rubs off on the rest of the team.” She perceives her coach forms individual expectations by observing skills and work ethic in practices. Her coach clearly defines her expectations for each individual, and her direct approach motivates Hannah because she is given specific goals to achieve. Hannah rated herself as one of the best athletes on the team, and she notices her coach will offer more instruction and friendly behaviors toward the better athletes. Hannah can tell her coach holds the better athletes to higher expectations from the type of feedback her coach offers.
Sally.

Sally, an 18-year old Caucasian athlete, started playing softball when she was 4-years old. As a freshman catcher, she anticipates she will earn a starting position this season. Sally relies on herself to build her confidence, but she expresses the need for a coach to be honest with her and yell at her if necessary to perform her best:

I have always been independent in building my own confidence. I don’t need someone to give me positive reinforcement to feel good about myself. What I don’t do well with is someone who won’t yell at me when I do something wrong. I need to be criticized not patted on the back and coddled.

Sally was the most confident in her playing abilities when she played for her summer softball team. Her coach does not portray many behaviors that either enhance or hurt her confidence. Her confidence is lower now because of the status of her athletic scholarship situation and because her current institution does not emphasize athletics:

I basically lost my scholarship and the second time around of recruiting was rough, and I became depressed which hurt the mental side of my game. I eventually picked myself back up and became better than I was before. Now, my perceptions of my playing ability are a little down because we just don’t have enough time to practice. I go to a school that is all about the academics and that comes first, and there are more strict rules on practice time especially in the off season. Softball is just not as important here as other schools, and it is taking some getting used to.

Sally was the most motivated to play during her time with her summer team during her high school years. Her motivation to play is not as high for similar reasons as her confidence change. Her institution emphasizes academic performance and she perceives her teammates as a
whole are not as talented as her summer teammates. Sally perceives her coach makes comments to her to make her believe she will be a starting player this year even though her coach has openly told the team freshmen do not fill starting roles for this team. Her coach’s comments motivate Sally to work hard so her coach will feel she has no choice but to start Sally because she is the strongest athlete at her respective position. Sally does not receive athletic scholarship money because her institution does not grant athletic scholarships, and Sally’s motivation to play is hampered by the stress of knowing she is not able to receive financial aid through an athletic scholarship to help pay for the cost of her education. Sally perceives she is one of the best athletes on the team. She believes her coach forms individual expectations by observing athletes’ perform in practices and games. Sally’s coach clearly communicates her expectations to the athletes during individual meetings. Sally appreciates knowing what expectations she must reach, and she perceives her coach treats all of her teammates equally.

Chloe.

Chloe is a 21-year old Caucasian athlete who began playing softball when she was 5-years old. She originally began her collegiate career three years ago at her current institution, but transferred to another institution after her first year. After an unsuccessful experience at her transfer institution, she transferred back to her current and original institution, and she has played for her current head coach for two years. Chloe plays in the catcher position and was not in a starting role previously but anticipates starting this season. Although Chloe believes she has always been confident in her playing abilities, she feels her coach’s perspective and expectations affect her perceived competence:

I think I’m pretty confident with softball. I guess one thing that affects my confidence with softball would be my head coach’s point of view and her expectations. I think when
she’s not happy with me or when she’s expecting from me or calling me out, especially me being a senior, um that affects my confidence. That’s really the only thing I can think of. I don’t think anything outside of softball really affects it.

Chloe does not feel as valued as a senior member of the team, and she perceives her coach does not value her as much as other teammates because she transferred after her first year. She was the most confident in her playing ability during her last years in high school because she was the best player on her team and she knew she would maintain her starting role even if she had a bad performance. She is less confident now because she feels pressure from fear of losing her starting role if she makes a mistake. She feel another factor that has contributed to her change in confidence is her coach’s expectation for her are more demanding than in her high school years. Her coach is mostly a positive person, and her positive remarks help enhance Chloe’s confidence. Chloe does not appreciate when her coach highlights Chloe’s mistakes in front of her teammates and her confidence is impacted negatively.

She was the most motivated to play softball her first three years in high school because she was excited to play collegiate softball. Her motivation has decreased since high school because she struggles to focus on softball. She is frustrated with her physical limitations (e.g., injury related) and outside life factors demanding her attention. She has always been self-motivated to play, but she feels “drained”:

I feel like I’ve given a lot to this sport, and given my body a lot to this sport, but freshman, sophomore, and junior year in high school I was obviously very motivated. Ready to get a scholarship. Looking forward to college ball. And now I guess outside influences such as applying to [graduate school] in a couple of months. I’m more worried about my grades. I’m more worried about getting into that school. Getting started at that
than I am with what honestly is winning a [University C] championship. So I think my thoughts are different and just my body’s not the same as it used to be.

Her coach motivates her by sharing motivational stories about professional athletes and implementing exercises to help her and her teammates develop as people and athletes on and off the playing field. Chloe’s coach does not display behaviors that decrease her motivation, but Chloe feels less motivated for internal reasons.

Chloe believes her coach has individual expectations she forms them based on individual strengths. In past seasons she has explicitly discussed her expectations with Chloe, but Chloe does not remember her sharing her expectations this year. Chloe perceives her coach treats her weaker teammates differently. Chloe observes her coach does not spend as much instruction time with them or “waste her time” with them compared to better players on the team. The higher skilled teammates seem to receive more “nagging” and constant attention than other teammates.

**Brooke.**

Brooke, a 20-year old Caucasian athlete, has played softball since she was 5-years old. She fell in love with the sport immediately, and her passion and hard work earned her a starting position at second base for her current team. She has played for her team and head coach for two years. Her coach influences her sport competence is a positive way through her encouragement, recognition, and confidence in Brooke’s performance. “My coach speaks highly of me toward myself and around others. She told me that I am the leader of the team on the field and that she is building the team around me in order to provide a good defense and good hitters to produce runs.” Brooke feels the most confident in her abilities now because she feels she has mastered more skills and is improving each day. Her coach only improves her confidence because her coach has a consistently positive demeanor and offers constant encouragement. Her coach is
honest and openly communicates with Brooke and these behaviors solidify Brooke’s trust in her coach.

Brooke is motivated to play softball for multiple reasons, but her primary motivation comes from knowing her hard work translates into success on the field. She is motivated to play for her current team because she wants to please her coaches, parents, and teammates, and she wants to help her team win the conference championship:

My head coach, my parents, and my teammates motivate me now. I want to play well for them, beat other teams, and win for my school. I am proud of myself, my team, my coaches, and my family and friends, and I want to make everyone proud. I have never felt the way I do whenever we play other conference schools. There is so much rivalry and will to win during every game. Of course you want to win every game, but especially against other teams in our conference.

Brooke perceives her coach forms expectations about the team as a whole based on previous performances and comparison to other teams. Her coach is clear in her communication of her expectations and is precise in her explanation of what actions need to be performed to meet her expectations. Brooke perceives her coach holds the better athletes, like herself, to a higher standard than other teammates. She can tell expectations are different for teammates by the feedback pattern and behaviors from her coach.

**Jackie.**

Jackie is an 18-year old Caucasian athlete who has played softball since she was 4-years old. She has played many different positions in her career, but she has found a role at second base for her current team. She is accustomed to playing in the starting lineup, but as a freshman for her current team, she does not anticipate she will be in a starting role this season. Jackie feels
her current coach influences her perceived competence by the type of feedback and displays of confidence in Jackie. Jackie was the most confident before college because she was one of the best players on her team. Her confidence is currently lower because she is adjusting to college level softball and learning new philosophies and teammates:

I think it was not being surrounded by people and things that I knew and loved. Here everything is different, from the coaches and players, to the facilities and practices. My old coach provided a huge amount of confidence and comfort that I now do not have. Adjusting to not having her and my old teammates is tough for me. Also, I knew my role on this old team and loved it. Here I am not quite for sure of my role: however, as a freshman I do not think it will be as big as a role as I am use to.

Jackie recognizes her current coach uses praise when her performances are acceptable, but she feels she does not know her head coach well enough yet to know how her coach improves her confidence. She notices her coach does not let her perform her skills to her fullest ability, and Jackie feels her coach does not trust her as a multi-skilled athlete. Jackie’s perception of her coach’s doubt in her abilities makes Jackie feel less confident.

Jackie is motivated to play softball for several reasons, but she plays primarily because she loves the sport. “I play softball first and for most because I love it. It is a place in my life that all my problems go away when I play it. It is place that I can let go of worries and problems and just go out there and be me and play a game I love.” Her motivation level to play softball has not changed, and she is motivated to play for her current team because she wants to help the team improve and to be the best athlete on the team. Her coach makes her more motivated to play by establishing goals and expectations and showing her how to accomplish the goals to be
successful. Sometimes her coach yells or “screams” at her and this behavior makes Jackie less motivated to play.

Jackie perceives her coach forms expectations for each individual based on her coach’s personal philosophy and plan. Jackie is unsure of her coach’s specific expectations for her, and her uncertainty does not affect her motivation but does affect her confidence. Jackie rated herself as an average player compared to her teammates. She notices her coach gives “more positive talks” to the players who are less confident. Jackie perceives her coach has higher expectations for the better athletes and they receive more attention compared to other teammates who are perceived to be weaker.

**Christy.**

Christy is an 18-year old Caucasian athlete. She has been playing softball and playing the position of pitcher since she was 7-years old. As a freshman, she does not predict she will play in a starting position for her current team this season. She feels her feelings of having to impress her coach and compete for a starting position are factors in your current environment that affect her competence. She does feel her coach influences her perceptions of her playing ability, and she feels her coach helps her learn new skills more quickly by providing immediate corrective feedback. Christy was the most confident during her early years of high school because she was playing to be recruited to play collegiate softball. She joined a new summer travel ball team and faced better competition and this improved her confidence. She feels her confidence has changed now because she is trying to adjust to the level of competition in college and earn a starting position in the lineup. “I think I’ve gotten better in certain areas in my position, and I’ve learned a lot more things. It’s just the transition from high school to college is different, and it’s just my confidence that’s really changed.” She feels her coach improves her confidence when she offers
encouragement. Christy loses confidence when her coach uses a confrontational approach and is too direct or blunt with her comments. She perceives her coach does not have confidence in her abilities and the perceived doubt from her coach decreases Christy’s confidence.

Christy was the most motivated to play softball during her high school years because she was focused on earning a college scholarship. She put in extra work, and even though she is still highly motivated to play now her motivation is slightly different. Now she are motivated to earn a starting position and be the best on the team. She has internal motivation to be the best at any task she starts. “It changed in the way that instead like once I’m here I want to be number one, I don’t want to be 2, 3, 4 or whatever. Like I want to start and so you’re still doing all of your extra work and stuff that you did when you were trying to get recruited.” Christy is motivated to play for this team by the quality of the coaching staff, her teammates, and the opportunity to represent her university. Her coach motivates her more to play by emphasizing small daily goals that help Christy “take small steps to greater success,” and by making practices competitive and game-like. Her coach can make her less motivated when she yells and screams for unclear reasons. Christy feels her coach focuses on the small mistakes too much and can be “overly dramatic.”

Christy believes her coach forms expectations about her playing abilities individually, and her coach tells her what her expectations are in individual meetings. She feels her coach forms expectations more from pride in the university and wanting the team to represent the university well than any other factor. Christy notices teammates who are not the best on the team receive more instruction and more attention to mistakes than teammates who are perceived to be stronger. Better teammates seem to receive more praise and overall respect from her coach than
others. Christy feels some teammates who are better players on the team are designated leaders more often, asked for advice, are trusted, and have more confidence from her coach than others.

**Sara.**

Sara, a 20-year old Caucasian athlete, has played softball since she was 5-years old. The junior outfielder has played for her current institution for two years, but her current head coach has been at the institution for one year. Sara filled a starting position the previous year and anticipates maintaining her starting position this season. She feels the perceptions and treatment from her teammates, coach, and family influence her perceptions of sport competence. Her coach influences her confidence through positive reinforcement, but also by the way her coach highlights incorrect performances and continues to instruct her until she corrects the movement so she learns from the mistake and does not repeat the incorrect movement:

Well she’s really good about pointing out when you do something good and also when you’re not doing what you’re supposed to. And that really pushes you to be the best player because some people may just focus on the good but she really tries to you know work on the good and the bad. So encouraging the good, and not just putting you down when you’re doing something bad, and correcting it and making sure that it doesn’t happen again, and making sure you’re better and learning from it.

Sara was the most confident in her playing ability her senior year in high school. She is still confident, but is currently less confident because of the level of competition she competes against. Her coach increases her confidence by recognizing good work or successful attempts. Sara likes seeing her coach become “animated and genuinely excited about your performance.” Sara’s confidence decreases when her coach is blunt and direct with comments. Sara perceives
her coach does not care about her feelings, but she later realizes her coach was trying to help Sara improve.

Sara was the most motivated to play softball her senior year in high school, and she is highly motivated but your motivation to play has changed. She is now motivated more by the idea of competing for a national championship, meeting the expectations of her new coach, and for the new fans. She values being a role model to younger fans and representing her university in a positive manner:

I still say I have a lot of motivation to play. It’s just a little different. I mean we’re gunning for a national championship or something. And the fact that I’m representing the university in a positive way and getting to play for at the collegiate level is such a huge motivation. And we have or we’ve started to accumulate a lot of um bigger fan base and so there’s a lot of little girls out there you know looking up to us and so that’s motivation to be out there and do your best all the time because people are watching you all the time and you want to make a positive influence on somebody and make somebody’s day, and be a role model to somebody.

Sara perceives head coach has individual expectations about her playing ability. Sara knows her coach has expectations because she talks about her expectations frequently. Sara believes her coach forms her expectation based on what her coach has seen from Sara in practice and by getting to know her personality, strengths, and weaknesses as a player. Her coach holds regular meetings throughout the year where she discusses individual expectations and is very clear about her expectations for Sara. Her coach’s communication style and upfront approach affects Sara’s motivation and confidence positively because she knows where she stands and what she needs to do to improve. Sara does not notice any difference in treatment of
different talent level of players. Although there is a distinction between starters and nonstarters, her coach displays the same behaviors equally to all types of players.

**Tracey.**

Tracey, a 21-year-old African American athlete, began playing softball when she was 5-years old because she enjoyed the sport and her parents wanted her to stay in shape and create active lifestyle routines. She became serious about her softball career in high school, but the sport became more about winning and less about fun. She has played at her current university and for her head coach for less than one year. She is new to the team, but she anticipates earning a starting role at the shortstop position this season. She believes her existing confidence level and optimistic approach to her game affect her sport competence rather than her coach. “I think the factors I take in are just to have confidence and not to worry if you make mistakes. You’ll always have more opportunities [sic].”

Tracey was the most motivated and the most confident in her playing ability during her high school years when she played for a competitive summer travel team. Her coaches and teammates were supportive and encouraging to each athlete. Her confidence has changed since entering college because of coaching issues and “being on teams that weren’t that good.” She does not feel her current coach hurts her confidence because she does not listen to his feedback. Her motivation to play has decreased because she perceives her current coach and past coaches doubt her ability to perform well. She does not feel her coach displays any behaviors to enhance her motivation, and she plays for her team because she enjoys her teammates:

I feel like it changed because after I left that team my new coaches doubted me and played me less like I wasn’t good enough. I knew I was better than other players, but they played favorites. I started not caring because I figured they didn’t need me. Then my
ability to play good went down. Even when I picked it up and did better I still didn’t feel like it was good enough. Even to this day I don’t feel like I am good enough to play D1 softball.

Tracey perceives her coach forms expectations about each player individually. Her coach discusses his expectations with her, and she holds herself to high standards. Tracey perceives her coach does not treat players differently according to skill level, but she does believe her coach has favorite players who he treats differently than other athletes. “He treats ever player the same. Except when you are a favorite you can tell.”

**Ginny.**

Ginny, a Hispanic 21-year old athlete, started playing softball when she was 8-years old. The starting outfielder has played at her current institution for three years, but her head coach has been with her for one year. Ginny attributes her perceptions of her sport competence to her coach and his behaviors toward her:

Well, for one, how my coach feels about me. If he has confidence in me, it helps me to really focus in, and, I can do it because my coach has my back and he believes I can do it.

My team, also, I mean, that’s probably the biggest factor honestly, is how my coach is relaying that confidence to me. If he is willing to work with me until I get it right.

Her coach is encouraging and willing to schedule extra practice sessions so she can receive additional instruction for skills, she does not perform correctly. Ginny is the most confident in her playing abilities now compared to any other time in her career. Her confidence is enhanced by her coach’s willingness to remain calm and express belief in her performance ability. Her confidence is affected negatively when she observes her coach portraying negative body language (e.g., slouching, head shaking) after a poor performance.
Ginny was the most motivated to play softball at the beginning of her second year in college. As the oldest of three children, Ginny is the only female sibling. Her younger brothers told her they admired her because of her talent and how far she had advanced with her softball career. Ginny was motivated to play softball to make her brothers proud of her. She does not feel as motivated this year because she realizes her career will end after the season. “Well, this is my last year of softball so I am probably not as motivated as then because I know it’s coming to an end. But at the same time, I am very motivated and I want to make this year count.” She is motivated for several reasons this year, but a primary motivator is her teammates. She loves her teammates and wants to see the team succeed. Her coach enhances her motivation by organizing fun, well-structured practices. Her coach lessens her motivation by using conditioning as punishment when he becomes frustrated.

Ginny perceives her coach forms expectations individually about her and her teammates. Her coach clearly communicates his expectations, and Ginny likes knowing exactly what her coach expects from her each day. Ginny rated herself as an above average athlete on the team. She notices her coach seems to have higher expectations for the stronger athletes on the team. She can tell her coach has different expectations by the type, quality, and quantity of feedback he issues.

Allison.

Allison is a 20-year old Caucasian athlete who started playing softball when she was 14-years old. She has played outfield for her current institution and coach for three years. Although she did not hold a starting position last season, she anticipates playing in a starting position this season. She believes her existing knowledge about the game, the trust level with her teammates, and her interactions with her coach affect her sport competence. Allison appreciates when her
coach asks her to demonstrate skills for other athletes because she feels her coach has confidence in her ability:

A lot of times will go around like at camps or stuff, around other people, he will have me kind of be the person that talks about different skills or demonstrate things that we do. It makes me feel like he has confidence I have learned them from him and understand them and that I have picked them up quickly.

Allison felt the most motivated to play and the most confident in her playing ability when she played with her travel summer team during her high school years. She admits her confidence has decreased since playing for her current team, and she believes her confidence has been affected by her difference in opinion about coaching styles with her head coach:

A lot of it came down to the fact that I have never had a coach with this coaching mentality, and I was just coached differently and brought up with different kinds of coaches that are more baseball-headed coaches that have a more aggressive mentality. And very uplifting, but, also very, let you know if you do something wrong. They are as stern as they have to be, and this is more delicate coaching at my college. I think a lot of it, I just didn’t agree with all the decisions he has made along the way, and he doesn’t help encourage very much.

Allison mentions her coach’s lack of encouragement, excitement, and unclear reasons for frustration negatively influence her confidence. She struggled to think of any behaviors he displays to enhance her confidence. Her motivation level has dropped because she realizes she is almost done with her career and she is distracted by potential post-graduate events. “I find myself asking myself what’s the point of continuing to play because it’s not doing anything for, it’s not benefiting my future at this point.” She admits she is motivated to play for this team
because she is receiving athletic scholarship money to help finance her education. Although her coach can increase her motivation by including competitive drills in practice, Allison is less motivated most of the time because she feels the drills are redundant each day.

Allison believes her coach has individual expectations for team members, but she does not perceive his expectations are clearly defined to the athletes or to himself. She is concerned when he his skill assessment for her is opposite of what she assesses:

An example of how he wouldn’t be able to pull expectations out of this is that, like, this is my third year and I just clarified with him and the other coaches this year of what pitches I like to hit. For example, I don’t like inside pitches, I like outside and I favor it. So, I would get an inside pitch and take it and he would be like, “Oh, that was your pitch.” And I am like, I have been here for three years and you still don’t know my pitches. How can you make detailed, individual expectations if you don’t know your players individually?

She feels her coach communicates his expectations for her indirectly by using drills in practice and providing feedback on issues, he desires to see her fix. Allison likes the direction she has when her coach gives her small daily goals to accomplish. Allison rated herself as one of the best players on the team, and she does not perceive her coach to treat teammates differently.

**Jill.**

Jill is a 20-year old Caucasian athlete who has played softball and other sports since she was 11-years old. She began focusing on softball at age 14, and she has played the catcher position since she started. Jill has played for her current university and coach for two years, and she anticipates maintaining her starting position from the previous year this season. She played a
variety of sports and feels her past experiences with good coaches from different sports has improved her ability to understand the game of softball and learn new skills quickly. She believes the large amount of practice time with previous coaches, and the experience from playing many games has affected her playing ability and skill level from then to now. Jill does not feel she is able to practice as many hours on the field or spend as much time with her coaches now and the decreased instruction and practice time has affected her play:

I grew up in [state] on the other side of the country and we didn’t have weather problems so we would play all the time. And I really think that has affected my skill level and just my confidence in playing because I think I had more hours on the field and more hours of my coaches than most people have.

She does not feel her coach verbalizes what corrections she needs to make, and his absence of communication affects her confidence in her playing ability. Her confidence increases when her coach is involved. She thinks he does a “great job” off the field of providing and encouraging team bonding.

She was the most motivated to play softball last year. Her father was her motivation because she understood his physical circumstance and she believed she had no reason to not be the best because she was physically capable. Her teammates motivate her to play for her current team. Her teammates all support each other through good days and bad, and Jill feels her teammates supply enough motivation:

I think I have the best teammates in the whole world. I mean they’re constantly around and just a constant motivation that’s just keeping me going through the good and the bad days that they’re there. We also have good days so it’s easy to be picked up by someone that’s having a really good day.
Her coach motivates her to play by the behaviors he displays off the field more than on the field. The community service and team bonding events is a motivator for her, and she feels her coach communicates more affectively off the field. His struggle to verbalize corrections or instruction on the field can make her less motivated to play.

Jill perceives her coach forms expectations about playing individually. Her coach open and clearly communicates his expectations during meetings, practices, and goal setting exercises. His communication and goal sheet improves her confidence and motivation because she understands exactly what skills she needs to improve. Jill, who rated herself as one of the best athletes on the team, notices weaker players on the team receive more overall instruction and positive feedback than herself or better players.

**Melinda.**

Melinda is a 22-year old Caucasian athlete who has played softball since she was 8-years old. She has played for her current university for three years, but her head coach joined the program one year ago. She plays the first base position and held a starting position last season that she anticipates maintaining this season. Melinda believes her coach is a primary influence on her perceived sport competence. Her coach affects her competence through her feedback style. “She has a very large influence in the way my confidence strives. She encourages you a lot and never has negative feedback.”

Melinda feels the most confident in her playing abilities now because she is entering her final season as a collegiate softball athlete. She is determined to have an outstanding senior season. Her coach improves her confidence through her positive demeanor and constant encouragement. She was the most motivated to play softball in previous years because she loved the game and enjoyed playing. Her motivation is not as strong now because the enjoyment and
excitement is not as strong. “It is just getting kind of old. I am ready to move on to something new in my life.” Her coach increases her motivation by making practices interesting, but excessive conditioning lessons Melinda’s motivation to play.

Melinda perceives her coach forms individual expectations for each athlete by assessing each athlete’s skill level and potential. Her coach clearly communicates her expectations with Melinda through conversations and drills during practice. Melinda rated herself as one of the best athletes on the team. She perceives her coach ignores the presence and performance of her weaker teammates more often. She can tell her coach has higher expectations for the better athletes on the team by the quality and type of feedback her coach offers.

Sadie

Sadie, a 21-year old Caucasian athlete, began playing softball when she was 5-years old. She has played for her current institution for three years, but her head coach joined the team one year ago. She held a starting position at third base last season and she anticipates she will remain in a starting role this season. Sadie believes her coach influences her perceived sport competence in a positive manner through the use of positive, corrective feedback and encouragement. She appreciates when her coach reminds each of her teammates how much they can improve:

My head coach influences everyone’s feelings about how good they are at softball. This year and last year, she encourages us all as softball players to play to the best of our ability. She lets us know when we are not playing to our potential but she usually stays a positive and encouraging as possible which I think helps everyone on the field.

Sadie was the most confident in her playing ability her senior year of high school because she did not have to compete for a starting position. Although she remarks her confidence is the same, she mentions confidence has been “challenged” because she has to compete with her
teammates to earn a starting position. Her coach improves her confidence by offering encouragement after mistakes and issuing praise when she performs well. Her confidence is hurt when her coach issues too many corrections immediately following a poor performance. “Sometimes she will tell me my hands, legs, and eyes all don’t look good, and I know she is trying to help, but sometimes when I am struggling I don’t like being told everything looks bad.” Sadie’s motivation to play softball has not changed since she was the most motivated to play during her high school years. She is motivated to play primarily because she thoroughly loves the sport. “I simply played because I didn’t know how I could survive without the sport. It has been such a huge part of my life and truly my first love.” Her coach increases her motivation by reminding her that her hard work in practice will help the team win another conference championship.

Sadie perceives her coach forms individual expectations about each athlete by assessing previous performances. Sadie understands her coach’s expectations for her because her coach clearly communicates her expectations to Sadie. Sadie, a self-rated average athlete, does not notice any difference in treatment from her coach to her teammates.

_Jenn._

Jenn is an 18-year old Caucasian athlete who has played softball since she was 5-years old. She is a freshman in college and has played for her current university and coach for less than one year. She plays in the second base position and does not anticipate earning a starting role this season. Jenn perceives several factors contribute to her perceived sport competence. She relies on her previous success during games and academically, her capability to learn new skills, her stress management strategies, and the demeanor of her coach and teammates to form her perceptions of her competence. She feels competent when she receives approval from her coach.
“If they don’t have to repeat themselves, and seem pleased with my play, then I know that I have learned quickly enough. As long as my coach realizes that I am needed and I want to be there, then my efforts will feel valued.”

Jenn was the most confident in her softball abilities when she was in high school. Her confidence fluctuates now based on her performance during games and practice. “I go through confidence shifts based off my performance. Sometimes they are brief and are overcome easily, and other times they take a little time to fix. Either way, game winning hits feel amazing while any error is going to suck.” Her coach enhances her confidence by offering encouragement and praise. If Jenn perceives her coach is disappointed in her personally or athletically, or if her coach “stops talking to me” then Jenn’s confidence is influenced negatively. Jenn is motivated to play softball for several reasons, and she wants her coach to be satisfied with her performance. Currently, her motivation is lower than previous moments in her career. She feels she has conflicting opinions with her coach and teammates. “My motivation is not at its peak right now. I’m enjoying practicing the sport; however, I’m conflicting with some teammates and the coach. Since we’re not all functioning on the same level of understanding, there is a deterrent friction.”

Jenn perceives her coach forms individual expectations about each athlete’s performance ability by observing each athlete’s performance in practice and games. Jenn knows what her coach’s expectations are for her because her coach verbally expresses her expectations in conversation. Jenn believes if she does not meet her coach’s expectations then she is punished for failing. She finds the punishment frustrating and difficult to remain motivated to play because she is punished for failing. Jenn rated herself as the weakest athlete on her team. She perceives her coach becomes frustrated more often and quicker with herself and her weaker teammates.
She does not notice any other behavior that would indicate differential treatment to other teammates.

Jamie.

Jamie is an 18-year old Caucasian athlete who began playing softball when she was 12-years old. She has played for her current university and coach for less than one year. She plays in the shortstop position, and she anticipates she will earn a starting role this season. Jamie is more confident now in her playing ability than any other time in her career. She feels the most confident in her abilities now because her coach patiently explains flaws in her performance and offers strategies to correct her flaws. “So now I actually have someone that’s actually telling me and explaining to me why I’m doing something or how to do it right and that’s just way better. It makes me feel more confident in how I play. Now that I actually understand.” She appreciates her coach’s communication, and she likes when her coach recognizes good performances. When her coach displays negative body language (e.g., head shaking) and discouraging remarks (e.g., “you can do better”) after a poor performance, Jamie loses confidence. Jamie would prefer her coach privately meet and explain her mistake and offer corrective instruction.

Jamie is internally motivated to play softball, and she was the most motivated her senior year in high school because her team competed for a state championship. She likes to win and is highly competitive, but she is motivated to play her current team because she likes the school and her teammates, and because she wants to represent her university in positive manner. “I love playing softball just because it’s just I’ve played it for so long. And I’ve never hated it besides when my coach my junior year would scream at me, but basically I just want to be I’m motivated to win. I hate losing, and just I’m a very competitive person so. I just like to play.”
Her coach motivates her to play by presenting motivational speeches. Jamie does not believe her coach displays behaviors that make her less motivated to play.

Jamie perceives her coach has expectations her individually, but she is unclear of how her coach forms her expectations. Her coach consistently communicates directly her expectations, and her coach’s communication enhances Jamie’s confidence and motivation to play. Jamie believes she is one of the best players on the team. Jamie perceives her coach is more relaxed with several of the upperclassmen, but she feels this is because her coach is new to the program and uses the upperclassman to answer questions about the program because she is learning about the past.

Emma.

Emma is an 18-year old Caucasian athlete who has played softball since she was in kindergarten. She plays the third base position, and she is a non-scholarship athlete for her current team. She has played for her team and coach for less than one year, and she does not anticipate playing in the starting lineup this season. Emma believes her coach influences her perceived competence through communication, praise, and playing time. “I think the head coach is a huge influence on how you are confident in yourself. Whether they say it or show it in actions, you can tell from a few things: 1. How often they play you, 2. If they communicate with you, 3. Tell you you’re doing a good job.” She felt the most confident in her softball playing ability when she played for her summer travel team during her high school years. Her confidence is not as high currently because the team environment is tense, and she feels intimidated practicing with older, more experienced teammates:

I would say I was most confident playing in my summer league with my friends. The environment was more relaxed and we focused on having a good time and enjoying the
game. When I played my first year of varsity and now in my first year of college, I've felt less confident because it can be quite intimidating playing with older girls. You feel like you lack experience and don't fully understand everything that's going on or different practice drills. So for me, when it comes to playing on a new team, like now in college, would be a time I feel less confident in my softball abilities.

Emma is motivated to play softball for several reasons, but she enjoys the sport and values an active lifestyle she maintains through practice. Her coach increases her motivation by encouraging her to work toward improvement, and by incorporating competitive drills in practice. Her motivation decreases if her coach uses physical conditioning as punishment. “If they yell or do a lot of punishment running it makes me less motivated, mainly because it's just exhausting.” Emma perceives her coach forms individual expectations by assessing each athlete’s strengths and weaknesses. Her coach clearly communicates her expectations to Emma, and Emma appreciates the open communication because she knows what skills to improve.

Nicole.

Nicole, a 19-year old Caucasian athlete, has been playing softball for as long as she can remember. She has played the first base position for her current university for one year, but her head coach is new to the program this year. Nicole anticipates she will maintain her starting role this season. She is confident in her athletic abilities in general, but she believes she excels in softball. Her coach helps her feel more confident with her positive remarks and her willingness to work with her on a skill until Nicole performs the skill correctly. Her coach mostly improves her confidence, but when her coach avoids eye contact, or when she does not speak to Nicole after a poor performance then Nicole loses confidence. “When she doesn’t look at you, like eye contact, after you know you’ve made a mistake, that kind of dampens the spirit.”
Nicole is motivated to play because she loves the game, and she was particularly motivated to play after she experienced a long-term sickness. When she feels she needs a motivation enhancer remembers how she felt after her sickness. She is motivated to play for her current team because she wants to make an impact and help improve the team record. “I’ve heard a lot of good things about my team, and I wanted to make an impact on them because they haven’t had good seasons in the past, and I wanted to improve their standing.” Her coach has a positive demeanor, and Nicole feels her coach motivates her the most by offering frequent encouragement. She does not feel her coach’s behaviors make her less motivated to play softball.

Nicole perceives her coach has expectations of her individually, and she thinks her coach forms her expectations by observing Nicole in practice, assessing her attitude on and off the field, and observing her ability to adjust to different situations. Her coach indirectly communicates her expectations. Her indirect method of communication of expectations affects Nicole’s motivation and confidence slightly in a negative way. Nicole perceives her coach gives more instruction to teammates who are not the best on the team, and her coach offers more mental development to these teammates. Nicole does not notice any other differences in behavior between different levels of athletes, and her coach tries to notice and acknowledge when players do perform a behavior well that would normally be out of their comfort zone.

**Alyssa.**

Alyssa is a 21-year old Caucasian athlete who has played softball for 16 years. She has played for her current university for three years and her current coach for one year. She has maintained a starting role at the short stop and anticipates serving in the same starting position this season. She believes her current coach affects her sport competence in a positive way by treating Alyssa with respect and showing confidence in Alyssa’s ability to play her position well.
“Coach treats all of us with a lot of respect and she shows us all that she believes in us.” Alyssa was the most confident in her playing ability when she was younger because she felt stronger physically. Her confidence has weakened since her younger years because she notices her body “hurting more” and she feels she cannot perform the best of her ability. Alyssa’s coach increases her confidence with her positive demeanor and willingness to acknowledge her small successes. “The thing I love about coach is you don’t even have to make a great play for her to compliment you; all you have to do is put in the effort. Coach usually gets really excited and says things like ‘atta girl’ or ‘that’s the way to work kid.’”

Alyssa is motivated to play softball for several reasons and her motivation level is the same as when she was younger. She is motivated to play for her family’s approval and so her parents will see their financial support and other sacrifices are appreciated. “I still play because my family approves of it and for the recognition but my parents have put a lot of time and money into all the years I have played softball, so finishing all 4 years at the collegiate level would really make my parents proud, especially my Dad.” Her coach makes her more motivated to play each day by reminding her that she is helping to improve the team and establish a winning tradition.

Alyssa perceives her coach forms individual expectations about each athlete. She knows what her coach’s expectations are because her coach clearly communicates with her through routine individual meetings. When Alyssa knows what the expectations for her performance are, she is more motivated to practice because she wants to improve to meet her coach’s goals. Alyssa rated herself as an average team member, and she does not perceive her coach treats teammates differently.
Brecken.

Brecken is a 19-year old Hispanic athlete who started playing softball when she was 4-years old. She has played for her current team and coach for less than one year. She did not serve in a starting role as pitcher last season, but she anticipates she will play as a starting pitcher this season. Brecken believes external factors (e.g., the weather conditions) can affect her sport competence, and her coach affects her competence positively by offering encouragement. Currently, she is not as consistently confident in her playing abilities as she was during her high school years. She suffered a physical injury that suspended her from playing softball, and she feels the injury paired with not playing has made her stress about her ability. “I think that my injury has put a mental stress on me as well as a physical.” Brecken’s coach makes her feel more confident by cheering for each athlete on an individual basis, and she does not perceive any of her coach’s behaviors hurt her confidence.

Brecken was the most motivated to play softball prior to this year because she “loved it and it was optional.” She still enjoys softball, but is slightly less motivated to practice and play. Her coach increases her motivation to practice by structuring fun, meaningful practices that help to keep training “interesting.” When her coach implements hard training sessions with little recovery time between sessions, Brecken becomes less motivated to practice or play. Brecken perceives her coach forms individual expectations by observing each athlete perform. Her coach clearly communicates her expectations to Brecken, and the open communication motivates Brecken to play because she wants to please her coach. Brecken is a self-rated strong athlete on the team, and she does not perceive her coach treats any of her teammates differently from herself.
Jane.

Jane, a 20-year old Caucasian athlete, has played softball since she was 5-years old. She competed for a junior college for two years before transferring into her current institution last year. She has played for her current team and coach for less than one year. Her current coach did not recruit her because the coach is also new to the team. Jane anticipates she will start in the catcher position for the upcoming season. She believes her coach positively affects how quickly she learns new skills by his physical demonstration of the correct movements. She thinks he influences her confidence in her softball ability by offering positive reinforcement and by his actions that display he has confidence in her abilities. Jane was the most confident in her ability her freshman year in junior college because she was performing well. Her confidence has lessened because she transferred to an unfamiliar team the coach had not seen her play. “Just going to a new coach, especially cause [sic] our coach, we got recruited by somebody else and she ended up being asked to leave, so a new environment with a coach that’s never really seen you play, I think that affected my confidence.” She feels less confident because of the unfamiliarity of the new coach and the pressure of trying to earn a starting position. Her coach has not displayed any behaviors or actions that she feels hurts her confidence, and her coach makes her more confident when she gives Jane verbal feedback about her performance and recognizes when she performs well.

Jane was the most motivated to play softball last year in junior college because her team was successful and competed for the Junior College National Championship. Her motivation has changed since then and is not as high because she current team has traditionally composed an unsuccessful playing record:
It’s changed because I have gone to a new program that hasn’t been as successful. I feel like the motivation to win when I was at my junior college was very high and I feel like here it’s not as high. I mean, everybody wants to win, but it’s kind of like it’s accepted that we have been bad and that we are going to do bad.

She feels some people (not her coach) expect her team to stay unsuccessful, and others perceived doubt makes her less motivated to play. Her coach makes her more motivated to play because of her coach’s history of coaching successful teams, and her coach has an excited attitude and approach when instructing. Jane is motivated by how her coach verbalizes her expectations for the team and how her coach communicates her confidence in each athlete’s playing ability:

I think how motivated she is to win and how successful she has been in her career, like she has the expectation that we are gonna win, and I think that’s a big motivation, your coach has to believe in you and your team. And I think she does and I think she believes in her players and thinks that we have the ability to win.

Jane perceives her coach has individual expectations for each athlete, and her coach regularly verbalizes her expectations through conversation. Jane thinks her coach forms her expectations by observing performances, and by observing Jane’s motivation and effort in practice, the weight room, in the community, and in her academic studies. Jane perceives her head coach corrects or makes more comments “getting onto” the better athletes on the team compared to other skill level athletes because the coach thinks they should be performing at a higher level then they currently display.
Rylie.

Rylie is a 20-year old Caucasian athlete who started playing softball in the seventh grade. She has played for her current institution for one year and her new head coach for less than one year. Although she did not hold a starting position playing in the outfield last season, Rylie believes she will serve in a starting role this season. She believes her ability to adapt to situations and her coach’s positive feedback and instruction style positively affect her sport competence. She feels the most confident in her playing ability right now, and she attributes her high confidence to her coach:

It’s looking back on how my confidence was say um this past softball season to the current softball season that I’m in now. It’s totally different in that my confidence is the highest it’s ever been. With the new coach she definitely changed the type of playing style that I have, but changed it in a positive way to where it makes me confident at bat confident on the field or just confident in general as a player for her team compared to how I felt the past year where I felt like I lacked of confidence in all those aspects of the game.

She is presently the most motivated to play softball then she has felt in the past. She realizes she two years remaining to play collegiate softball. “I think for me I’m going into my final two years you know playing softball, and you know playing softball for the rest of my life as far as collegiately. And it’s just I should take advantage of these last two years.” She is primarily motivated to play for her current team because he wants to help the team improve enough to win games despite perceived doubt for individuals outside of the team. Her coach motivates her by issuing constant positive comments and genuine facial expressions that show
how excited she is when Rylie learns a new skill or performs well. She does not feel her coach displays any behaviors that make her less motivated to play.

Rylie perceives her coach forms expectations about her and her teammates as individuals, and her coach communicates her expectations demonstrating a skill and then expecting the athletes to model the coach’s movements. Rylie believes her coach forms expectations from observing her perform in practice. Rylie rated herself as one of the best players on the team, but she does not perceive any negative differences in treatment from her coach toward players of different skill level. She notices weaker players receive more positive reinforcement after they perform a skill correctly.

Kellie.

Kellie is an 18-year old Caucasian athlete who has played softball since elementary school. As a freshman, she has played for her current institution and coach for less than one year. She plays in the shortstop position and anticipates earning a starting position this season. Taylor believes her father is a primary factor influencing her perceptions of her sport competence. “If I make an error or don’t have a good at bat, not only am I hard on myself but I can also hear my dad saying something like ‘Come on Taylor’ in a less than encouraging tone. My dad can make or break my attitude about a play or hit.” She feels her coach influences her perceptions positively by offering praise and encouragement, but incorporating correction when necessary.

Kellie felt the most confident in her playing ability and the most motivated to play softball her senior year in high school because she filled a leadership role and she had earned an athletic scholarship to play collegiate softball at her current institution. Her confidence is currently not as high because she “puts a lot of pressure” on herself to prove to her coach she is skilled enough to play in the starting line-up. Her coach increases her confidence when he
recognizes her good performances and offers her praise. Kelli’s coach hurts her confidence when he ignores her poor performance and does not offer correction. “[Coach] can completely ignore you when you run past him to the dugout while we’re hitting, and that’s never a good sign.” Kellie’s motivation to play has remained constant since her senior year in high school. She is motivated to play softball for multiple reasons, but name her family as a primary motivator. Her motivation to play for her current team involves several reasons as well. “Nothing has to motivate me to play for this team. I sincerely love and want to play for [name of school] and with my teammates. If I had to answer though, I would say to make my family proud, get my education paid for, and make lifelong memories and friends.”

Kellie perceives her coach forms expectations about individual athletes and for the team as a whole. She thinks he forms his expectations by observing past performances and expecting the same or better performance each attempt. Kellie rated herself as one of the best players on the team. She does not notice her coach treats players differently based on skill level, but does notice he has a friendlier, relaxed relationship with athletes who have been team members for a longer period of time.

Jessica.

Jessica, a 19-year old Caucasian athlete, discovered softball when she was 10-years old. She has played in an outfield position for one year at her current university and under her current coach. She does not anticipate serving in a starting position this year. She feels her teammates are the biggest influence on her confidence because they make her feel comfortable and a part of the team, but she feels her coach negatively influences her confidence by not helping her feel comfortable which influences her performance ability. “I think having the team I have makes it makes you feel a lot more comfortable because everyone’s very welcoming and like super sweet,
and so it makes me feel more comfortable. But I think that the coaches aren’t as makes you feel not as comfortable as you could and it makes you not play to the best of your ability sometimes.”

She is unsure how her coach affects her perceptions on how quickly she learns new skills because she perceives her coach offers little instruction.

Jessica was the most confident in her playing ability her senior year in high school because she had received an athletic scholarship to play collegiate softball at her current institution, and she performed well to end her season. She feels her confidence has been affected negatively since her senior year in high school because of her coach and because she does not have a secure starting position on her team. Her coach improves her confidence when her coach emphasizes Jessica’s mistakes and offers helpful corrections so Jessica understands how to improve. Her coach hurts her confidence when she does not communicate with her. Jessica feels no communication affects her more than yelling at her. “I think the most hurtful thing would be just not saying anything at all. Like rather than yelling I just think not saying anything at all is like the most stressful part of it.”

Jessica was the most motivated to play during high school. She feels her motivation is similar now because she is working hard and putting in extra practice time to earn a starting position. She loves to play softball, and her teammates, friends, and university motivate her to play for her team. She does not feel her coach enhances her motivation, but when her coach displays perceived disappointment or doubt in her ability, Jessica’s motivation decreases. “The feeling of like you’re not approved like when she’s if they are like not approving or you don’t have like a chance at all to be like a big part of the team, I don’t know that’s not very motivation at all.”
Jessica believes her coach forms individual expectations about each athlete’s playing ability. She thinks her coach forms her expectations by observing her in practice and games. Jessica is not sure of her coach’s specific expectations for her because her coach does not clearly communicate expectations with Jessica. Not knowing specific expectations can be confusing, but she does not feel the un-clear communication affects her motivation. She perceives her coach to treat teammates who she feels is among the best on the team differently because they seem to receive more praise and overall interaction from her coach. Jessica believes there are favorites on the team who are key players, and players who the coach are not viewed as among the best are not given the same attention or praise.

**Colleen.**

Colleen is a 21-year old Caucasian athlete who began playing softball at a young age because her sister played softball. She did not realize she was skilled enough to play collegiate softball until her sophomore year in high school. She has played in a starting position in the outfield for her current university and coach for three years. She anticipates she will maintain her starting position for this season. She is very confident in her playing ability, and she perceives her support system and personality characteristics help enhance her sport competence:

I think that I have an incredible support system with my team and off the team. And one of my strengths is time management, and so I feel like I’m very good at balancing you know between school and homework and softball. And I can really kind of compartmentalize, and when I go on the field like I’m really focused and try to leave it all on the field and being able to focus on what’s going on there. With that being said the ability, like the coachablity [sic] thing, come very easy to me.
She believes her head coach does influence her confidence in her softball ability by how she instructs, communicates, and provides feedback. Her coach’s positive demeanor and monthly meetings with her about expectations enhance Colleen’s perceptions of competence.

Colleen is the most confident in her softball abilities during the season and in games as opposed to now in the off-season because she is “not at my sharpest yet.” Her coach improves her confidence with positive verbal comments that express her coach’s confidence in her performance:

I think all of those things actually help build my confidence when she pushes me to be higher. To be better. If she says just the verbal things like while I’m up to bat, I respond really well to those verbal or maybe a clap or something would be nonverbal. But I can definitely look at my coach and see that she has confidence in me when I’m playing and that helps.

When her coach does not communicate with her or does not acknowledge poor performances, her confidence in her ability decreases because Colleen prefer some form of feedback as opposed to no feedback from her coach.

Colleen was the most motivated to play softball last year when she was focused on advancing to post-season competition. She feels more motivated now because she wants to achieve that goal of making it to post-season games this year. She is motivated to play for her team because she is “proud to be a part of something that is larger than myself.” Her coach motivates her to play with constant reminder of individual and team goals, and by structuring practices in ways to simulate game situations.

Colleen believes her coach forms individual expectations about athlete’s playing ability. She thinks her coach forms these expectations by observing her perform and expecting good
performances each outing. Colleen’s coach clearly and routinely communicates her expectations, and her coach’s communication improves Colleen’s motivation and confidence. Colleen rated herself as among the best players on her team. She notices in the spring the better players are given more instruction time by reporting early to practice to receive individual instruction time compared to other athletes on the team.

**Angela.**

Angela is a 20-year old Caucasian athlete who has more than 15 years of softball playing experience. She began playing softball because her older sisters were already involved in the sport. She transferred from another four-year institution this year and has played for her current team and coach for less than one year. She plays the shortstop position and does anticipate earning a starting role this season. She believes her ability to learn new skills quickly and her coach’s communication style influence her sport competence positively.

She has always had solid confidence in her softball ability, and she received support for her confidence from her sisters and father as she matured. She was the most confident during her high school years because she knew she was going to play each game, and she realized she was viewed as a leader on her team. Her confidence is lower now because she is learning how to adjust to a new environment and compete for a starting position.

So I think that I was very confident throughout my high school years and throughout my summer ball years. And I think what has changed now is just um I played at University B for two years and I wasn’t getting um the playing time that I wanted and um also you know I had to earn my spot. On my high school team I didn’t really have to earn it. I knew I was going to get to play.
Her coach improves her confidence by giving verbal recognition of her hard work or good performance. Her coach is a good communicator and her feedback and communication make her feel more confident that she is performing a skill correctly. Angela has always been highly motivated to play softball because of her sisters and father, but also because she loves the sport:

I was most motivated growing up around two sisters that played softball and my dad being a coach. They all three motivated me to play, and I loved watching them, so I kind of fell in love with the game. I wanted to be just like them if not better, so they motivated me to become a better athlete and better person as well. And why? I think just because they’re my sisters and I looked up to them. I still do. And also my dad, so yeah, that’s why I’m very motivated.

She was the most motivated during her high school years because she had her family available to encourage her. She is still very motivated to play for her team because she wants to win and be the best player at her position. Her coach motivates her by her constant enthusiasm for the game. Angela can tell by her coach’s actions and words that her coach loves the sport.

Angela perceives her coach forms expectations about her teammates on an individual basis, and her coach clearly communicates expectations with each athlete. Angela rated herself as an average player on her team, and she does not think her coach treats teammates differently based on skill level.

**Shawna.**

Shawna, a 19-year old Caucasian athlete, began playing softball when she was 5-years old because she had witnessed her older sisters enjoy the sport. She has played for her current team and coach for one year, and she anticipates filling a starting role at the catcher position this
season. She believes her coach positively influences her sport competence because her coach is an affective communicator, encourager, and displays confidence in her playing ability:

My coach is a very good communicator. She knows how to use her words and is not afraid to. This being said, she reinforces my feelings that I am good at softball by praising me when I have done something correctly or well. At the same time, if I have done something wrong, she lets me know but also tells me how to correct the error. This lets me know that she has faith enough in my abilities that she can just tell me what to do and I will execute on the very next play.

Shawna feels her motivation and confidence level have always been constant, and she has not noticed a change in either since playing for her current coach. “As a player, I’ve always had a lot of confidence in my game, no matter what sport I played. I don’t think that my confidence has changed.” Her coach increases her confidence by issuing praise and correction appropriately. Shawna’s motivation to play is fueled by her love for the sport and desire to be the best player. “I can’t think of a time when I wasn’t motivated to play softball. I just love the sport.” Her coach enhances her motivation by creating competitive drills in practice.

Shawna perceives her coach forms individual expectations about each athlete and overall team expectations. She believes she and her coach have a relationship built on mutual respect and Shawna enjoys this relationship. “Because she knows how high the expectations are that I place on myself she holds me to a higher standard.” Shawna rated herself as one of the best athletes on the team. She does not perceive her coach treats players differently based on skill level, but she does notice her coach shows more frustration toward teammates who do not attempt to improve.
Peyton.

Peyton is a 21-year old Caucasian athlete since she was 8-years old. She played one year at a different four-year institution and transferred into her current institution, and under her current head coach, one year ago. She plays in the pitcher position and does not anticipate serving in a starting role this season. She recently experienced a major injury that has suspended her playing capabilities that she feels has majorly impacted confidence. Her biggest obstacle is overcoming her injury to return to the high performance level she achieved last summer. She feels her coach negatively influence her confidence, but she does not feel her coach influences her ability to learn new skills. She perceives her coach focuses on the starting athletes and does not care about the development of the other athletes on the team:

At practice she doesn’t ever say like good job or anything. She only interacts with certain people. The starters get to do all the stuff. The rest of us just get to base run. So not only does she destroy our confidence, but we don’t also get to get better every day like everybody else does. They have the opportunity to get better and we just have the opportunity to get better at base running. And that’s not really my thing since I’m a pitcher.

Peyton was the most confident in her softball ability when she was young and had a successful pitching outing very early in her career. She feels her confidence has changed from then to now primarily because of her injury. She does not believe her coach’s behaviors positively enhance her confidence, but she does feel her coach’s feedback style and behaviors negatively affect her confidence. Her coach has expressed Peyton’s skills are not as developed as they need to be (i.e., weight, speed, strength of pitches), and Peyton feels her coach has an
attitude that displays doubt in her ability to make corrections. These actions and behaviors coupled with her negative talk about other players on the team make her feel less confident.

She was the most motivated to play softball this past summer for her summer travel team. Her motivation is different now because she is motivated to play for her father, to stay in shape for her travel team, and to prove her skills to people who doubt her ability. “Well I guess for me my dad motivates me. And since I’m kind of like from small time [state] I feel like everybody who told me I couldn’t do something just everybody had their doubts I just basically don’t want to prove them right.” Her coach motivates the team when her coach talks about her team winning the conference championship. Her coach makes her less motivated to play by making negative comments about her teammates (i.e., making fun of them or talking about them behind their back), and by telling Peyton her skills are not developed enough to progress in drills. She currently feels the situation with her coach “is rather hopeless” because she does not believe her performance will please her coach regardless of the amount of practice.

Peyton does not think her coach has individual expectations about her playing ability because she does not think her coach cares about any players that do not play in a starting position. She does notice different coach behaviors among different types of players. The players who her coach has selected as starters receive more position specific instruction time because the other players are “forced” to serve as base runners instead of practicing their defensive positions. Peyton notices her coach has a friendlier relationship with the better players. She does feel her coach has favorite players based on the perception that certain players appear to be allowed to make more mistakes and receive less punishment than others.

Alicia.
Alicia is a 21-year old Caucasian athlete who started playing softball when she was 7-years old. She has played in the pitcher position for her current university for three years and for her current coach for two years. She anticipates maintaining her starting role this season. She feels her coach positively influences her sport competence by offering constructive feedback, developing a trusting relationship, and teaching to her preferred learning style. “My head coach is very good at giving me constructive feedback; she knows that I learn the best when I see what I need to do, and she knows how to explain things to where I understand them. She corrects me when I do something wrong, and gives me positive feedback when I do them right.”

Her confidence is currently the highest she can remember because she has learned many new skills and mastered old skills to enable her to compete successfully at the Division I competition level. Her coach increases her confidence by recognizing and praising good performances, and by communicating expectations to her directly. When her coach yells or makes negative comments, Alicia begins to doubt her playing ability and her confidence decreases. Alicia has always been highly motivated to play softball, and her motivation has changed since beginning her collegiate career. She still loves the game, but she feels she plays because she is forced to play instead of playing because she chooses to play:

My motivation has changed a lot since then; I now play the sport because it pays for my college education, and because it has become a habit. The game I used to love to play has become a job, and even though I still love playing it, it seems more like something I have [sic] to do rather than something I want [sic] to do.

Alicia perceives her coach forms expectations about her playing ability on an individual basis by assessing her strengths and weaknesses as an athlete. Her coach clearly communicates her expectations through individual meetings and through comments in practice. Alicia
appreciates her coach’s open communication and is more motivated and confident because she knows what areas her coach wants to see improvement. Alicia rated herself as one of the best athletes on the team. She perceives her coach does not give the weaker players as much attention or as many opportunities to make improvements or receive practice time as the stronger players. Alicia notices the stronger players receive more attention and practice time than weaker teammates.

**Emerging Themes**

Inductive analysis of each interview revealed four major themes relevant to the research questions. The themes that emerged relating to athletes’ perceptions of how their head coach affects their motivation to play or confidence in their ability are: (a) perceived competence, (b) coach behaviors and feedback, (c) perceived coach-athlete relationship, and (d) perceived treatment.

The first theme, *perceived competence*, examines the perception that the coach does influence athletes’ perceptions of competence, but includes other effectors outside of the coach. The second theme, *coach behaviors and feedback*, demonstrates positive and negative coaching behaviors and feedback types that were reported to enhance or inhibit both motivation to play and confidence in skill. The third theme, *perceived coach-athlete relationship*, provides examples of relationship characteristics athletes reported that both enhance or hurt motivation and confidence. The fourth theme, *perceived treatment*, examines athletes’ perceptions of the head coach treating athletes differently based on performance capability. This theme includes discussion of differential treatment based on athletes’ perceptions of weaker skilled athletes compared to stronger skilled athletes on the team.

**Perceived competence.**
This theme examines athletes’ perceptions of how their head coach affects their perceived competence toward softball. Competence includes the perception of how good the athlete believes she is at softball, her ability to learn new softball skills, and confidence in her abilities on the softball field. This theme will explore reasons athletes’ perceive her confidence is influenced including coach related issues and athlete attributes (i.e., existing confidence level, work ethic, willingness to be coached, self-comparison). Many participants mentioned several factors that affect their sport competence level. The following sections will discuss the most common factors.

*The coach and competence.*

During the interview process, 93% of participants believed their current head coach influenced their perceived competence level. Many responses included competence being affected during instruction sessions or after a skill performance. Participants were reliant on coach feedback and observation of coach behaviors particularly after a skill performance. Participants revealed the coach influenced perceived competence by using praise and encouragement after corrective instruction. Shawna believed her coach communicated efficiently by incorporating praise:

> My coach is a very good communicator. She knows how to use her words and is not afraid to. This being said, she reinforces my feelings that I am good at softball by praising me when I have done something correctly or well. At the same time, if I have done something wrong, she lets me know but also tells me how to correct the error. This lets me know that she has faith enough in my abilities that she can just tell me what to do and I will execute on the very next play.
Sadie agreed with Shawna by commenting on her coach’s communication style and use of praise and encouragement as a way to influence her perceived competence. “She lets us know when we are not playing to our potential but she usually stays a positive and encouraging as possible which I think helps everyone on the field.” Allison felt “how the coaches interact with you and the coaches’ encouragement” were factors affecting her perceived sport competence.

Kara explains her coach’s use of positive directional language when instructing, “She is definitely a positive re-enforcer. She rarely, if ever, says negative things. For example, she will say “Come through the ball” instead of “Don’t stay back.” Her thought is that if she puts the wrong thought into your mind that is what you will do, instead of the proper thing. I think it’s very logical and very beneficial.” Many participants believed if their coach used negative comments after a skill performance, their perceived competence was harmed. For example, Hannah explained:

- Coaching definitely is a factor that affects how I feel about how I am doing in softball. Ultimately, in my mind, I’m working to show the coaches I’m capable of performing at this level. So if I’m getting a lot of negative feedback from the coaches then it can cause me to play worse sometimes because I’m not confident in my ability.

- Alicia appreciated her coach’s willingness to correct her skill performance by teaching to Alicia’s preferred learning style. “My head coach is very good at giving me constructive feedback; she knows that I learn the best when I see what I need to do, and she knows how to explain things to where I understand them. She corrects me when I do something wrong, and gives me positive feedback when I do them right.” Some participants observed the coach’s reactions to skill performance and used the type of reaction to shape their perceived competence. Jaclyn admitted her competence was affected by her coach’s reactions to Jaclyn’s ability to learn.
a new skill. “It depends on how she reacts toward me when learning something new.” Jackie made a similar comment concerning her coach’s feedback reaction, “My current head coach does influence my perception of how well or how quickly I learn. I base my perceptions on her feedback when I hit and field with her and the amount of play time I receive.”

Although the large majority of participants reported the coach did affect perceptions of competence, not all coaches affected the athletes in a positive way. Peyton’s perceived competence was harmed by her coach’s differential treatment toward her compared to other athletes on her team:

At practice she doesn’t ever say like good job or anything. She only interacts with certain people. The starters get to do all the stuff. The rest of us just get to base run. So not only does she destroy our confidence, but we don’t also get to get better every day like everybody else does. They have the opportunity to get better and we just have the opportunity to get better at base running.

Jessica reflected on her coach creating an unwelcoming or uncomfortable environment for her that hurts her perceived competence. “But I think that the coaches make you feel not as comfortable as you could and it makes you not play to the best of your ability sometimes.” Jessica and Peyton were the only two participants that reported how their coaches negatively affect their perceived competence. Chloe felt her coach affected her confidence through certain behaviors. “I think when she’s not happy with me or when she’s expecting a lot from me or calling me out, especially me being a senior that affects my confidence.”

The majority of participants referred to the coach affecting competence during the process of providing instruction and communicating to the athlete when skills were performed correctly. Kayla provides an example, “She’s great. She encourages me. Tells me what I’m doing
wrong, but then tells me how to fix it. So like even if I am doing something wrong I know how to fix it so I can feel more confident in what I’m doing. [She] tells me what I’m doing right.”

Many participants explained positive, encouraging feedback during instruction positively affected perceptions of perceived competence. Melinda provided an excellent summary of most participants’ responses, “She [my coach] has a very large influence in the way my confidence strives. She encourages you a lot and never has negative feedback.” The word, or variation of, “encouraging” was used 15 times when participants explained if and how their coach affects their perceived sport competence.

*Athlete attributes.*

Athletes reported other factors outside of the coach to influence perceptions of competence. These factors related to athlete characteristic attributes including capability to be coached and pre-existing conditions (i.e., confidence level, knowledge base, and stress level). The ability, or willingness, to be coached includes the athlete’s rate of improvement, willingness to listen and attempt what the coach request, and speed of skill comprehension.

Athletes who believed they “picked up on new skills” quickly either because they listened to the coach or because they naturally learned new skills quickly felt this trait (e.g., “coachability”) was a factor in their perceptions of their competence level. Rylie believed her ability to adapt to circumstances despite what is changing helped her feel more competent. “I would have to say being able to adapt to the situations that are on the field. Pitcher, mental, physical, like if the if the coach is telling you how to do something, just being able to adapt to the situation that’s given to you no matter what the situation is.” Melissa provided another example of her ability to adjust and listen to the coach as a reason her competence is strong:
I mean by no means do I think I’m the best on the softball field, but I think I’m one of the most hard working out there. I think that I’m a very coachable athlete. I’m usually able to change what I do in order to make my coaches happy. If the tell me to do stuff differently than I do it differently. But I think I’m pretty good at being able to take in new things and adjust what I’m doing.

Christy felt “all the drills and everything that we do are easy to pick up on” and her perception of how quickly she learned new skills improved her competence. Jenn believed her “rate of improvement” was a factor in her sport competence level, and both Angela and Bethany felt they learn quickly so their fast learning rate helped them feel more competent.

Thirteen participants mentioned pre-existing factors contributing to their perceptions of their sport competence level. Five of these participants mentioned the coach was another factor in shaping their perceived sport competence, but this section will discuss pre-existing factors only. Pre-existing conditions included existing confidence level and existing knowledge base about the sport. Elena explained her confidence level was already high because she had played in a starting position the previous year and served in a leadership role. “As of right now I am a starter, so that makes me think that I perform the best at my position. Also, I act as a leader/captain on my team so that makes me feel like I am an individual to look up to.” Sally went as far as to say she relies on herself to build her confidence. “I have always been independent in building my own confidence. I don’t need someone to give me positive reinforcement to feel good about myself.”

Some participants felt how much knowledge they already had about performing skills in softball influenced their sport competence. Allison believed her “background knowledge of where I stand” was one factor influencing her competence. Jill felt her sport background of
participating in several different sports and experience with different coaching styles helped her be able to grasp concepts in softball more quickly and provided her with a solid knowledge foundation:

I just think that growing up and having playing so many sports it’s really easy for me to pick up on new skills and really learn from coaching. And I think just understanding it and understanding the game and different concepts of how different games are played, and how different sports how different forms are. How many different forms there are and how they can all be used for something else. I mean I think just learning from a multitude of good coaches has affected how well I pick up new skills.

Rylie believed her competence was affected by knowing the fundamental skills of the game. “Okay going off what I said it makes me like me knowing the fundamentals and how to properly do them it makes me feel so, so confident that behind any play or any at bat that I could do good. I feel if I step in the box you know I know the fundamentals of a swing.” One participant, Kayla, admitted trying new skills she has not performed previously made her “nervous” and affected her competence because she didn’t “know if I’ll be able to do that” skill properly.

This section has provided information about the first of the four emerging themes: perceived competence. This section examined the most dominant factors athletes’ perceived affected their sport competence. The majority of participants believed the head coached influenced perceptions of sport competence either by enhancing or harming competence levels. Many athletes used coach feedback and behaviors after a skill performance to assess their sport competence. Many participants attributed pre-existing personal attributes to influencing competence levels. Athletes believed their ability to be coached, existing confidence level, and
knowledge base enhanced their sport competence. Most participants mentioned several factors contributed to perceptions of sport competence, but only the most common factors were discussed.

**Coach feedback and behaviors.**

Participants shared openly specific behaviors and feedback types their coach displayed that both enhanced motivation or confidence or hurt motivation or confidence. This section shares the most common forms of both positive and negative feedback types and coach behaviors reported to enhance and hurt motivation and confidence. Verbal feedback was defined as words, phrases, or noises the athlete could hear. Non-verbal feedback was defined as gestures, facial expressions, or body posture the athlete perceived to see. Positive feedback was defined as communication (verbal or non-verbal) the athlete believed enhanced feelings of motivation or confidence toward playing or practicing softball. Negative feedback was defined as communication the athlete believed lowered, or hurt, motivation or confidence toward playing or practicing softball.

**Feedback type.**

Athletes provided numerous examples of feedback types, both verbal and non-verbal, that enhanced or hurt motivation and confidence. Although all types of feedback should be considered when determining impact on motivation and confidence, only the most commonly reported feedback types are discussed. Verbal and nonverbal types of feedback are included together under the appropriate positive or negative headings.

**Positive feedback.**

The most commonly reported types of positive feedback that enhanced motivation and confidence were issued both through verbal and non-verbal communication. Positive feedback
was reported more often than negative feedback types. All forms of positive feedback comprised 79% of all feedback responses. Coach feedback type was most often discussed in relation to enhancing confidence. The most common forms of verbal feedback included re-assuring words or encouragement after a performance and praise. Encouragement was often coupled with corrective instruction. The most common form of positive non-verbal feedback was body language (e.g., visible excitement or passion level, tone of voice, facial expressions).

*Positive feedback: encouragement and reassuring language.*

The majority of participants (68%) included the coach’s use of re-assuring language or encouragement after a performance as positive feedback that enhanced both motivation and confidence. In many cases athletes used this type of feedback as an indicator they were performing skills correctly, and this form of feedback was often paired with corrective instruction. Most participants referred to feedback type when asked to describe verbal and nonverbal behaviors from their coach that enhance confidence.

One participant, Hannah, explained she felt her coach’s encouragement was motivation to continue working hard at a skill. “When you do something right that you’ve been struggling with she really lets you know that you’re doing a great job, and to keep working hard. When she lets me know that I’m doing a good job, it makes me want to keep doing a good job.” Jaclyn believed her coach motivated her to perform well because her coach “gives us hope to do well when we mess up” by issuing encouragement after a poor performance. Rylie was motivated to perform “better” because her coach issued consistent encouragement. “The verbal behaviors would be the constant encouragement that motivates me to actually perform better to input the things she’s telling me to work on.” Sadie indirectly commented on encouragement as a motivation enhancer. “This year and last year, she encourages us all as softball players to play to the best of our
ability. She lets us know when we are not playing to our potential, but she usually stays as positive and encouraging as possible which I think helps everyone on the field.”

Some participants used encouragement and re-assuring language to assess if they performed the skill correctly and were making progress. Jenn’s coach used constant communication to clarify instruction to assess if Jenn understood the concept. Jenn used the reassurance after correct performances from her coach to help her understand successful skill concepts. “They [the coaches] are always talking to me, always helping me improve. They comment when I have done what they ask correctly to reassure my learning experience.” Teresa’s coach helped her understand she was performing correctly by paying close attention to her movements and verbalizing her observations to re-affirm to Teresa she was performing correctly. Teresa believed she could tell her coach was pleased by observing her behavior and assessing her feedback. “You can kind of tell how happy she is with your adjustment or performance, I guess. She also usually tells you too, ‘I can see the adjustments you’re making and I like what you’re doing’, and that helps too.” Mary Ann was in the process of learning a new skill specific to her position, and her coach’s reassuring and positive demeanor helped her understand how to learn the new concepts:

I slap and this year he is teaching us something completely different. He knows it’s going to take a little while to get some things, but when we start doing something right, he compliments us and encourages us, like, “Hey, that’s exactly what I want.”

Athletes explained encouragement and re-assuring language were strong types of verbal feedback that enhanced confidence toward their softball abilities. Both were often reported in combination with immediate corrective instruction. Brooke’s coach used corrective instruction in

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combination with encouragement to influence Brooke’s confidence to perform the skill correctly the next attempt:

Even after I make a big mistake or have a horrible game, she finds something positive to say. Of course she tells me what I did wrong, but she also tells me that she knows I can do better and to keep working. That is encouraging to hear, instead of her just yelling. I feel like I get better after a mistake.

Kayla appreciated her coach correcting her behavior then encouraging her to keep trying to fix the skill. “She encourages me. Tells me what I’m doing wrong, but then tells me how to fix it. So like even if I am doing something wrong I know how to fix it so I can feel more confident in what I’m doing.” Melinda and Ginny felt her coach’s behavior was similar to Kayla’s coach. Melinda said, “She has a very large influence in the way my confidence strives. She encourages you a lot and never has negative feedback,” and Ginny’s coach “makes sure to come up to me and tell me ‘relax, you got this’ while reminding her he believes in her capabilities. Sadie perceives her coach dramatically influences her confidence through encouragement. “If she was not encouraging it would be harder to believe in my abilities.” Bethany’s confidence is increased because her coach “builds us up” and remembered “it wasn’t like she was yelling at us” after a mistake. Mary Ann mentioned her coach’s instruction style also omits yelling and focuses on encouragement:

He is very encouraging, and even when you make a mistake, he doesn’t yell. It’s more like, he encourages you to do the right thing and I’ve never heard him yell, he never yells at me, he doesn’t yell at other teams. That makes me feel so much better about myself that I am doing something right and that I am not doing something wrong. If he thinks it’s
wrong, he doesn’t yell at me, but he tells me “Hey, try to do this instead.” But I think that helps me in my confidence.

Sara echoed the value of corrective instruction combined with encouragement when she shared her coach’s instruction style:

Well she’s really good about pointing out when you do something good and also when you’re not doing what you’re supposed to. And that really pushes you to be the best player because some people may just focus on the good but she really tries to you know work on the good and the bad. So encouraging the good, and not just you know putting you down when you’re doing something bad and correcting it and making sure that it doesn’t happen again, and making sure you’re better and learning from it.

Overall, athletes admitted the use of encouragement after a skill performance, and often paired with corrective instruction, was the biggest verbal positive influence on their confidence in their ability. A few athletes mentioned yelling as a form of correction hurt their confidence or motivation because they would prefer to be addressed with a positive approach.

Positive feedback: praise.

The second most influential form of positive verbal feedback on confidence and motivation was praise (66%). Responses coded under the praise category involved feedback recognizing the athlete for a correct performance or any successful behavior. Praise comments followed both large and small successes or behaviors, and all praise comments were associated with enhanced confidence or motivation.

Kara recognized her coach was disciplined and had a particular image for the correct skill performance. Kara appreciated her coach’s willingness to emphasize small successes along with large successes, and be the first one to praise her for a job well done. “My coach gives a lot of
praise, even for the little things. She is very big on doing things right, and when we do, she’s the first to say good job.” Alyssa’s comments agreed with Kara’s when Alyssa said her coach is the first one to “compliment my teammates and I” after they perform a skill correctly. Alyssa elaborated on her coach’s positive influence by explaining, “The thing I love about coach is you don’t even have to make a great play for her to compliment you; all you have to do is put in the effort. Coach usually gets really excited and says things like ‘atta girl’ or ‘that’s the way to work kid.’” Angela acknowledged she recognizes her coach’s effort to issue praise and show emotion. “So you know when we do something good she’s the first person that’s going to let you know. She’s the first person that’s really going to be amped up and fired up and everything and it gets us fired up.” Teresa contributed she liked when her coach gave her a high five and hearing her coach say “good job” after a good performance.

Some participants believed when the coach made an effort to personally recognize their effort their confidence increased because they felt they were bringing a valuable element to the team and contributing to success. Brooke described her coach’s extra effort during a game:

Not only does our head coach cheer and clap like normal coaches, but she takes the time to come find out in the dugout in between innings of a game, after a great play, and even at practice. She will come up and put her hand on my shoulder and tell me that she thinks I am doing great. That means more than just cheering from far away, because she took the time to come over.

Sara’s coach picked unexpected times during practices or games to highlight individual athlete’s skills or good performances. Sara comments her coach will “point out why you’re so valuable and really picks out our skills for the team and what we’re really bringing to the
atmosphere. So that gives you a lot of confidence.” Rylie’s coach uses the same technique by highlighting individual athlete progress:

She’ll definitely mention just like “oh this player is working on this and she’s doing really really good.” So just actually verbalizing it to others on the team, and then they see the importance of what you’re working on and how it’s affecting the team overall.

Jenn liked when her coach claps and cheers for her, but also when her coach will “give credit when due following a game.” Ashley’s confidence increased when her coach approached her after a good performance in between innings and told her she “did a good job” because the feedback made her “feel that I’ve done something valuable to the team.” Mary Ann added about her coach, “He always says ‘hey that’s a great play’ after a nice catch, so it makes me feel like I’m a part of this team and I am a valued member.” Tory used her coach’s praise feedback to increase her confidence and re-affirm she was performing a skill correctly. “If we’re hitting off the pitching machine and she says ‘great hit’ and stuff that kind of boost my confidence. Knowing that she realized that I did something good.” Tory added she views her “coaches as my authority figures in softball, so having them tell me ‘good job’ makes me realize I am good enough to be here.” Jamie used her coach’s praise feedback as performance confirmation because when her coach responded with statements like “Yes! That’s good!” after a correct performance, Jamie believed those statements make her “feel better, like I’m on the right track. I’m doing good.”

Overall, participants recorded praise as the second most influential positive verbal influence on confidence. Athletes appreciated praise statements after large and small successful performances in practice and games. Athletes used praise as a way to enhance confidence and feel like a valuable team member, and in some instances, as a way to assess if they were
performing the skill correctly. The majority of the most commonly reported positive feedback was verbal feedback (55%). Participants did comment the most often on one form of positive nonverbal feedback.

Positive nonverbal feedback: body language.

Positive body language was defined as physical behaviors participants perceived from their coach as noticeable excitement level evident through body posture, tone of voice, and facial expressions. Body language was often accompanied by praise and encouragement, but should be mentioned because of the perceived affect on confidence and motivation. Positive body language comprised 41% of the nonverbal types of feedback participants observed.

Athletes perceived a head nod from their coach indicated approval. Sadie noticed her coach nodded her head and smiled when she issued encouragement. Her coach’s behaviors “allows us to know that we are doing things right.” Kellie’s coach used a head nod and a smile to communicate to Kellie she performed well. Bethany’s coach used a head nod paired with a clap after Bethany performed a skill properly without being told how to perform because her coach “approves of like what we just did without her consent.” Jamie believed a head nod from her coach “could mean that she’s happy.”

Athletes perceived other forms of feedback to positively influence confidence and motivation in the form of tone of voice, body posture, and excitement level. Alyssa liked how her coach “usually gets really excited” and issues praise when Alyssa performs well. When asked if her coach displays any behaviors that enhance her confidence, Jaclyn commented on her coach’s excitement level and tone of voice after a good play. “She compliments with a certain inflection in her voice. She gets excited and shows positive emotion.” Jenn was motivated by how her coach “continually shows enthusiasm for the sport.”
Angela believed she could tell her how much her coach loved the sport of softball and loved coaching by observing her facial expressions and actions. Angela’s motivation increased when she observed her coach’s excitement and commitment to the sport:

My coach is always amped up to practice or play, and it’s just awesome to see that her love for the game is still standing strong, and she’ll always love the game. And just knowing that she’ll always love the game and she’ll never get rid of the game. Just because you know just some people you know they get tired of it or they get worn out with the game, so I think her motivation just her face and her love for the game just makes me motivated because I never want to give up softball, but you know just her motivation is her faith and her love for this sport.

Sara liked how her coach made her “feel good” about how she was performing when her coach showed emotion and issued praise after a good performance. “She gets really animated so the players pick up and hear her sometimes jump around. That makes you feel good when you’re doing something and she gets really excited about it. Her whole body just gets excited.” Nicole agreed with Sara about her coach’s visible excitement after a performance made her feel “really excited as a player”, and “you can tell when she’s happy or upset” by her body language. Nicole wanted to please her coach, so if she perceived her coach was not pleased through her body language Nicole felt motivated to “be a better athlete.” Jane’s confidence increased when she observed her coach become “fired up” after a good performance because Jane thought his reaction reaffirmed to herself she performed correctly. Rylie, Jane’s teammate, added their coach’s facial expressions portrayed genuine “enthusiasm and enjoyment of his teaching somebody something and them actually doing it” increased Rylie’s motivation to play. Tory
noticed her coach raised the tone of her voice when she was excited and said, “that’s what really inspires me to play.”

A few participants, like Rosemary, appreciated their coaches’ positive body language because their coach made practice a more “positive experience” by portraying confidence and motivation enhancing behaviors. Ginny explained her coach jumped in the air, clapped, and “pounded our fists” after an exciting play, and when he “looks like he is having fun coaching us” she enjoyed playing for him. Rosemary’s coach shared the importance of perceived body language to the team, and Rosemary was acutely aware of her coach’s body language each day. When Rosemary perceived her coach’s body language was positive, she had a pleasant experience at practice and was more motivated to play:

She always is you know encouraging us in a good way, and I think that her body language, she talks a lot about body language on our team. She always tries to, she’ll cross her arms a lot, and she’ll even if you can tell she’s not in a great mood, she always puts on this face at practice that you know right when you cross the field you’re entire attitude should be different and you should just be focused on softball. It’s a new day. And so I think her nonverbals are always very positive, and you can never really tell if she’s having a bad day, which helps us to then make a positive experience out at practice.

Tory believed she could assess how much her coach was dedicated to her and her teammates by observing her coach’s body language. “Her body language just the way she holds herself at practice and stuff, and in games really tells us a lot about the kind of coach she is and how much she’s dedicated to us.” Tory was more motivated to play for her coach because she perceived her coach was committed to the success of the team. Athletes perceived their coaches’
positive forms of body language enhanced confidence and motivation to play softball. Athletes were the most conscious of body posture, tone of voice, and head nodding.

This section provided information about the most commonly reported types of verbal and nonverbal positive feedback athletes believed enhanced individual motivation and confidence. Athletes reported encouragement or reassuring language and praise more than other forms of positive verbal feedback. Instances of encouragement accompanied corrective instruction in most cases. Perceived positive body language including excitement level, tone of voice, and head nods was reported as the most influential form of nonverbal feedback type. The positive feedback athletes reported was often accompanied by positive coaching behaviors that influenced confidence and motivation. The following section will examine the most common positive coaching behavior athletes perceived.

Positive coach behaviors.

Participants observed positive coaching behaviors they perceived enhanced confidence and motivation. The reported behaviors can be viewed as conscious coach strategies to enhance confidence and motivation. Athletes provided information on several positive coaching behaviors, or strategies, and the most commonly reported are presented in the order of most often reported followed by the next most often. Positive coaching strategies included the coach’s emphasis of athlete’s personal best, coach’s actions display confidence, and meaningful practice sessions.

Positive coach strategies: personal best.

The coach’s emphasis on the athlete’s personal best included the coach issuing consistent, positive encouragement to the athlete to focus on her individual success and encouragement to excel through hard work. This type of coach behavior was identified as a
strategy because it helped athletes focus on individual improvement and situations each athlete could control rather than progress of teammates that were out of the control of the individual athlete. Encouragement of personal best was accompanied often with the verbal positive feedback type of encouragement, reassuring language, or praise, and was associated with increased confidence or motivation.

Colleen’s coach built her confidence by encouraging with reassuring words to be the best athlete she could be. “I think all of things actually help build my confidence when she pushes me to be higher. To be better.” Kara described her coach’s emphasis on personal best combined with positive body language as “inspiring” by commenting, “She gives off the vibe that we truly are improving every day, and we are. She inspires us to better than yesterday.” Alyssa’s coach “makes us all want to work hard to turn our program around” by working hard every day to improve individually and as a team. Jackie noticed her coaches motivate her team similarly to Alyssa’s coach. “I feel that both coaches expect nothing but our best. This is how they motivate us to play. They know we want to be the best so practicing and telling us we can reach our goals if we do this is a way they motivate us.” Jackie’s coaches used emphasis on personal best combined with goal setting, and Jackie perceived a specific expectation from her coach to be the best. Nicole was more motivated to play because her coach consistently reminded her she could always improve. “She tells us that we could always be better. And no matter how good we are there’s always something to improve on.” Rylie was motivated by her coach issuing “constant encouragement” to work on skills and improve, and by her coach verbalizing that “she sees the best in everybody and she expects the best in everybody, and knows how good we can be if we work hard to become the players she sees we can be.”
Some coaches motivated athletes to focus on personal excellence through hard work by creating an expectation to win their conference championship or have a successful season. Peyton’s coach motivated her by encouraging the team to “be our region’s champs or conference champs.” Sadie’s team won their championship last season, and her coach consistently reminds her and her teammates about the hard work they performed last season and how the results produced a championship. “Nothing felt better than winning the [conference championship] last year, and being reminded of that on days we feel tired makes us all push through practice.” Christy was motivated by her coach emphasizing each athlete should get “one degree” better from the previous day, and consistently reminded the team of their goal to advance to post-season games this year. Sara, Christy’s teammate, added her coach improves her confidence by providing consistent encouragement and reminders of how “good we really are” because she was improving her skills each day. Jane’s team was not successful in the past, but her new head coach was successful at her previous institution and her coach’s previous team won their conference championship. Jane’s coach tells Jane how much hard work is required to win a championship, and Jane was motivated to play by the thought of winning a championship under the direction of her new coach. “She [her coach] wants to win, you can tell. She expects us to want it just as much as she does. She talks about how, at her old school, they won the conference championship, and I think that motivates me to want that.” Jane was motivated by her coach’s consistent reminders of working hard to be the best players they could be so they could win games. “She gives us speeches saying how to reach our goal, and that’s winning in conference. Just stuff like that really pushes me to want to do that again.”

Coaches who consistently reminded athletes of improving each day to become the best athlete they could be, emphasized the results of hard work in practice being winning, and the
description of winning games or championships improved athletes’ motivation and confidence toward softball. Many of the responses were coupled with other strategies (e.g., goal setting), but only the most common behaviors were discussed.

*Positive coach behaviors: actions display confidence.*

The second most reported coaching behavior (37%) that improved confidence and motivation were behaviors the athlete perceived the coach showed confidence in the athlete’s softball abilities. These behaviors were indicated by the coach defending the athlete or showing the athlete he or she believed the athlete could perform successfully despite the given situation. Some of these behaviors the athlete perceived through observation and others were verbally communicated to the athlete.

Elena was aware of her coach’s expectations for her as a player, and her perception of her coach’s high expectations motivated her to play. “My coach set expectations that she knows I can achieve. She believes that we are better than we think we are, and it motivates us to push to be that great.” Elena believed she knew her coach “sees the great in me” and Elena was motivated to “push harder” because she wanted to meet her coach’s expectations. Shawna perceived her coach trusted her ability to perform through her coach issuing correction for an error one time (as opposed to multiple occasions). “If I have done something wrong, she lets me know but also tells me how to correct the error. This lets me know that she has faith enough in my abilities that she can just tell me what to do and I will execute on the very next play.” Nesa was motivated by her coach’s expectation of each player filling a specific role, or having a specific “job” to perform during games:
It motivates me even more to know that they expect each players to have a job, and know that when the team is put in the situation where that job is needed, and if you show you can get the job done, you will have the opportunity to make it happen.

Similarly, Jane’s confidence was enhanced if she was placed in a starting position because she believed if she was in the game that showed her coach’s confidence in her that she could perform successfully. “Knowing she has confidence in you and that’s why she sent you out there.” Colleen used her position in the game day lineup to assess her coach’s confidence in her playing abilities and her perception of her coach’s belief in her abilities. “She’s made it very clear that I’m an essential part of the offensive line up, so I think I have more confidence in myself because she has confidence in me.” Colleen remarked she could “definitely look at my coach and see that she has confidence in me when I’m playing and that helps.” Colleen did not indicate specifically how she could tell her coach had confidence, but she could observe her actions and body language and perceive her coach had confidence. Melinda described her perception of her coach’s confidence as “feeling needed” in a certain situations, and this feeling made her more motivated and confident.

Other athletes knew their coach had confidence in their playing abilities because their coach told them directly or indirectly. Sadie’s coach consistently told her directly she knew Sadie could perform the skill and her coach’s verbalization made Sadie “believe it as well.” Ginny’s coach directly verbalized his confidence to Ginny during instruction or during moments when Ginny was struggling to perform. “I know when I begin to lose it a little bit and he sees my confidence going down, he always makes sure to come up to me and tell me, ‘relax, you got this. I need you to re-focus because I believe you can do it, so do it.’”
Brooke’s coach indirectly verbalized her confidence in Brooke’s ability by sharing with Brooke she was a leader on the team and she “is building the team around me in order to provide a good defense and good hitters to produce runs.” As a pitcher, Brooke’s confidence increased because she perceived her coach was confident in Brooke’s abilities because she was structuring the team around her. Jane’s coach used a different approach to indirectly verbalize her confidence in Jane’s abilities. Jane’s coach used Jane as a model to demonstrate skills at clinics involving younger, less experienced athletes, and her coach told the younger athletes how well Jane performed the skills being demonstrated. Jane commented, “It makes me feel like she has confidence I have learned them [skills] from her and understand them, and that I have picked them up quickly.” Allison’s coach used her as a skill demonstrator at clinics as well, and Allison perceived this behavior demonstrated her coach’s confidence in her abilities similarly to Jane. Allison’s coach listened to her ideas and allowed her to carry through with team request, and Allison believed this behavior demonstrated her coach’s confidence in her as a leader on the team. “If I approach him or the team with something, he backs it up. Or if I approach him and say, ‘can I do this with the team?’ He’ll let me do it because of my leadership role.” Tory’s coach displayed confidence by arguing with game officials over decisions the coach believed were incorrectly determined:

In games, if umpires are not calling strikes when they’re [the pitches] are right down the middle [of the plate], she’ll keep telling our pitchers “that’s a great pitch, keep going!”, and hearing her fight for our pitchers and our team just makes me respect her that much more.

Athletes reported several verbal and nonverbal positive physical behaviors they believed enhanced their motivation and confidence toward softball. The last behavior that is discussed is
an organizational behavior or skill the coaches did that noticeably affected, specifically, athletes’
motivation to play.

*Positive coach behaviors: meaningful practice sessions.*

Athletes mentioned meaningful practice sessions (34%) increased their motivation to play. Meaningful practice sessions were defined as practices that were well structured (e.g., efficient, affective), fun, or incorporated competitive drills. Some descriptions of meaningful practice sessions included goal-setting techniques. All athletes who reported meaningful practice sessions believed their motivation to play increased after these sessions.

Colleen’s coach created a pressure-inducing environment for a portion of practice by placing athletes in situations that simulated game situations. “At the end of each practice, she’ll put us in game-like situations where one person will be put in a pressure situation. You know it’s kind of like the game’s on the line.” Allison’s coach created competition among team members through similar game simulations, and smaller scaled competitions involving fundamental skill performances. “We will compete. Inter squad kind of, not necessarily scrimmaging, any kind of mini-games that have to do with skill.” Athletes like Allison liked the competitive drill aspect of practices because “That makes me more motivated because I’m competitive and those competitive juices get flowing.” Christy played in the pitcher position, and she was more motivated to avoid failure when her coach structured her pitching practices so Christy would pitch to hitters in game-like situations.

I think that she makes practices game like, and I think that helps me. And getting to pitch to batters in situations where I want to strike you out, and I have that self-motivation where I don’t want to fail. I want to be great at whatever I do, so having competitive practices really help that.
Other coaches incorporated a sense of competition between teammates by adding drills that required athletes to compete to perform the best at the given drill, or created a sense of competition to earn a playing position over a teammate. Emma’s coach motivated her by reminding her she needed to “work hard in order to earn a starting position,” and competitive drills in practice motivated her to “work harder and perform better.” Sara was more motivated by competition in practices because she believed the competition aspect helped her perform the drill or skill better. “She [her coach] always incorporates some sort of competition in practice so it’s not just doing a drill and just doing it good. In the drill you’re competing against somebody, and having played sports my entire life I’ve always had that competitive edge.” Shawna’s coach created a different approach by creating specific skill challenges in practice and allowed teammates to choose another teammate to “challenge” that day in practice to earn points toward a point total:

One thing we do is a [player challenge]. We send challenges to our head coach specifying what challenge and who we would like to challenge, and the winner gains a point in the competition and the loser loses a point. This is just another motivating factor for us at practice because we all thrive on competition.

Meaningful practice sessions not only incorporated competition, but athletes reported practices that were well organized (e.g., efficient), diverse, and fun motivated them to play. Almost half of the responses involving meaningful practice sessions mentioned they were more motivated to play when practices were “fun.” Mary Ann, Kayla, Ginny, Christy, Melinda, and Brecken all participate on different teams, and each one remarked they were motivated to play because their respective coach “makes practice fun.” Some athletes not only liked fun practices, but practices that involved different drills so practices were diverse and did not become
repetitive. Sara explained, “She [her coach] always makes practices different. We don’t do the same thing every day so that makes going out there, you don’t know what’s going to happen and you don’t know what to expect.” Brecken’s coach “mixes things up at practice so that we continue to have fun and don’t get bored.” When Melinda’s coach diversified practice, that action made her “love being here.” Kellie was motivated because her “coach is very organized and makes practices upbeat. We are never standing around not doing anything.”

Meaningful practices sessions that incorporated competition, diversity, and enjoyment for athletes increased motivation to play softball. A meaningful practice session was the third most common positive coach behavior reported to enhance motivation.

This section provided results of the most common forms of verbal and nonverbal feedback types and positive coaching behaviors reported to enhance confidence and motivation to play softball. Although the large majority of responses to questions pertaining to coach feedback and behaviors athletes perceived to affect motivation and confidence was positive, some negative feedback types and behaviors were reported.

**Negative feedback types.**

The majority of feedback reported was overwhelmingly positive; however, negative feedback comprised 21% of all feedback. The most commonly reported type of feedback was negative verbal in the form of yelling or negative comments. Yelling or negative comments was mentioned by only nine athletes, but this form of feedback was the most mentioned form including negative nonverbal feedback.

A couple of athletes believed yelling or negative comments hurt their confidence and made them doubt their ability to perform. Hannah expressed her concern about her lower confidence level and the impact on her performance when her coach issued negative feedback.
“Ultimately, in my mind, I’m working to show the coaches I’m capable of performing at this level. So if I’m getting a lot of negative feedback from the coaches then it can cause me to play worse something because I’m not confident in my ability.” Alicia agreed with Hannah when she commented how “Yelling or negative comments always makes me doubt my ability because I do not respond well to those. When coach does this, I tend to become very hesitant about what I can and cannot do.”

Some athletes did not like negative comments or yelling from their coach because they became less motivated to play softball. Jackie stated, “When they scream at me I become less motivated to please them,” and both Emma and Alicia mentioned their coach yelling at them decreased their motivation also. Christy became less motivated when she perceived her coach over-reacted to a mistake and her coach would “just freak out and yell without thinking what she’s really saying. Like hurting people’s feelings if they make an error that’s just a minor error.” Jaclyn noticed her coach shaking her head and “mumbling under her breath” after a poor performance.

A couple of athletes mentioned hearing negative comments from their coach about teammates decreased their motivation to play. Tiffany mentioned her dissatisfaction with her coach’s yelling, but also with the comments she overheard about a few of her teammates. “The coaches make negative comments to each other in front of the rest of the girls. Sometimes they will yell at them across the field to pick it up, or they might even swear under their breath.” Peyton observed her coaches negatively comment on a few of her teammates, and her perception of her coach acting unprofessionally decreased her motivation to play. “Our coaches a lot of times make fun of other players behind their backs, and I mean, it’s really hard to hear that
coming from my own coaches talking bad about [my teammates] to me. I just feel like it’s really unprofessional.”

Yelling and negative comments were the most commonly reported form of negative feedback reported. The results should be considered with caution because only nine out of 41 participants mentioned these feedback types as negatively influencing confidence or motivation. However, the results were considered valuable considering the harmful consequences. Athletes reported a slightly larger percentage of negative affects in the form of coach behaviors.

**Negative coach behaviors.**

Negative coaching behaviors were behaviors athletes perceived decreased their motivation or confidence toward softball. Two coaching behaviors emerged as the most harmful out of a final pool of four different negative behaviors. Athletes perceived conditioning as punishment or excessive conditioning (29%) as having the most commonly reported negative impact on motivation. The most influential negative behavior that decreased confidence was actions from the head coach the athlete perceived as disappointment in the athlete’s performance (29%). Disappointment was displayed through unrealistic expectations, or through actions perceived to show doubt or no confidence in the athlete’s performance ability.

**Negative coach behaviors: conditioning.**

Excessive, hard, or punishment conditioning activities emerged as the most reported coaching behavior perceived to decrease motivation to play. Conditioning included physical activities including running, weight lifting, or hard circuit training drills during practice sessions. Athletes disliked conditioning for reasons including feeling physical fatigue and conditioning used as a form of negative reinforcement. Responses involving conditioning were not descriptive, but simply a statement of conditioning decreasing motivation.
Conditioning less motivated most athletes involved in this portion because it made them physically tired and fatigued. When asked if her coach displayed any behaviors that decreased her motivation to practice or play, Kara simply commented, “Probably the large amount of conditioning that we have every day.” Tiffany corresponded through an email interview and intentionally capitalized her most despised aspect of practice she perceived decreased her motivation. “CONDITIONING. I dread it so much. It sometimes even makes me dread going to practice.” Melinda added her coach’s use of conditioning made her so physically fatigued she could “barely move.” Melinda said, “Sometimes she [her coach] thinks she has to hammer us with running and lifting weights to make our talent level increase.” Brecken commented when her coaches “give us extremely hard workouts with not enough time to rest” she loses motivation to practice.

Other athletes that responded with conditioning were less motivated to play when conditioning was used as a punishment for poor performance or behavior. Kellie provided an example, “Extra running for some type of punishment makes practice undesirable.” Jenn’s coach used running as a form of punishment, and Jenn was less motivated by “chronic punishment” her coach issued for perceived small mistakes. Emma, Jenn’s teammate, admitted she too becomes less motivated by “a lot of punishment running [because] it makes me less motivated.” Tiffany felt the pressure to obey her coach and the rules established by the team to “avoid punishment” that often came in the form of conditioning. Melissa reported mostly positive comments about her coach, but she did say, “I think the only thing that makes me less motivated is running for punishment.” Ginny captured the over-arching feeling about punishment conditioning when she described a negative coaching behavior specific to her coach:
He makes us run a lot. Sometimes just making you run isn’t teaching me anything. It just makes me hate being here right now [at practice]. So there are times where I wished he could find a different way of punishing us. Instead he will just kind of give up and say, “We are going to start running because you are not focusing.” Making us run is not making us any better.

Athletes reported excessive conditioning or punishment conditioning as one of the most common actions coaches choose that decrease motivation. Athletes were less motivated when they felt physically fatigued to the point of exhaustion. Athletes were not motivated by negative reinforcement when conditioning was used as a punishment. One final negative coaching behavior the athletes in this study reported to most often decrease their confidence level was if they perceived their coach was disappointed in their performance.

**Negative coach behaviors: perceived disappointment.**

Perceived disappointment includes behaviors athletes observed that made them feel their coach doubted their performance ability or were disappointed in their performance. This negative coaching behavior was reported from 12 different athletes and accounted for 29% of all responses. The majority of responses concerning this behavior involved athletes’ perceptions from observing their coach’s behaviors. The sense of disappointment was not verbalized from coach to athlete in any response.

Teresa believed she was disappointing her coach because she believed at times she was not meeting her coach’s expectations and her coach’s expectations may have been unrealistic for her. She felt even though she was disappointed in herself, the perceived disappointment from her coach was more detrimental to her confidence:
I think sometimes knowing that you’re not meeting the expectations can have an influence on your confidence, and just general motivation cause I think everyone knows when they play poorly, but when you’re disappointing your coach also, I think it can add an extra burden on your shoulders. Sometimes if the expectations are unrealistic or kind of unaccomplishable [sic] for an individual it can add an extra burden instead of motivation.

Colleen mentioned her coach’s behavior after a poor performance as “she’s not necessarily going to respond to me,” and this behavior made Colleen question if her coach was disappointed in her that led to a decrease in confidence. Ashley acknowledged she could tell if her coach was disappointed in her by observing her body language, and her coach’s mood “just kind of rubs off on your mood.” Jenn was less motivated by not only punishment conditioning but more by “the greater sense of disappointment” she perceived from her coach. Jessica did not elaborate on how she could sense her coach did not approve of her playing abilities and she struggled to verbalize her feelings, but she was not motivated by her coach’s actions. “The feeling of like you’re not approved, like when she’s, if they are not approving, or you don’t have a chance at all to be a big part of the team. That’s not very motivating at all.”

Ashley shared she could tell her coach had a lower expectation for her than other teammates by the type and quality of feedback her coach issued after a performance. Ashley wanted to be held to the same high standard as the best athletes on the team, and when her coach issued praise to her for a performance other teammates perform routinely, Ashley started to believe her coach doubted her performance ability. She explained her reaction to her new coach’s praise after a routine performance:
I guess at first you’re like “awww” like happy that you’re being praised, but then you realize that this other player does this all the time and I didn’t do that. So then that would kind of upset me because I’m used to being expected to do the best [at her previous institution], and that’s it.

Christy, a freshman pitcher, perceived her coach did not have confidence in her ability because her coach did not appear to believe Christy thought about concepts the correct way. Her coach’s doubt was evident when she used older teammates to relay instruction to Christy. “So she’ll like, the main pitcher, will be like the little birdie and come tell me what she [the coach] wants to tell me even though I’m already thinking it. She [the coach] doesn’t think that I think that way, or like know what to do in a situation, when I do.” Jackie, a left-handed slapper, perceived her coach doubts her ability because she will not let her perform at her specific position to her maximum capability. “My current coach hasn’t let me swing away much yet, only power slap. Sometimes I take this as her not trusting me as a player that can do multiple things.”

A few athletes offered a bleak description of how deeply their coach’s perceived doubt or disappointment affected their confidence and motivation. Peyton, a pitcher, believed she had worked hard to develop four pitches to use in game situations, but her coach only allowed her to practice three of the pitches. When Peyton approached her coach to ask to include the fourth pitch, Peyton’s confidence was deeply hurt by her coach’s response:

I had four pitches but then I worked over them with my [previous] pitching coach and I only had three pitches. I wanted to start my fourth one up again, and she [her current coach] told me that “you’re other three pitches aren’t very good so you can’t start a fourth pitch.” I mean I feel like there’s a better way of going about that.
Peyton provided a couple more examples of negative coaching behaviors, and concluded her confidence and motivation was so low she was ready to quit softball. “I just feel like I’m just ready to give up. I feel like there’s no hope because no matter how hard you try, it doesn’t matter.” Jenn believed her coach was more concerned with highlighting her failures instead of cultivating success, and each time she failed Jenn believed she disappointed her coach. “My least favorite emotion to experience is disappointment, but it is impossible to please those who care not for your success but expect to punish you for your inability to succeed. It takes the fun out of softball.” Tracey experienced negative coaching behaviors and perceived her coach doubted her ability. Tracey perceived she received less playing time in games because her coach thought she was not “good enough” to play;

I knew I was better than other players, but they [her coaches] played favorites. I started not caring because I figured they didn’t need me. Then my ability to play good went down. Even when I picked it up and did better, I still didn’t feel like it was good enough.

Even to this day I don’t feel like I am good enough to play DI softball.

Athletes provided several examples of how they perceived their coach displayed doubt or disappointment in their abilities to play softball. Only one athlete, Peyton, provided an example where the coach verbalized her dislike for her ability. All other athletes gave examples of behaviors or actions they perceived their head coach displayed that indicated doubt or disappointment. Athletes recorded feelings of doubt evident through a diverse display of actions ranging from issues relating to perceived expectations, playing time, and instruction type. Although responses for this section were a small portion of overall responses concerning coaching behavior that affects motivation or confidence, the results were important considering the negative affect these behaviors can have on athletes.
Perceived coach-athlete relationship.

The third theme that emerged through the course of this study was aspects relating to coach-athlete relationship characteristics. Certain aspects of communication style or how the coach and athlete interacted commonly surfaced. Several characteristics emerged as positive or negative relationship attributes the athlete perceived either enhanced or hurt motivation or confidence toward softball. The perception of coach-athlete relationship had the overall biggest impact on confidence or motivation as evident by the number of times aspects of a relationship were reported. Relationship characteristics are discussed separately as positive and negative attributes.

Positive relationship attributes.

Athletes consistently referred to several positive coach-athlete relationship attributes perceived to enhance motivation or confidence. The most common reported attributes are discussed in order of most to least reported. Two dominant attributes emerged as having the most positive influence on motivation and confidence. Athletes perceived a coach-athlete relationship involving open, clear, or direct communication (93%) was the single most influential factor to influence motivation or confidence. The second attribute was a coach-athlete relationship that involved the coach being involved or engaged with the athlete. Other relationship characteristics that emerged, but were not among the most common responses were mutual respect and honesty, and a relationship involving an overall positive tone (e.g., coach approachable, positive demeanor). These two characteristics each represented 29% of overall responses, and deserved mention.
Communication style.

Positive communication style was defined as open, clear, or direct communication from the coach to the athlete. A positive communication style used in reference to enhancing confidence or motivation was recorded from 38 of the 41 participants. Positive communication was referenced mostly in discussion about coach expectations of athletes’ performance. Athletes were more motivated and confident in their ability to reach their coach’s expectations when the coach clearly communicated what the coach expected. The participants in this study reported direct verbal communication during scheduled meetings or impromptu discussion with their coach about expectations.

Kara reported her coach “voices her expectations” and “there’s rarely any confusion on what she expects.” Hannah’s coach “tells us specifically what she wants from us” during meetings, and “makes it pretty clear for each of us” what the coach’s expectations for performance are for individual athletes. Hannah appreciates her coach’s direct communication and is more motivated to practice and play because “then I know what I need to work toward. It keeps my mind on something specific to work toward every day.” Tiffany’s coach directly communicates expectations to her by telling her, but also by giving her a written document with team expectations defined. “We have a handbook that has all the expectations written out. It is also commonly understood what is expected of us.” The majority of participants reported clear, direct communication of expectations, and many believed there was no confusion on what their coach expected from them in reference to performance.

The direct and open communication about expectations enhanced motivation and confidence for many athletes because their coach provided a clear direction and goal for practice and improvement. Alicia appreciated the direction her coach provided for her because she
believed she had a better understanding of what was required to be a successful Division I athlete. “For me to know coach’s expectations really helps my motivation and feelings of competence because I know what she wants from me; that combined with what I want to do, I am fully aware of what I need to do to be a successful DI softball player.” When Melinda’s coach verbalized her expectations of Melinda’s defensive performance, Melinda confidence and motivation increased because “Feeling needed always makes you motivated and helps your confidence.”

Alyssa participated in individual meetings during the fall season, and her coach told her specifically what expectations she had for Alyssa. The direct communication motivated Alyssa to please her coach. “Makes me want to work harder to meet those expectations.” Brecken was motivated and more confident through clear communication, and she felt she contributed valuable skills to the team because her coach held high expectations for Brecken. “It motivates me more when she tells me she has high expectations because then I know I am good and valuable [to the team]” Nesa described her coach’s communication as open and “honest”, and these characteristics enhanced her motivation because she understood what skills to improve. “Because I feel like my coach is so honest with us, I think it [motivation] increases because I can focus on specific things that I know she is looking for, and then we can discuss if I am fulfilling my duties and in what ways I need to fix.” Kayla’s motivation increased by direct communication because “that really helps me know what my coach expects from me and how I can help the team.” Ginny felt similarly to Kayla because she was motivated by knowing exactly what her coach wanted her to accomplish. “I like to know what he expects. I don’t like the guessing game.”
Sara viewed her coach’s direct communication about expectations on a more personal level. She was more motivated and confident because she believed the direct, open communication was an indicator that her coach made an effort to understand each player individually and form a more personal relationship:

Yes it does [enhance motivation and confidence] because it really helps us understand that she really does care and it’s really about us and the team, and it’s not just a show. I mean she really identifies with each of us.

Colleen appreciated direct communication because she wanted to please her coach and perform well. “I think that when somebody else expects something out of you, you want to expect the same out of yourself, and so you’re motivated to be the player that she expects you to be. I think it’s very motivating.” Jamie was motivated for the same reasons as Colleen. “She’ll [her coach] tell us to our face what she expects out of us. That helps me be motivated also to get wherever she is or expecting of me.” Most athletes were motivated by clear communication of expectations, but some athletes appreciated this form of communication when receiving corrective instruction or reinforcement.

Athletes reported feeling more motivated or confident when their coach was open and clear about the types of corrections they needed to make, or when their coach offered immediate praise or reinforcement. Hannah’s confidence increased because her coach “tells me in the moment that I’m doing a good job, but also off the field she goes out of her way to let me know I’m doing well, such as during individual meetings.” Alicia was more motivated to play because her coach directly issued praise immediately following a successful performance, and communicated areas in need of improvement. “She will make sure to give me a high-five if I do a good job during an inning on the field, or she will have an individual meeting with me to let me
know about my progress and what else I need to work on.” Sadie’s coach “lets us know when we are not playing to our potential,” but her coach’s positive approach and direct communication helped Sadie feel more confident in her ability to improve. Similarly, Nesa’s coach used a direct approach without embarrassing her to offer corrective instruction. Nesa’s confidence improved because she was more clear about how the skill should be performed correctly:

She is very straight forward. She doesn’t really call you out and yell about something you did wrong. She observes habits that everyone may be doing, and will then stop to give input on things to remember or a technique we should be doing.

Brooke’s coach uses direct communication to ensure Brooke was clear on the task. Brooke’s confidence increased because she received immediate feedback on her progress. “I like that she is specific on what to work on. She will tell us what we are doing good on (and she still wants us to get better at it), and she tells us what we need to work on the most.” Jill felt the same about her coach’s direct approach involving correction. “He does a great job of verbalizing positives and negative, and I think that builds your confidence because you know what you’re doing right, and he does a great job of verbalizing how to change, how to do something better.”

Brooke elaborated by mentioning direct communication and the method of delivery from her coach helped her feel she could trust her coach:

When she talks to me, she looks me in the eye and is honest. If feels more personal, and I love the way she communicates with us. She is always positive, but she also is always honest and does not sugarcoat anything. So you know whenever she is telling you something she really means it.

When asked if her coached displayed any behaviors that enhance her motivation to play, Jessica responded by emphasizing her desire for more corrective and direct communication from
her coach. “Let’s say something goes wrong, if she calls you over and tell you how to improve on what you’re doing wrong. Pretty much just talking to us about what we can do to improve.” Nicole stated direct, clear communication helped her be more confident because “I feel that if I know what I’m doing wrong, I can consciously do it better next time.” Athletes believed open, direct communication, specifically concerning coach expectations and corrections, was the most influential factor on enhanced motivation and confidence. Athletes appreciated knowing what their coaches expected from them performance wise or what improvements to make because athletes had a clear direction to guide their practice. The second influential relationship characteristic was a coach-athlete interaction where the coach was involved, patient, and persistent.

Involvement.

A coach-athlete relationship was defined as involved if the coach displayed behaviors that indicated persistence with instruction, patience with athlete when teaching new skills, and general involvement in the athlete’s personal or athletic life. Athletes reported confidence and motivation increased when their coach displayed genuine interest and concern in their development as an athlete or individual. Most athletes referred to their coach’s involvement when learning new skills, and the patience their coach displayed through willingness to work with the athlete until she performed the skill correctly.

Alyssa’s confidence increased when her new coach introduced a new skill and her coach insisted on working with Alyssa on the new skill until Alyssa performed the skill correctly. “Coach really knows the game well, so a lot of the skills she works with us on are fairly new, but she works with us until we get it right.” Nicole was on the same team as Alyssa, and Nicole agreed their coach “she’ll keep working with you so you get it right,” and she elaborated if her
coach was willing to work with her until Nicole grasp the concept then Nicole’s confidence increased. Ginny’s coach gave her confidence in her ability by making himself available to practice with her when she needed the extra work. “He is always willing to work with me. He tells me all the time, ‘I need you to come out and we will do a little extra because I need you to get this.’” Melissa’s coach was patient and persistent by helping Melissa realize she was making improvements and “I’m learning what she taught me to do because she’ll stay with me until I do the right thing.”

Other athletes remarked on their coach’s patience when learning new skills. Patience increased the athletes’ confidence because they felt they had time to fully comprehend the skill correctly without feeling “rushed” to learn. Kellie believed she naturally learned skills quickly, but her confidence increased when her coach presented her with a new skill and displayed patience with her to learn the skill:

I can pick up almost anything softball related just because I’ve played so long, so I’ve either done it already or seen it done before. However, if he throws something new at me, he always allows time to get use to the new concept.

Kayla’s coach gave Kayla time to learn a new skill without pushing her to learn too quickly. Kayla believed her coach’s patient approach improved her confidence. “They never try to rush me. They might tell me maybe you should work on this on your own, but I never feel rushed to learn something new.” Rosemary appreciated her coach’s involvement while learning new skills, and her coach’s patient, positive approach increased her confidence. “She is patient with us when we’re learning new stuff, but she definitely will give us encouragement if she can see that we’re working hard and making adjustments to the new skill that we’re trying to learn.”
A few athletes commented on their coach’s involvement in their development, and athletes believed an involved coach increased their confidence. Jill noticed her coach was physically present and made an effort to be visible and available to the team members. “He’ll just be around for a college coach. He’s around us a lot and I think that builds my confidence.” Bethany was more motivated by her coach’s involvement and concern about her development in life. “She’s just very involved. Very involved. And it motivates us that way because she just wants us to be excellent at everything we do in life.” Angela’s coach maintained an approachable demeanor to encourage athletes to speak with her about any issue, softball or non-softball related, at any time:

You know she tells us anytime that we’re struggling, even with outside of softball or school or anything, that even with softball, that she’ll always be there no matter what.

And we can always talk to her about anything. That has gave [sic] me more confidence.

Athletes reported the most common elements of a positive coach-athlete relationship that increased motivation or confidence were open, direct communication and involvement. Open communication was the single most recorded factor perceived to enhance motivation or confidence. In particular, athletes appreciated knowing their coach’s expectations and specific areas of improvement. Athletes believed coaches who were involved and patient in the learning process enhanced motivation and confidence.

**Negative relationship attributes.**

Athletes reported two relationship characteristics perceived to harm confidence or motivation. A coach-athlete relationship characterized by no communication was the most common theme (34%), and unclear communication was the second theme (24%). These communication characteristics accounted for a combined 59% of the negative perceived coach-
athletes relationship attributes. No communication was characterized as the coach ignoring the athlete or performance or remaining silent and offering no feedback after a performance. Unclear communication was identified by the coach using indirect methods to communicate, or if the athlete was unsure of the meaning of the coach’s communication. Similarly to negative feedback types, the responses pertaining to this theme were mostly positive; however, because of the potential negative consequences to motivation or confidence, the two styles are discussed. The two communication styles are reported jointly.

A coach-athlete relationship characterized by no communication involved a coach ignoring an athlete’s performance, providing no feedback (silence) after a performance, or acting in ways to avoid contact with the athlete. No communication harmed confidence and motivation more than any other negative factor including negative feedback types. The majority of responses discussing no communication included this behavior occurring after a poor performance.

Athletes noticed after poor performances, most often in game situations, their coaches ignored them when the athletes looked to the coaches for feedback about the performance. Athletes reported the ignoring, or no communication, made them feel less confident about their abilities. Kellie described how her coach behaved after a poor performance during a game. “[Coach] can completely ignore you when you run past him to the dugout while we’re hitting, and that’s never a good sign.” Tracey knew her coach was not pleased because she commented that he “ignores us and shakes his head.” Jenn and Jamie played on the same team, and both commented their confidence was hurt if their coach ignored them. Jenn’s confidence lowered if her coach “ever stops talking to me.” Jamie expressed frustration with her coach after a poor
performance because Jamie wanted direction on how to fix the mistake instead of no constructive feedback:

If I messed up a play or something and I look over and I just see her shaking her head, it’s like “oh crap!” Like I didn’t know I did it wrong, I understand that, but it just sucks to see, and I’d rather just have her call me over and be like, “Hey you could of done this” or “You could of done that.” I just keep thinking about it [the mistake] and I won’t be better.

Melissa reported her coach was typically involved and open, but said, “You really know that she didn’t like what you did because she stays silent.” Teresa, Melissa’s teammate, elaborated on their coach’s behavior and the damage to her confidence:

I would say sometimes when you aren’t playing so well, it kind of goes the opposite way in which she’ll almost ignore you. That can kind of hurt your confidence just because you don’t know what she’s thinking or what she feels about how things went. Just no communication verbal or nonverbal I feel like can hurt confidence a lot.

Ashley felt uncertain about her performance and confidence when her coach silently observed a recent workout without offering any form of feedback. “If you’re having a bad day or something, she’ll just kind of stand there and doesn’t really say anything. And you’re like, ‘oh crap!’ I’m not doing so well. She’s standing there looking at how bad I’m doing compared to the other pitchers.” Chloe believed her lower confidence and uncertainty of her importance to the team was a result of her coach’s avoidance. “I guess just sometimes the lack of things she says that make me feel sometimes less valuable than other players.”

Nicole looked to her coach for corrective feedback after a poor performance, and her coach avoided eye contact with Nicole. “When she doesn’t look at you, like eye contact, after you know you’ve made a mistake, or when she doesn’t say anything at all, that kind of dampens
the spirit.” Colleen remembered situations she did not perform and her coach did not respond to her after the mistake. Colleen believed she would have benefited from encouragement from her coach, but no communication left her wondering, “if she’s disappointed in me, that could hurt my confidence.” Tory felt the least confident when her coach “doesn’t acknowledge me at all,” and went as far to admit, “If she’s not talking to me that makes me think she doesn’t care about me, so that makes me less motivated.” Jessica admitted feeling stressed and less confident when her coach remained silent with her. “I think the most hurtful thing would be just not saying anything at all. Like rather than yelling, I just think not saying anything at all is like the most stressful part of it.” Allison elaborated on why her coach’s avoidance after a poor performance hurt her confidence and why she values direct communication:

He will never look you in the eye, which is a very subtle thing, but I mean, as far as confidence is concerned, I think it does help when you have a coach that can just look you in the eye and tell you how it is. Because it just shows a level of understanding there, or respect, and you tend to respect them more at that point so it helps your confidence.

Rosemary believed one of the “biggest problems” on her team was the un-clear communication of the coach’s expectations the absence of communication from her coach about expectations. Rosemary believed no communication and “unclarity” was negatively affecting all of her teammate’s motivation and confidence because she did know what goal she was trying to achieve:

For most of us, if we don’t know what’s expected of us from our coaches then we don’t really have a motivation because we don’t know what our goal is. If they have a goal for us and we don’t know that’s our goal then it’s hard for us to reach it. If you don’t have the type of personality where you’re comfortable enough to go and talk to her about it
then you’ll never know what you’re expected to do, and then you’re confidence is all messed up because you might be doing something and you might feel good, but then the coaches are obviously not happy. But you don’t know because they don’t communicate with you.

No communication, or avoiding behavior, was the strongest contributing factor of a coach-athlete relationship that hurt motivation or confidence. Athletes reported unclear communication harmed motivation or confidence to a lesser extent. Unclear communication included indirect communication or communication that resulted in the athlete not understanding the meaning of the message.

Tiffany was a non-scholarship athlete and earned a position by trying out for the team after her teammates had already began team-related practices and functions. Team rules and expectations were not clearly defined to her causing her to have to “pick up on things myself,” and not having the same guidance as her teammates hurt her confidence. “When I don’t know a rule or expectation, it lowers my self-confidence and makes me feel inferior and oblivious.”

Chloe assumed she was supposed to act a certain way on the field because her coach never corrected her, but she was uncertain if she acted appropriately because her coach did not directly tell her otherwise. “She hasn’t really touched base with that this year. I just kind of assumed it.”

Kayla proclaimed to efficiently motivate herself, but her motivation was affected if she was not communicating clearly with her coach. “I mean I can motivated myself, but it’s hard sometimes if like we don’t communicate or aren’t on the same page. Or if I don’t know where he’s coming from. It’s hard for me to like not be motivated but like that would affect my motivation level.”

Jessica reported being confused by her coach’s unclear communication style. “It just makes you a little bit confused because you’re not sure like what they’re interested and want you
to work on the most.” Allison was not sure what her coach wanted her to do, but she assumed she could tell by the corrective comments during instruction:

I don’t think his expectations are as clearly defined, even to him, as they should be. I guess throughout practice he will kind of tell you. Like if we are hitting BP [batting practice] or something, he’ll be like, “Alright, I want you to start working on turning on the inside pitch.” I kind of gets where he wants me to go with it.

Allison elaborated on her coach’s unclear communication when she commented that she had played for her same coach for three years, and “I just clarified with him and the other coaches this year what pitches I like to hit. Like for example, I don’t like inside pitches. I like outside and I favor it.” She received unclear communication when she consistently received feedback from her coach about the inside pitch. “So I would get an inside pitch and take it, and he would be like, ‘Oh that was your pitch!’” Allison was confused and believed even though she had played for him for three years he still did not know her individual strengths and weaknesses and she became less motivated to play. Jill and Allison were teammates, and Jill agreed their coach “could verbalize instructions a lot better.” Jill became frustrated and confused when their coach became flustered during a game, and she could read his frustration from his negative body language, but he did not tell her what specifically he was angry about:

He just gets flustered, and like physically just like his body language sometimes is different, and that just kind of throws the game off. Sometimes it’s like you’re so worried about what your coach is doing because he’s not telling you what you’re doing wrong, he’s just showing through body language that it’s wrong. Especially with girls, it’s like, “Ah! I don’t know what I did wrong!” Like you know I’m feeling judged and you’re not playing full force because you’re worried about being pulled out.
Athletes’ motivation and confidence were hurt by a negative coach-athlete relationship characterized by no communication or unclear communication. Athletes reported feeling less confident because they did not know what skill to correct or if their performance pleased their coach. Most of the athletes placed value on their coach’s feedback and opinion, and most wanted some form of acknowledgement of their performance. These two aspects of a negative coach-athlete relationship emerged as having the most negative effect on motivation or confidence than any other negative feedback or behavior reported. The final theme involves pieces of all previous themes perceived to enhance or hurt motivation or confidence.

**Perceived athlete treatment.**

Athletes were asked to assess their skill level compared to their teammates using the terms “below average,” “average,” or “above average.” Athletes were next asked to describe if they perceived their coach displayed any behaviors that were different toward higher or lower skill leveled athletes compared to behaviors they received. Only 24% of participants perceived their coach treated all players equally regardless of perceived skill ability. Two themes emerged indicating participants perceived their head coach behaved differently toward below and above average athletes on their team. Participants used their individual skill assessment and their personal perceptions to assess skill ability of teammates. All athletes were asked to compare behaviors they receive to behaviors they perceived teammates of a different skill ability received. Differential behaviors were reported for both below average and above average athletes by 54% of all participants.

**Above average athletes.**

Participants perceived several differences in coaching behavior toward above average athletes on their teams. Above average athletes were referred to as “starters” in some responses.
“Starters” is a term for athletes who started games at certain positions routinely. Participants indicated differential behavior for these types of athletes in 42 responses from 22 different athletes. Half of the athletes (n = 12) that reported behavior differences for above average athletes also reported differences toward below average athletes. The most common behavior differences that emerged were participants perceived above average athletes received more skill testing and were held to a noticeably higher expectation (39%), and received more practice time and praise (29%). Coaches “pushing” athletes’ skill limits during drills characterized skill testing. Higher expectations were not clearly indicated, but were perceived through feedback pattern or quality. Practice time was defined as instruction or playing time and included instances where athletes received more attention. Praise included any form of positive recognition.

Hannah perceived her coach verbally pushed above average athletes more because Hannah thought her coach “feels like the better players can handle it and will benefit from it more.” Melinda noticed her coach testing athletes’ physical limits because Melinda believed her coach held these athletes to a higher standard. “She has higher expectations for them, and she pushes them to make better plays.” Jaclyn commented on her coach testing athletes if her coach thought those athletes could perform the task. Jaclyn said her coach “pushes them when she knows they can do something.” Jackie perceived her coach expected more from these athletes, and her coach’s behavior indicated these athletes were “different” than other teammates. “They are different in the fact that they [the coaches] test and are harder on those they expect more out of.”

Bethany and Ashley, who were on different teams, provided examples of their coaches’ noticeable behaviors when testing skill limits of above average athletes. Bethany viewed the
limit testing with a positive perspective because she believed her coach tested all athletes to encourage them to improve:

They push them [above average athletes] really hard, like everyone is pushed to their limits. Like my ground ball is probably an average ground ball, and probably the best player is going to get one that’s even further. They just keep testing us and testing us and testing us to see how great we can be.

Ashley perceived a similar incident from her coach with a more neutral perception, but noticed a couple other behavior differences:

They [above average athletes] definitely receive a lot of positive feedback. Like any ground balls when they’re doing infield, like she always says ‘good job’ like she [the specific athlete] always does well. They’re definitely held to a higher standard. If there’s a ball hit and they don’t get it and anybody else wouldn’t even dream of getting, they’re told they should’ve gotten it. Any hits [they get], well it should’ve been harder or whatever.

Tiffany had a similar experience with her coach. “When they [above average athletes] make an outstanding play, it is not as exciting as it would be if I made an outstanding play.” Ashley felt similarly to Tiffany. She could tell she was held to a lower standard than the above average athletes by the frequency of feedback:

You can tell if you do something that another player does with ease, and you, it’s like something you do every now and then and then you’re praised for that. I guess you can kind of assume that you’re expectations are lower than the expectations that your coach might have for that other player.
Brooke assessed herself as an above average athlete, and she believed her coach placed higher expectations on her by expecting her to lead the team. “She has confidence in everyone, but she expects us to be leaders and role models.” Nicole perceived her coach held above average athletes to a higher expectation because her coach pushed these athletes to perform at a higher level if the coach believed the athletes were not performing at a higher level:

The better players on the team, she has a level of expectation I guess, and I you perform to that level then she’s like normal with you, but I you drop to the average level then she asks you to pick it up because she knows you can be above average.

Ginny rated herself in the above average category and she noticed a difference in her coach’s feedback quality toward lesser skilled athletes. She believed she was held to a higher expectation because her coach “knows that I can do it. He will get on me more just because he expects more. He expects me to be at the top all the time.” She noticed her coach seemed to “ease up” on other teammates because she perceived her coach thought “oh well, that’s the best I am going to get from her.” Rosemary perceived her coach treated players on a “hierarchy” based on perceived skill level. When asked about noticeable behavior differences she replied, “I would say kind of starting lowest to highest level of talent, for lack of a better word.”

Participants reported a second common behavior difference directed toward above average athletes. Athletes perceived above average athletes received more practice time and overall attention and more praise or positive recognition. Alicia admitted she thought her coach “pays more attention to the starters and better players on the team, and those players also get more playing time in practice and games.” Jackie believed the starting athletes were more valuable to the team, and were supposed to receive more attention. “They [her coaches] of course will give more attention to those that are more important to the performance of the team at this
moment.” Peyton was not happy with her coach’s perceived clear preference for the starting athletes on her team. “I think she just cares if the starters get better. Just every day at practice she only pays attention to starters and only works on starters. I mean everyone else has to base run.”

Jessica’s coach showed obvious differences in treatment by paying more attention to above average athletes, and by indicating through treatment she did not prefer below average athletes on the team. “I see it. The good players are the big key players that they [the coaches] really like. They’ll give the most attention and they really enjoy being around them. If they have a player they don’t necessarily like too much, you can tell. It’s very obvious.” Colleen noticed a more subtle difference in instruction time and attention, and she realized the difference in instruction time as she answered the question:

I mean the starters will get video reviews from the game. In-season some of the key hitters would come out 30 minutes early to have an individual [practice session]. So yeah I guess there is a little bit more coaching directed to the people who play more. There’s more one-on-one time.

Increased instruction time and attention was often accompanied by increased praise or positive attention. Jaclyn perceived her coach acted generally more positive toward above average athletes, and she noticed her coach tested them at times. “She is a little bit more positive toward them, but she also pushes them when she knows they can do something.” Christy believed her coach issued more praise to higher skilled teammates even when Christy did not agree with her coach’s perception of the performance. “She praises them pretty much every time they make not even that good of a play.” Ashley noticed her coach gave these players “a lot of positive feedback,” more so than the amount Ashley received. Peyton had a more negative experience with her coach issuing more recognition and praise toward starting teammates. She
believed her coach emphasized the starting players’ performance after a particular game to make her feel like she was not a good athlete. Peyton’s team won a game against a lower division opponent:

When we were playing after the game we won by a lot, and she was like, “Thankfully the starters got us up ahead enough so that we could put everybody else in” which just makes people feel like garbage because you know we’re not good enough to play against a community college.

Participants perceived coaches treated above average athletes, or starters, differently based on perceived skill level. Athletes perceived high skilled teammates were held to an overall higher expectation and were “pushed” more often to test the limits of their skills. Athletes perceived above average athletes received more practice time, attention, and praise or positive recognition than lower skilled teammates. Participants reported more instances of perceived differential treatment directed toward above average athletes, but did report instances of differential treatment directed toward below average athletes.

**Below average athletes.**

Participants perceived several different coach behaviors directed specifically toward below average or weaker athletes on the same team. Thirty-two responses from 22 participants acknowledged differential behavior toward below average athletes. The most commonly reported behavior difference was coaches appeared to ignore below average athletes more often and held them to a lower expectation. Ignoring included coach behaviors that ignored mistakes, physical presence, or performance attempts. Lower expectation behaviors were not presented clearly other than the athletes could tell expectations were lower for these athletes by observing the coach’s feedback pattern and quality.
Alicia perceived her coach did not provide the same practice or instruction time for below average athletes. “She doesn’t give them as many chances or reps as the stronger players.” Alicia’s teammate, Peyton, contributed extreme examples of differential behaviors directed toward above and below average athletes, and she admitted her coach’s behavior negatively affected her confidence. She reported her coach avoided interaction and provided fewer opportunities for practice or instruction for below average athletes:

At practice she doesn’t ever say like “Good job” or anything. She only interacts with certain people. The starters get to do all the stuff. The rest of us just get to base run. Son not only does she destroy our confidence, but also we don’t get better every day like everybody else does. They [the starters] have the opportunity to get better and we just have the opportunity to get better at base running.

Melinda had a simple response when asked if she noticed any behaviors that were different toward below average athletes. “Most of the time she just ignores them.” Chloe perceived her coach had an overall positive and inspiring approach, but she reported her coach “doesn’t really waste her time to get on” lower skilled athletes after a mistake. Teresa was perceptive to her coach’s body language toward below average teammates. These teammates rarely received playing time so they spent most of game time in the dugout (i.e., on the bench), and Teresa perceived her coach ignored these teammates. “I notice it [behavior differences] in the actual physical communication between them and coach. You know if you’re on the bench she doesn’t always acknowledge what you’re doing to help the team. You kind of feel like you’re not a part of the team.”

Athletes perceived below average athletes were held to an overall lower standard than higher skilled athletes on the team. Participants were unclear why they perceived a lower
standard, but provided examples indicating differences in feedback quantity or type. Rosemary, an above average athlete, noticed her coach would “point out mistakes that I make and she won’t point out theirs.” Ginny believed her coach was “hard on them” the same as other teammates, but she perceived he “eases up every once in a while” on these teammates but not on the higher skilled teammates. Ashley rated herself as a below average athlete, and she noticed her coach issued praise to her more often after a performance Ashley believed was not difficult. Her coach did not issue praise to higher skilled athletes for the same skill performance. She realized her coach did not believe Ashley was a strong player because of the praise she received. “That would kind of upset me because I’m used to being expected to do the best.”

Athletes perceived coaches treated below average athletes differently than their higher skilled teammates. Coaches ignored mistakes, physical presence, or performances of below average athletes more often. Athletes perceived coaches held lower skilled athletes to an overall lower expectation of performance based on feedback pattern, quality, and frequency.

**Summary of Themes**

Inductive examination of interview transcripts produced several emergent themes that held meaning to participants and to the purpose of this study. In speaking with female Division I softball athletes participating on teams across the United States about their motivation, confidence level, and perceived coaching behaviors, four major themes emerged. The themes that emerged relating to athletes’ perceptions of how their head coach affects their motivation to play or confidence in their ability are: (a) perceived competence; (b) coach behaviors and feedback; (c) perceived coach-athlete relationship; and (d) perceived treatment.

To summarize, 93% of athletes perceived coaches affected perceptions of competence. The majority of participants referred to the coach affecting competence during the process of
providing instruction and communicating to the athlete when skills were performed correctly. Many participants explained positive, encouraging feedback during instruction positively affected perceptions of perceived competence. Athletes believed personal individual attributes contributed to perceptions of competence, but the coach had the greatest influence.

Motivation and confidence was enhanced through positive feedback and positive coaching behaviors. Athletes were the most motivated and confident when their coach used reassuring words or offered encouragement during a performance, and issued praise after a performance. The most common positive coaching behaviors were when the coach placed intentional emphasis on the athlete striving toward their personal best performance, when the coach’s actions displayed confidence in the athlete’s performance ability, and when the coach implemented meaningful practice sessions that were competitive and efficient. Athletes lost confidence or motivation when coaches yelled after a performance, implemented conditioning as a form of punishment, and when the coach’s behaviors displayed disappointment or doubt in the athlete’s performance ability.

Characteristics of positive and negative coach-athlete relationships had the greatest influence on athletes’ motivation and confidence levels. Positive relationship characteristics included a relationship with open, direct, and clear communication between the coach and the athlete. Open communication was the single most influential factor on motivation and confidence. A relationship with the coach being involved, persistent, and patient toward the athlete’s learning process affected motivation and confidence positively. A negative coach-athlete relationship was characterized by no communication or unclear, indirect communication between the coach and athlete. Negative relationships harmed confidence and decreased motivation.
Athletes perceived teammates to have different skill levels, and coaches treated above average and below average athletes differently. Above average athletes were held to an overall higher expectation level involving more pushing and testing of skill limits, and received more practice time, attention, and praise than lower skilled athletes. Below average athletes’ performances, presence, or mistakes were ignored more often, and lesser skilled athletes were held to an overall lower expectation.

The above themes and results from the quantitative section are integrated and discussed in Chapter VI.
CHAPTER VI

Discussion

The purpose of this concurrent embedded mixed methods study was to examine the effects of coach expectations, displayed through feedback and behaviors, on female collegiate athletes’ intrinsic motivation to play softball. The study emphasized quantitative methods in the form of self-report surveys enhanced by qualitative methods in the form of structured interview responses. The participants for the quantitative portion of the study, measuring coach expectations, perceived coaching behavior and sport competence, and motivation levels consisted of 174 female collegiate softball athletes and 20 male and female collegiate softball head coaches. All participants were members of 20 universities in the United States recognized by the NCAA (2012a) as competing in a Division I athletic conference. Participants for the qualitative portion of the study were 41 female collegiate athletes from 25 Division I athletic teams. This chapter includes a discussion of findings in relation to current literature. Qualitative findings are used when appropriate to enhance the results of the quantitative portion. Finally, implications for future research, practice, and policy are discussed.

Overview of the Study

This concurrent, embedded mixed methods study sought to explore the effects of coach expectations on female athletes’ motivation to play softball. Quantitative data and analysis was the focus, and qualitative findings were gathered to enhance quantitative results.
Quantitative data was collected through four self-report measures, and assessed coach expectations, athletes’ perceived coaching behaviors, sport competence level, and motivation level in accordance with SDT (Deci & Ryan, 1985). Four hypotheses guided the statistical analyses and were stated in null form: (1) no distinct expectancy groups would emerge from pre-to post-study indicating coaches’ high or low expectations about athletes, (2) perceived sport competence would not be correlated with intrinsic motivation or with other forms of self-determined motivation, (3) athletes would not experience a change in sport competence of self-determined types of motivation from pre- to post-study, and (4) athletes would not perceive different coaching behaviors based on group assignment over the course of the fall season.

A dependent t-test showed a significant difference between coach expectancy ratings pre-to post-study. A k-means clustering technique formed three expectancy groups (low, average, high) based on coach expectancy ratings. Perceived sport competence was weakly positively correlated with the three most self-determined types of motivation at the final time point. One-way ANOVA and repeated measures ANOVA analyses resulted in significant differences between groups for initial integrated regulation, initial and final amotivation, identified regulation, and introjected regulation levels. Low expectancy athletes reported significantly less integrated and identified regulation than other athletes, and high expectancy athletes reported lower levels of amotivation and introjected regulation than other athletes. Motivation and sport competence levels did not change significantly from pre- to post-study.

One-way MANOVA results indicated significant group differences in the perception of coaching behaviors with the initial perception of non-reward, encouragement, and general communication. MANOVA results showed significant group differences in final perceptions of reward, non-reward, and corrective instruction. Including both data collection periods, low
expectancy athletes reported significantly higher frequencies of non-rewarding behaviors than other athletes and significantly lower frequencies of reward, encouragement, general communication, and corrective instruction. Repeated measures ANOVA results indicated significant group differences with the coaching behaviors of non-reward, organization, and general communication. Low expectancy athletes reported significantly more non-rewarding behaviors and less general communication at both times than the high and average athletes. Average expectancy athletes reported perceiving more organizational behaviors than high expectancy athletes. The perception of frequency of corrective instruction and encouragement changed from pre- to post-study with low and average expectancy athletes reporting less corrective instruction over time, and high and average expectancy athletes experiencing encouragement less often from the beginning of the fall season to the beginning of pre-season.

The qualitative portion of this study was guided by the following research question: How do athletes perceive their head coaches to affect their intrinsic motivation to continue playing softball for their current team? Specifically, what types of coaching behaviors do athletes perceived to alter their motivation to play softball? These questions were answered through phone and email interviews guided by a structured interview question protocol. After inductive analysis of each response, four main themes emerged indicating how athletes believed their head coach affected their motivation to play and confidence in their ability. The four main themes were: (a) perceived competence, (b) coach behaviors and feedback, (c) perceived coach-athlete relationship, and (d) perceived treatment.

The first theme, perceived competence, discussed the two most common factors athletes believed affected their perceptions of their competence. The coach emerged as the most common factor as indicated by over 90% of the sample, and individual athlete attributes emerged as the
second most common factor. The second theme, coach behaviors and feedback, discussed the most common positive and negative feedback and coach behaviors to affect motivation and competence. Encouragement or reassuring language was the most common form of positive feedback type, and coaching behaviors that encouraged personal excellence were the two most commonly reported factors to enhance confidence and motivation. The three negative factors in this theme that most often hurt confidence and motivation were negative remarks or yelling from the coach, excessive or physical conditioning used as a form of punishment, and coaching behaviors that indicated the coach was disappointed or doubted in the athlete’s performance ability.

The third theme discussed positive and negative aspects of the perceived coach-athlete relationship thought to enhance or harm motivation and confidence. Perceptions of the coach-athlete relationship had the most positive and negative influence on perceived competence and motivation in this portion of the study. The most common positive aspect reported was a clear, direct, or open coach communication style. Not surprisingly, the most common negative element was ignoring or no communication from the coach. The fourth and final theme, perceived treatment, discussed differential treatment from the coach toward athletes based on performance expectations set by the coach, and how perceived treatment affected motivation and confidence. Only 24% of participants perceived their coach treated players equally despite athletes’ skill level and performance expectations. The most common reported behavior difference for above average athletes was they were held to a noticeably higher standard than below average athletes, and the standard was evident through feedback type, frequency, and quality. The most commonly reported difference for below average athletes was their behaviors or performances were ignored more often.
Findings from the emerging themes are integrated into appropriate sections to compliment the quantitative analyses. Discussion on all results is related to relevant literature and includes discussion of unexpected findings. The research findings are presented in sections labeled by hypotheses.

**Discussion of Research Findings**

Many researchers have examined the influence of an athletic coach on athlete performance, personal growth, and athletic development, and many have found the coach has tremendous impact on several areas of an athlete’s career (Amorose, 2003; Bell, 1997; Gallon, 1980; Mahony et al., 1999; Wang et al., 2009). Athletes often list an athletic coach as an important figure in their lives and coaches often serve in the role of teacher, mentor, and leader for athletes (Amorose, 2003). The nature of coach-athlete interactions can influence athletes’ motivation, enjoyment, lasting memories, performance preparation, and goal setting strategies (Gallon, 1980; Lyle, 1999; Smith et al., 1995; Smith et al., 2010; Wang et al., 2009). Past experiences and enjoyment level of sport participation contribute to the motivation to continue practicing a sport or skill (Cronin & Mandich, 2005).

Research indicates success is driven by the type of motivation an individual has toward an activity or behavior (Ryan & Deci, 2000; Vallerand & Fortier, 1998). Ryan and Deci’s (2000) self-determination theory is useful for explaining the differences within and causes of motivation in individuals. SDT defines six different types of motivation along a continuum moving from no motivation (amotivation) to the most self-determined type of motivation (intrinsic). Athletes who perform, or play, for more self-determined reasons have been found to invest more effort, maintain higher levels of concentration, persist longer when faced with difficulty, and perform better than athletes who perform for external reasons (Fortier & Grenier, 1999; Pelletier et al., 2000).
1999; Pelletier et al., 2001). Knowing what environmental factors enhance or suppress self-determined types of motivation can be used to create surroundings that will encourage self-determined motivation and enjoyment of sport for athletes (Vallerand & Fortier, 1998). SDT offers several meta-theories in an attempt to offer possible social, environmental, and individual factors that affect motivation.

Cognitive evaluation theory focuses on perceived competence as a mediating variable to intrinsic motivation. If a person is already self-determined in motivation toward a behavior, and any environmental factor influences the person’s perceived competence toward that behavior (positively or negatively) then intrinsic motivation will be influenced in the same direction (Deci & Ryan, 2000; 2007). In the athletic environment, coach feedback is a social factor athletes use as an indicator of athletic performance ability (Amorose & Weiss, 1998). Coaches provide information about athlete performance attempts through verbal and non-verbal feedback methods. Competitive athletes often complain that the coach’s choice of feedback style is a reason for decreased levels of performance and enjoyment (Gearity, 2011; Gearity & Murray, 2010; Turman, 2003). Feedback type, quantity, and quality may be more than a perceived indicator of coach expectations for athlete performance ability, and may be an actual indication of expectations in some instances.

Horn et al. (1998) introduced the expectation-performance process illustrating a self-fulfilling prophecy within the athletic environment. This process begins by the coach forming an expectation about an athlete from incorrect information. The process advances if the coach treats the athlete differently based on the original expectation. Documented differential treatment includes high expectancy athletes receiving more overall and higher quality feedback, more positive reinforcement, more technical instruction, more praise, and more encouragement after
mistakes than low expectancy athletes (Amorose & Weiss, 1998; Krane et al., 1991; Solomon, 2008; Solomon et al., 1998, 2008). The next step in the process involves the athlete interpreting the perceived behavior and altering his or her behavior to match the feedback type. An example would be an athlete who normally spends extra time practicing a skill believes he or she receives less attention or instruction, assumes the coach does not care, and stops spending as much time practicing a skill. The athlete’s performance and psychological development may be influenced negatively depending on feedback issued (Horn et al., 1998). The final step in the process is the coach observes the athlete’s behavior change and assumes the original expectation about performance ability was correct. An individual’s interpretation and experience in any situation can be critical in determining achievement behavior and developing adaptive or maladaptive achievement strategies (Treasure, 1997), and if the athlete or the coach interprets behavior incorrectly then negative consequences could result.

Coaches should become aware of how their behaviors influence athletes’ motivation and perceived competence. Awareness may help to regulate actions that negatively influence motivation and confidence, and may encourage coaches to create environments that enhance motivation and competence. The remainder of this chapter addresses the four hypotheses that guided the quantitative portion of this study, and addresses the question of what coaching behaviors female athletes perceive affect motivation and competence toward playing a sport.

Hypothesis one.

The first hypothesis stated no distinct expectancy groups would emerge from pre- to post-study that would indicate coaches’ high or low expectations about athlete performance ability. Based on the results of the cluster analysis and the significant difference between expectancy ratings pre- to post-study, this hypothesis was rejected. Scores from the MERS measure were
used to create cluster groups, and three distinct groups emerged. MERS ratings were ranked on a scale from 1 (low expectation) to 5 (high expectation). The low expectancy group received mean pre- to post-study MERS ratings of 2.58, the average expectancy group had a mean MERS rating of 3.68, and the high expectancy group had mean ratings of 4.58. A significant dependent t-test confirmed a difference between pre- to post-study expectancy group ratings, and the average of pre- to post-study scores were used in the cluster analyses to form expectancy groups.

Quantitative analysis indicated coaches did form low, average, or high expectations about athletes’ performance ability in this study.

Qualitative findings offered support for coaches forming expectations for athletes. Of the 41 athletes that provided interview feedback, 75% of them believed their head coach had performance expectations for them. Shawna shared, “Individually we all have expectations placed upon us. They may vary some from person to person.” Jackie believed her coach had short and long term expectations for her and the team. “I think she specifically has a plan in her head of what she sees for us and what she expects of us now, and in the future.” Many of the athletes thought the coach having expectations about performance ability was necessary and should be expected. Bethany illustrated this thought when she said, “I think every coach should have an expectation of how a team should play, and the individuals.” Overall, the athletes in this portion of the study perceived their coach did form expectations about their individual and team performance ability, and many expected their coach to form expectations.

Research on coach expectations provides support for coaches forming expectations about athletes’ performance ability based on direct skill observation, third party feedback, stereotypical information, or impression cues (e.g., personal, performance, psychological) (Darley & Fazio, 1980; Horn et al., 1998). Most research suggests the majority of expectations are formed from
impressions the coach gets from watching the athlete perform skills or analyzing performance statistics (Horn, 1984; Solomon et al., 1996). This study did not attempt to describe what information the coaches used to form expectations, but through the interview process, many athletes shared how they perceived their coach formed expectations. Respondents for this study reported most often the method their coach used to form expectations was by assessing the athletes’ potential (42%). Assessing potential included observing the athletes’ effort level, motivation type during practices, and determining the athletes’ individual strengths and weaknesses as a player. Athletes thought all of these factors were combined so the coach could assess how well he or she thought the athlete would perform in the future. An example came from Kayla when she explained how she perceived her coach formed expectations. Kayla perceived her coach formed expectations “By how hard she sees us work, how driven she thinks we are, how talented we are, and how much potential she sees in us.” Elena felt similarly about her coach’s methods when she shared, “She [her coach] takes into account what we are capable of. She sees our potential and plays off of that.”

No research mentions the coach using the method of assessing athlete potential as a way to form expectations. Research does indicate observation of performance and skills test (Horn, 1984; Solomon et al., 1996), and assessing athletes’ strengths and weaknesses may be included in the performance and skills assessment. Recent research shows support for coaches using psychological cues from athletes (e.g., concentration level, confidence level) to form expectations (Becker & Solomon, 2005; Solomon & Rhea, 2008). There is no indication of the coach assessing effort level or motivation level as a method to form expectations in the literature reviewed for this study. The purpose of this study did not include discovery of what information coaches use to form expectations, but the results of the qualitative portion of this study
concerning expectation formation should be examined in the future. For the purpose of this study, both quantitative and qualitative findings support literature that coaches do form expectations about athletes’ performance ability.

Finally, the cluster analysis technique provided interesting results. Research on coach expectations includes analysis and discussion about two distinct expectancy groups: high or low (Horn et al., 1984; Krane et al., 1991; Becker & Solomon, 2005). Cluster analyses provided three distinct expectancy groups by including an average ratings group. The low expectancy group only accounted for 11% of the sample; however, the average expectancy group comprised 41% of the sample. The average expectancy groups’ average MERS ratings clearly distinguished this group in the average category ($m = 3.68$). Combining the average and low expectancy groups would have made two expectancy groups (low and high) with similar sample sizes, but examination of characteristics about average expectancy athletes would have been omitted. The average expectancy group is discussed in further detail in the discussion section of this chapter.

**Hypothesis two.**

The second hypothesis stated perceived sport competence would not be correlated with intrinsic motivation or with self-determined types of motivation. The purpose of this hypothesis was to examine the relationship between sport competence and motivation types in this study in relation to cognitive evaluation theory. CET and other meta-theories within SDT have been supported in research showing perceived competence may be a mediating variable to intrinsic motivation (Amorose & Horn, 2000, 2001; Deci & Ryan, 1985; Deci et al., 1999; Whitehead & Corbin, 1991). The results of this hypothesis showed perceived competence had a weak positive correlation with the three most self-determined types of motivation (intrinsic, integrated, and identified regulation) at the end of the study, but no significant correlation at the beginning. A
weak negative correlation with introjected, external regulation, and amotivation both pre- and post-study was evident. Examination of the Pearson correlations shows a positive trend with sport competence and all forms of self-determined motivation at both times, and although not all correlations are significant the positive direction is consistent with CET contentions.

This result shows partial support for existing literature, but is somewhat inconclusive because a correlation with self-determined motivation was not evident until the completion of the study. An encouraging result is perceived competence showed stronger and significant correlations with self-determined motivation over the course of the study. Examination of PSPP-SC descriptive results show a trend of athletes in this study became generally more competent from the start of the study to the end of the study. Although sport competence did not significantly change from pre- to post-study, a positive trend is encouraging because athletes did not lose perceived competence during the study. Sport competence may not have shown a significant correlation with self-determined types of motivation at the start of the study because perceived competence scores were not high enough. One subscale of the PSPP was used to measure perceived sport competence. This subscale contained only six items to assess perceptions of sport competence, and the use of a single subscale from the PSPP to measure sport competence needs to be examined for reliability and validity. A more comprehensive assessment of sport competence may have been achieved by using a more complete measure for perceived competence.

For this study, intrinsic motivation was assessed as one general category. Some research suggests intrinsic motivation can be categorized into three different forms: (a) to know; (b) to experience stimulation; and (c) to accomplish (Vallerand et al., 1989). The measure used for this portion of the study was developed with two variations, one grouping intrinsic motivation as one
construct and the other assessing the three types of intrinsic motivation individually. Although there is no research to support this explanation, a stronger correlation between competence and self-determined motivation may have resulted if intrinsic motivation was measured as three different types. Athletes in this study were collegiate athletes competing at the highest collegiate competition level. The majority of participants reported having 10-15 years of softball playing experience, and examination of descriptive statistics revealed the sample was overall more self-determined toward softball than not. This sample may have identified more with intrinsic motivation to know or to accomplish because of their background characteristics.

The results cannot be interpreted with confidence that sport competence was a predictor of intrinsic motivation in this study. Other studies examining SDT support basic needs theory (BSN) showing individuals must feel autonomous, competent, and relatedness toward and activity or behavior for intrinsic motivation to develop (Amorose & Horn, 2000; 2001; Deci & Ryan, 1985; Hollembeak & Amorose, 2005). Altering the three basic needs may alter intrinsic motivation. For this study, perceived competence was isolated to determine the impact on intrinsic motivation, but BSN should be examined with this population in the future.

**Hypothesis three.**

The third hypothesis stated athletes would not experience a change in perceived sport competence or self-determined motivation from pre- to post-study. No significant results emerged showing a change in motivation or sport competence levels from pre- to post-study with any of the three groups. This hypothesis was retained because motivation and sport competence levels did not increase or decrease significantly from the beginning to the end of the practice season.
Referring back to CET, if individuals are self-determined in motivation toward a behavior or skill, then factors that affect perceived competence could have the same affect on intrinsic motivation because competence acts as a mediating variable. Descriptively, the sample as a whole was more self-determined toward playing softball than externally driven, and shows support for previous gender research that identifies females tend to be self-determined across several domains including sports (Duda, 1992). Research has shown perceived competence is the strongest predictor of intrinsic motivation in some studies (Amorose & Horn, 2000, 2001; Deci et al., 1999; Whitehead & Corbin, 1991).

**Sport competence.**

Research reports coaching behaviors, such as positive feedback and technical instruction increased perceived competence and intrinsic motivation in athletes (Amorose & Horn, 2000, 2001; Deci et al., 1999; Hollembeak & Amorose, 2005). Interview participants provided support for encouragement and praise paired with corrective instruction as enhancing competence and motivation. Most participants (93%) shared their coach did affect perceptions of competence. Athletes believed they were “working to show the coaches [they were] capable of performing” at the Division I level. Many participants reported their coach “influences my perception with her feedback,” and most responses indicated re-assuring words or encouragement (68%) and praise (66%) were the positive types of feedback that influenced competence and motivation the most. Athletes expressed encouragement after a skill attempt helped them realize where to make corrections. One athlete admitted, “If she [her coach] was not encouraging, it would be harder to believe in my ability.” Other athletes were more confident in their ability when their coaches had set high expectations for them because the athletes believed “that’s good for confidence because they [the coaches] think we can do it.” Some athletes were encouraged when the coach offered
simple praise by noticing when athletes do a “good job” or encourage them to “keep working hard.” Many athletes were more confident and motivated when their coach encouraged athletes to reach their potential. Athletes believed when the coach “pushes me to be better” or “inspires [the athlete] to be better than yesterday” their confidence increased. Some of the encouragement focused on improving the program or team standing and some focused on the athlete striving to be “better people” on and off the field because their coach wanted them to “be excellent at everything we do in life.” Athletes indicated praise from the coach “gives us hope to do well when wemess up.” Several athletes mentioned receiving praise for small accomplishments, or effort, improved feelings of confidence and motivation. Athletes appreciated recognition for “something simple” or praise when it was “deserved.”

Literature has discussed coaching behaviors in the form of feedback or instruction type affecting competence and motivation, but none was found discussing other forms of coaching behaviors. The qualitative portion of this study revealed several coaching behaviors athletes perceived to enhance confidence and motivation. The second most prominent theme that emerged for positive coaching behaviors that specifically enhanced confidence and motivation were behaviors from the coach that displayed confidence in the athlete’s performance ability. Athletes were motivated when their coach “believed” in them. Other athletes were motivated by knowing the coach “expects each player to have a job” and the coach used specific players in certain situations depending on the “job” needed. Some athletes knew their coach had confidence in them by how the coach defined their role on the team. Athletes who were placed in leadership roles believed their coach “trusted” their opinions and “backed them up” with team-related decisions. Many athletes did not provide specific examples of how their coach displayed confidence in them, but simply stated they knew their coach had “confidence in me” or
“confidence in my ability.” Knowing their coach had confidence in their performance ability was a major contributor to increased motivation and competence.

An unexpected coaching strategy that influenced motivation was when coaches conducted meaningful practice sessions including competition or competitive drills and goal setting. Athletes were motivated by short and long-term goal setting strategies because it gave them more “focus for the day” and “gave me more direction as to where to take each day.” Athletes expressed goal setting gave them the feeling of knowing “there’s something I’m working toward.” Some were more motivated by goal-setting because it helped them “see the bigger picture” and gave them “direction” on how to achieve the team’s ultimate goal. Athletes did mention well-structured and efficient practices were a motivating factor because they became “bored” with the “same old drills” every day. Athletes wanted to “have fun” or “enjoy” practice and “loved when [the coach] mixes it up.” The most prominent theme that emerged to enhance motivation was the inclusion of a competitive element during practice. Many athletes were more motivated when their coach created “game-like situations” or allowed them to compete against each other during certain drills. Athletes remarked repeatedly they “thrive on competition” or they were “competitive” and competition during practice allowed their “competitive edge” to come through.

The single biggest factor with a positive effect on competence and motivation was an open, clear, and direct communication style from coach to athlete. This element of a positive coach-athlete relationship was mentioned by 93% of all interview participants. Athletes reported higher levels of confidence and motivation when their coach was “clear about expectations” or “tells us directly what she expects from us” because they knew “exactly what was expected” of them. Clear communication gave athletes “direction” and helped them understand “where they
stood” with their coach and what skills they needed to improve to reach their potential. Many athletes explained knowing their coaches’ expectations made them “want to work harder to meet those expectations.” Some athletes used the clear communication from their coach to enhance personal expectations, and they believed this combination made them “fully aware of what I need to do to be a successful DI softball player.” Others believed open communication made them “feel needed” and resulted in higher confidence. Athletes’ confidence increased when their coach was direct and clear about skills that needed to be improved. Athletes believed direct, immediate corrective instruction helped them learn skills more quickly and “make adjustments” because they knew they were “on the same page” with their coach’s thoughts. Athletes alluded to trusting their coach’s direction and instruction more often with an open communication style. Athletes believed coaches with a direct (positive), clear approach “meant what she says” and was “honest.” A positive coach-athlete relationship, or perceptions of the quality of the relationship, has been found to have a significant effect on athlete physical well being (skill ability, body shape, competence, and performance) (Jowett & Cramer, 2010). Communication style from the coach to the athlete could be included as a characteristic of the coach-athlete relationship.

The most prominent theme that emerged found to negatively affect competence and motivation was a coach-athlete relationship characterized by unclear or no communication. More than half of interview participants (59%) reported when they received no communication in the form of feedback after a skill attempt, ignoring behaviors, or unclear communication their confidence and motivation were “hurt.” This negative behavior harmed athletes more than any other reported factor including negative feedback types. Many of the responses involved no communication occurring after a performance attempt. Athletes described this behavior as when their coach “stops talking to me,” remains silent but “shakes her head,” or “ignores me.” Athletes
perceived their coach ignoring them meant the coach was “not pleased” or did not “like what you did,” or “you aren’t playing so well.” Athletes admitted they would prefer some form of verbal feedback “even yelling” after a performance attempt because silence made them “feel like I’m not getting better.” In some cases, athletes were unsure of what correction to make because they were not receiving productive feedback from their coach. Athletes were left “wondering” and “stressed” about what action they should take to correct their issue. Some athletes believed their coach “doesn’t care about me” or they were “less valuable” to the team when the coach did not communicate with them. Unclear or indirect communication was reported less often, but had a similar affect on athletes. Unclear communication made athletes believe they did not “know what I am trying to achieve” because they were unsure of the purpose or desired outcome of the drill. Athletes expressed when they were unsure what was expected of them because the coach did not clearly communicate with them they continued with their actions, and when the coach finally corrected them on the action, the athletes’ confidence was “messed up” because they assumed they were performing correctly and the correction by the coach was not made immediately. Athlete reported feeling “inferior” and “oblivious” when the coach did not communicate clearly because they assumed one meaning but may have guessed incorrectly. All participants who reported this behavior were clear that this behavior had the largest influence on their confidence and motivation. Overall, responses show an obvious trend that motivation and confidence is enhanced by open, clear, direct communication and harmed by unclear or no communication.

CET and the expectation-performance process do not discuss other forms of coaching behaviors other than types of feedback that enhance motivation and competence. Literature does examine coach leadership styles (autocratic, democratic) and the effects on athlete motivation and competence (Hollembeak & Amorose, 2005; Smith et al., 2010), and coach-athlete
relationships have been examined relating to perception of strength of relationship (Jowett & Cramer, 2010). Leadership studies involved assessment of the coach’s leadership style defined usually as autocratic and democratic. A coach-athlete relationship characterized by communication ability between coach and athlete show some support for the limited research on coach communication style. Communication ability was found to have an effect on athlete burnout, and some connection to perceived competence was found (Vealy et al., 1998). The findings of this study present an interesting result, and should be examined further.

For this study, perceived sport competence did not change, and exposure to more frequent negative coaching behaviors did not affect competence or motivation levels. One explanation for this finding could be athletes’ pre-existing levels of sport competence. Research has shown coaching behaviors affected athletes’ self-esteem levels pre- to post-season when athletes had low self-esteem initially (Smith et al., 1979; 1995). Changes in sport competence could behave similarly. Sport competence may not increase if athletes are highly competent from the beginning. Another explanation could come from the measure used to assess sport competence. Although PSPP-SC mean scores for the low expectancy group indicated they perceived themselves to be the least competent at both time points of all groups, there is not a clear indication of how competent participants felt toward softball. All mean responses indicated athletes felt corresponding statements were only “sort of true” for them. No response from any group indicated the statement was “really true for them.” Even though low expectancy athletes perceived to be not very good at sports, or not among the best, responses did not indicate full commitment to any statement. The use of the PSPP-SC subscale could be a reason perceived competence levels were unclear.
A second explanation to no change in competence or motivation scores for this study could be effects on competence and motivation could be situational as opposed to long term. Horn et al. (1998, 2006) explains the second step of the expectation-performance process progresses if coaching behaviors are consistent over an extended length of time. Most of the qualitative responses describing negative coaching behaviors and feedback were described after a performance attempt. Very few responses concerning this behavior described long-term exposure (e.g., a year or more) to negative treatment. Perceived competence was affected in the situations explained that were short-term, so effects to perceived competence in this study may be limited to isolated instances. Quantitative results gave no indication of when negative behaviors were perceived, and the same conclusion cannot be assumed for these situations; however, the length of the study may not have been long enough to assess lasting impacts on competence. Approximately three months passed between the first and second data collection time point to allow coaches to form sustainable expectations about each athlete, and to ensure participants would not remember questions on the surveys (Gall et al., 2001; Solomon, 2001; Wilson et al., 2006). This period may not have been long enough to reveal consistent exposure to negative behaviors or significant effects on competence or motivation.

Finally, an explanation could be related to the demographic characteristics and motivational profiles of the sample. Research demonstrates perceived competence may be most influenced in younger athletes. Research findings indicate youth age athletes, and athletes who fear failure and disappointment are the most influenced by coach feedback and behaviors (Cronin & Mandich, 2005; Smith et al., 1995; Passer, 1988). Some qualitative research on collegiate athletes examined the perspective of the athletes on the affect of coach behaviors on performance and enjoyment (Gearity, 2011; Gearity & Murray, 2010), but findings were not
supported with quantitative measures. The athletes in this study were 18-22 years old, and may have been past the highly impressionable developmental phase for coaching behaviors to have a lasting effect. The sample as a whole was more self-determined toward softball, and some research on collegiate athletes indicates the dominant motivational drive can influence the athletes’ perception of the coach’s behaviors and leadership style (Amorose & Horn, 2000). Athletes who more intrinsically motivated perceived the coach to display more positive and instructional coaching behaviors with less ignoring behaviors. An individual’s interpretation and experience in any given situation can be vital in determining achievement behavior (Treasure, 1997), and athletes in this study may have had an overall positive interpretation of coaching behaviors. Quantitative analysis showed athletes did perceive negative coaching behaviors to occur much less frequently than positive coaching behaviors. The average scores for all negative behaviors for all three groups showed athletes perceived these behaviors “rarely” or “hardly ever.” Athletes may not have had an overall negative experience, and competence levels may have remained stable because of the athletes’ interpretation of their experiences with their coaches.

Motivation.

SDT (Deci & Ryan, 1985) was used as a guideline for this study for types of motivation and factors affecting motivation. SDT and CET suggest social and environmental factors can enhance or harm intrinsic and self-determined forms of motivation. Becoming aware of what factors in a specific environment affect motivation can help coaches create environments that enhance motivation. As discussed previously, CET provides one path through perceived competence as a method to influence intrinsic motivation. The social factors examined for the purpose of this study were coach feedback and behaviors. CET and research show feedback,
particularly negative, and coaching behaviors can influence perceived competence and simultaneously influence intrinsic motivation (Amorose & Weiss, 1998; Chelladurai, 1993; Deci & Ryan, 2000; Horn, 1987, 2002; Mageau & Vallerand, 2003). Perceived competence and motivation was not significantly altered in this study, and did not provide support for CET.

All athletes in this study were overall more self-determined in motivation to play softball than they were externally driven. The BRSQ rated motivation using a 7-point Likert scale with 1 indicating the lowest levels and 7 indicating the highest level. Across all three expectancy groups, the mean scores at both time points for intrinsic motivation, integrated, and identified regulation were in the five to six range with intrinsic motivation holding the highest mean scores of the three types of self-determined motivation for each group. The mean scores for the three least self-determined types of motivation (introjected and external regulation and amotivation) ranged from one to four. Qualitative findings support this trend because the majority of athletes reported they were motivated to play for their current team either for their teammates, or “the girls,” or because they “wanted to win.” The majority of interview participants admitted they were motivated to play for their current team because they value their teammates and “would do anything for these girls.” Placing personal value on an external factor as a motivator falls under the category of identified regulation and is an extrinsic motivation type that is considered self-determined in nature (Deci & Ryan, 1985). Many athletes most commonly reported being motivated to play softball in general because the “enjoyed” the sport or “had fun” playing. A clear distinction emerged between mean scores for identified regulation and the more extrinsic, introjected regulation. While intrinsic motivation seems to be the strongest predictor of enjoyment and participation levels, individuals also need some higher levels of certain extrinsic
motivation, and participants in this study showed a wide variety of motivational orientations (Vallerand et al., 1998).

One clear explanation for no changes in motivation levels over time could be because perceived competence did not change. CET argues perceived competence is a mediating variable to intrinsic motivation (Deci & Ryan, 1985), and competence levels remained stable for this study meaning intrinsic motivation was expected to remain constant. Another explanation could be the overall motivational orientation of the participants. As discussed previously, research on collegiate athletes has shown athletes’ dominant motivational drive influenced their perceptions of their coach’s behaviors and leadership styles (Amorose & Horn, 2000). Athletes who participated in their sport for more intrinsic and self-determined reasons perceived their coaches to display more positive and instructional feedback and less ignoring behaviors. The sample for this study appeared to show support for this finding through descriptive exploration. Average scores for all forms of self-determined motivation types showed a higher trend than scores for non-self-determined types of motivation for all groups. This indicates the sample may have been already more self-determined to play softball at the start of the study. If the sample was already self-determined toward softball, an increase in these types of motivation may not have been evident (Smith et al., 1979; 1995). Participants still remarked on ignoring behavior; however, the majority of reports were positive. Similar to perceived competence, effects to motivation could be situational rather than long-term.

Quantitative results do not offer information as to situations that occurred close to either time point. Athletes who reported lower levels of self-determined motivation at both collection points may have had a recent negative experience with their coach. Interview responses for this study revealed several behaviors coaches displayed that decreased athletes’ motivation, but
appeared to affect motivation at the moment of occurrence. Athletes’ explained their motivation was decreased by unclear or no communication after a performance attempt or by yelling or negative comments during practices or games. The only behavior that may have occurred long-term was punishment in the form of physical conditioning. Athletes mentioned punishment conditioning frequently as a behavior that decreased motivation, but did not provide details concerning the length or consistency of the behavior. In explaining the expectation-performance process, Horn et al. (1998; 2006) explained consistent exposure to negative coaching behaviors can create negative outcomes for athletes. In general, the coaches in this study did not appear to consistently display negative behaviors toward athletes. Descriptive examination of coaching behavior variables shows negative behaviors were experienced very rarely, and interview responses indicate behaviors occurred immediately following specific incidents. Self-determined motivation may have remained constant because athletes in this study were not exposed to consistent negative behaviors.

Another explanation for constant motivation levels could be the correlation to perceived competence found in the second hypothesis. CET describes perceived competence as a mediating variable to intrinsic motivation indicating the two variables should be correlated (Deci & Ryan, 1985), and research has shown a connection between competence and intrinsic motivation (Amorose & Horn, 2000, 2001; Deci et al., 1999; Whitehead & Corbin, 1991). In this study, perceived sport competence showed a weak negative correlation with external and introjected regulation (least self-determined), but no significant correlation with intrinsic, integrated, or identified regulation at the initial data collection point. Perceived sport competence was positively correlated with intrinsic ($r = .27$), integrated ($r = .29$), and identified ($r = .19$) regulation by the end of the study, but the correlation was weak for all three types of self-
determined types of motivation. The weak post-study correlation showed partial support for CET, but the correlation may not have been strong enough to identify perceived competence as a mediating variable to intrinsic motivation in this study. Because motivation levels did not change, and mimicked competence levels, this conclusion is not certain.

Although full support for CET and research linking perceived competence to intrinsic motivation was not achieved, interesting significant differences in the type of motivation levels between expectancy groups emerged through quantitative analyses. One of the most interesting trends was low expectancy athletes reported being more amotivated to play softball both pre- and post-study than high expectancy athletes, and experienced significantly less identified regulation than both high and average expectancy athletes. The high expectancy group had significantly higher identified and integrated regulation and lower amotivation than low expectancy athletes, and examination of descriptive results for the BRSQ subscales show this group had higher mean scores than all three groups for intrinsic motivation. Research shows athletes who participate in their sport for more intrinsic and self-determined reasons invest more effort, maintain higher levels of concentration, persistent long when confronted with difficulty, develop more adaptive behaviors, and perform better than athletes who are less self-determined (Fortier & Grenier, 1999; Grolnick & Ryan, 1987; Pelletier et al., 2001; Sarrazin et al., 2001; Vallerand et al., 1995). These types of athletes may spend more time practicing a skill and working toward skill mastery, and they may practice more efficiently. For this study, coaches were asked to rate athletes using the MERS scale that allows coaches to provide expectancy ratings based from athletes’ physical and psychological features (Solomon, 2008). Expectancy groups were formed from MERS ratings, and low expectancy athletes showed a clear mean expectancy rating below the average \( m = 2.58 \), and high expectancy athletes showed a clear mean expectancy rating above the
average \( m = 4.58 \). The low expectancy group reported significantly higher levels of amotivation and extrinsic motivation types, and based on research, this group’s motivational orientation may be a contributing factor to low expectancy scores.

For this study, low expectancy athletes were more extrinsically motivated to play softball than high or average expectancy athletes. Although descriptively this group reported higher levels of self-determined types of motivation overall, there were significant differences in these types of motivation with the other two expectancy groups. Particularly, low expectancy athletes had significantly lower levels of identified regulation than average or high expectancy athletes. SDT defines identified regulation as self-determined because the individual chooses to participate in a behavior because he or she has placed value on the behavior even though the behavior is unpleasant. An example relevant to this study could reflect back to findings mentioned in the previous section. Athletes who are more self-determined in motivation have been found to persistent longer, display more effort, and concentrate for longer periods (Fortier & Grenier, 1999; Pelletier et al., 2001; Sarrazin et al., 2001; Vallerand et al., 1995). Low expectancy athletes may find these behaviors, or similar behaviors relating to practice time, unpleasant and have not placed value on the benefits of the behaviors, and high and average expectancy athletes may not find these behaviors pleasant, but still choose to perform them because they value the potential benefits of extra repetitions. This study did not examine low expectancy athletes in complete detail, and the low expectancy group contained only 17 members, so while this finding may show support for literature concerning motivational types, it needs to be examined further with a larger sample size.
**Hypothesis four.**

The fourth hypothesis stated athletes would not experience differential coaching behavior based on group assignment from pre- to post-study. This hypothesis was rejected because there were significant group differences on how frequently athletes reported certain behaviors.

Research demonstrates instances where coaches can influence athletes’ self-esteem through feedback type and coaching behaviors (e.g., technical or corrective instruction) over the course of a season (Smith et al., 1979, 1990, 1995; Stewart & Taylor, 2000). Additional research provides support that coaching behaviors may influence athletes’ perceived competence and motivation to play (Amorose & Horn, 2001; Amorose & Weiss, 1998; Weiss & Ferrer-Caja, 2002). CET suggest if an individual is already self-determined in motivation toward an action or behavior, then social or environmental factors that influence perceived competence will have the same influence on intrinsic motivation (Ryan & Deci, 1985). Research on coach expectations, although inconsistent, has shown high expectancy athletes may receive more instruction, praise, and encouragement than low expectancy athletes (Amorose & Weiss, 1998; Krane et al., 1991; Solomon, 2008; Solomon et al., 1998, 2008). This study concluded expectancy groups did receive differential treatment, and although there were differences between expectancy groups, treatment did not affect motivation or sport competence toward softball. Quantitative results indicated significant group differences, and interview responses supported this finding with 54% of participants indicating athletes perceived differential treatment toward different levels of athletes based on performance ability.

**Low expectancy athletes.**

Low expectancy athletes reported more non-reward (ignoring, less recognition) than average and high expectancy athletes, less corrective instruction and encouragement from pre- to
post-study, and less general communication than high expectancy athletes by the end of the study. Less praise, recognition (or ignoring) shows support for research with low expectancy athletes receiving less overall feedback (ignoring) (Solomon, 1998, 2008). Horn et al., (1984, 2006) argued a self-fulfilling prophecy could occur if coaches consistently portrayed certain behaviors toward athletes over an extended length of time. If feedback or behaviors were negative, athletes could experience harmful psychological effects. Quantitative results offer no support for CET because negative behaviors (social factors) did not harm or enhance competence or motivation levels (Deci & Ryan, 1985). Quantitative results did show support for differential treatment with significant group differences between low and high expectancy groups in frequency of the amount of non-reward and general communication experienced by both groups. Although only non-reward was the only negative coaching behavior with a significant result, low expectancy athletes reported higher mean scores for three of the four negative coaching behaviors assessed by the CBAS.

Qualitative findings show support for quantitative results and indicate a trend for low expectancy athletes receiving more non-reward (ignoring) behaviors. Interview findings showed athletes perceived low expectancy athletes experienced the coach ignoring physical presence, mistakes, or performance attempts, and ignoring behavior was the most common behavior difference noticed toward below average athletes. Some athletes perceived their coach avoided interaction with low expectancy athletes, and some went as far as to admit their coach “most of the time just ignores them,” or the coach “doesn’t really waste her time to get on them” after a mistake. Athletes reported noticing a distinct difference in the “actual physical communication” between below average athletes and higher skilled teammates. Coaches were perceived to avoid interaction with these athletes including spending less practice time with this group. Other
athletes made remarks about lower expectancy athletes during games, “If you’re on the bench she doesn’t always acknowledge what you’re doing to help the team.”

The majority of interview participants self-rated as above or average athletes compared to their teammates, but all of them remarked how witnessing this behavior toward their teammates had a negative effect on confidence and motivation. Coaches who ignore athletes’ performances or physical presence may hinder the athletes’ psychological and performance growth (Horn et al., 2006). Responses in this study allude to ignoring behaviors directed at below average teammates harming not just the targeted athlete but also other athletes on the team. Quantitative and qualitative data for this study indicate teammates and low expectancy athletes perceive low expectancy athletes were ignored, and received more non-rewarding behavior than high expectancy athletes. Unfortunately, these findings show support for a negative environment that could harm motivation and athletic development (Horn et al., 2006).

Low expectancy athletes reported corrective instruction and lower mean scores for encouraging remarks less often by the end of the study, and although significant group differences were not found, descriptive statistics showed low expectancy athletes experienced both behaviors less frequently than either of the two other groups. The decrease in corrective instruction and encouragement was not limited to the low expectancy group. All three groups declined in frequency of these two behaviors from pre- to post-study except the high expectancy group for corrective instruction. Research findings are inconsistent on these results. Some research has shown low expectancy athletes receive less technical instruction and encouragement after mistakes (Krane et al., 1991), and some research has shown low expectancy athletes received the same amount of instruction (Sinclair & Vealy, 1989; Solomon, 2008), more
instruction (Amorose & Weiss, 1998), or more positive reinforcement (Krane et al., 1991) than high expectancy athletes. Interestingly, this study contributes inconsistent results as well.

Encouragement was defined as reinforcement or re-assuring words issued at any point during competition or practice, and not specific to immediately following a mistake. Quantitative results indicate a trend of low expectancy athletes experiencing less encouragement overall, and although results for this behavior were not specific to expectancy group, this finding was consistent with quantitative research in the youth sport setting indicating encouragement is less frequent toward low expectancy athletes (Amorose & Weiss, 1998, Horn, 1984; Rajeski et al., 1979). Qualitative results indicate a trend of these athletes receiving more encouragement than high expectancy athletes. Low expectancy athletes were perceived to receive more encouragement than high expectancy athletes from 10% of the interview participants.

Encouragement was noticed by teammates in the form of “more positive talk” or “a lot more positive reinforcement.” Athletes commented their coach “encourages those [below average] athletes to work hard,” and perceived the coach “may encourage them even more than some of the girls that are starters or a little bit better.” One athlete described her coach as being “a little nicer” to the below average athletes on her team. No interview participants perceived low expectancy athletes received less encouragement. This finding was consistent with qualitative research in collegiate athletics showing low expectancy athletes received more positive reinforcement (Krane et al, 1991). Although this coaching behavior does not comprise a large portion of the qualitative findings, there is some indication of low expectancy athletes receiving more encouragement than high expectancy athletes, and this result should be examined more directly in the future.
Corrective instruction was observed similarly as encouragement for expectancy groups. Low expectancy athletes reported overall lower mean scores, and low and average athletes experienced a decrease in frequency from pre- to post-study, but no significant difference between expectancy groups was found. This study returned inconsistent results for this behavior as well. Quantitative results indicated a trend of decreased corrective instruction for low expectancy athletes and are consistent with research in the collegiate and elite athletic environment (Krane et al., 1991; Sinclair & Vealy, 1989). Similarly, interview participants reported below average athletes received less corrective instruction by some coaches. Corrective instruction was directly related to practice time since practice time was generally when coaches would instruct. The responses for this portion perceived below average athletes received less practice time and therefore less corrective instruction. Less instruction was evident through athletes noticing the coach “doesn’t give them as many chances or reps as the stronger players,” or “the starters get to do all the stuff, and they have the opportunity to get better.” This behavior was often mentioned when athletes noticed the coach ignored below average athletes. The general perception was “players that are important to the team” received the most practice time and attention because they were the most needed for success.

However, qualitative findings were inconsistent on this behavior with 15% of participants reporting below average athletes received more corrective instruction, and 12% perceived they received less corrective instruction. Participants perceived more instruction as “giving them the attention they need,” or being “more verbal with instructions with them.” Some increased corrective instruction was perceived through the coach being “more patient with them when they are trying to learn something,” or the coach may “spend more instruction time with them” until they “get things right.” This finding is consistent with research in the youth sport setting where
low expectancy athletes received more instructional feedback (Horn, 1984). Other research has shown no difference in the frequency of corrective instruction between low and high expectancy groups (Solomon, 2008), but no previous literature examined for the purpose of this study reported decreases in this behavior or encouragement from pre- to post-study across all groups.

One explanation for the decrease in behavior frequency for all groups could be the timing of the data collection points. The first data collection point occurred in the middle of the fall practice season. Fall practice season, August through November, is considered the time when coaches provide the most instruction because competition season does not begin until the month of February. Athletes may have perceived more corrective instruction and encouragement initially because they were in the middle of a heavy instruction period. The beginning of the academic year is the start of the fall practice season. Coaches use this period to introduce new athletes (e.g., freshman, transfer athletes) to the learning style and selected coaching philosophy. Returning athletes need to adjust from a summer season characterized typically by individual practice or no practice. Coaches provide heavy, broad technical instruction to help athletes adjust to team practice.

The second data collection point occurred the second week in January, at the start of the pre-season. Some athletes were still returning to campus and team practices from the winter break session. Practices may not have been in progress for some athletes, and perceptions of coaching behavior could have been memories of what athletes remembered from their last practice sessions in the fall. Another explanation could be the nature of the pre-season instruction. Many teams have six weeks of pre-season after athletes return to campus from winter break. The fall practice season includes broad, intense instruction, and the winter pre-season involves skill specific instruction and cohesion to prepare athletes for the competition season.
Once athletes report to campus at the start of the pre-season, the usual period before competition season begins is a six to seven week period. Coaches may be in a different mind-set as they prepare for the rapidly approaching competition season. Coaching approaches could shift from patient, encouraging instruction with large amounts of correction to a more urgent style with less encouragement because of the stress of the approaching season.

Low expectancy athletes reported receiving less general communication than high expectancy athletes. This finding is consistent with research that has found low expectancy athletes receive less overall feedback including technical instruction, praise, encouragement after mistakes, and interpersonal contact than high expectancy athletes (Amorose & Weiss, 1998; Horn et al., 1998; Krane et al., 1991; Solomon, 2008). An interesting trend is low expectancy athletes reported descriptively higher levels of general communication at the end of the study. This trend has not been shown in the previous literature, and is encouraging. Horn et al.’s (1998) examination of differential treatment illustrates how low expectancy athletes could receive less communication overall which could lead to negative psychological influences on the athlete that would ultimately harm performance. Low expectancy athletes reporting higher frequencies of general communication is a positive finding because coaches did not completely ignore the athletes’ presence and were perceived to make more of an effort to communicate with this group of athletes by the end of the study. The coach is still showing an effort to include the athlete in conversation and keep her involved despite the expectation of the athlete.

Another interesting result was the differences between the MANOVA and repeated measures ANOVA results for encouragement, reward, and corrective instruction. MANOVA indicated significant differences between low and high expectancy athletes for these behaviors, but ANOVA results did not show the same differences. MANOVA is an omnibus analysis that is
used to gain a general observation of the effect of the independent variable (expectancy group) on multiple dependent variables (perceived coaching behaviors). MANOVA tests if there is a significant difference between groups based on the combination of the dependent variables, and ANOVA analyzed group differences on single dependent variables. The results from the MANOVA analyses show group differences at two separate time points, and may offer support for effects of coach behaviors being situational rather than long term. Repeated measures ANOVA showed results over time, and may further support most effects are short-term. Further examination should study the combination of dependent variables in the future.

One final trend that deserves attention is the examination of descriptive mean scores for all coaching behaviors. Examination of average scores for each perceived coaching behavior measured by the CBAS reveals low expectancy athletes reported higher frequencies of negative coaching behaviors (e.g., non-reward, punishment, ignoring mistakes) both pre- and post-study than the other two groups. High and average expectancy athletes reported the highest frequencies at both time points for all positive coaching behaviors (reward, encouragement after mistakes, corrective instruction, keeping control, instructions, encouragement, organization, and final general communication). An important note is negative coaching behaviors were reported “hardly ever” or “seldom” by all three groups indicating these types of behaviors were not frequent. As previously discussed, even though these findings are not significant, the trend of low expectancy athletes perceiving more negative coaching behaviors demands further attention.

**High expectancy athletes.**

High expectancy athletes experienced fewer non-rewarding behaviors than low expectancy athletes, less organization than average expectancy athletes, and more general communication than low expectancy athletes by the end of the study based on quantitative
results. Average expectancy athletes reported similar frequency of those two behaviors and are included for discussion purposes in the high expectancy group. Qualitative findings found high expectancy athletes (above average skill level) were thought to receive more skill testing, practice time, more praise, and were held to an overall higher standard than low expectancy (below average skill level) athletes. The finding of less ignoring (more attention) supports research showing high expectancy athletes receive more overall and higher quality feedback (Sinclair & Vealy, 1989; Solomon, 1998, 2008). Qualitative findings showed support for this finding as well. Athletes perceived above average teammates received more instruction, attention, and positive recognition accounting for 37% of all responses. Athletes noticed their coaches would “give more corrections to a better player than one that isn’t as good.” Others noticed extra instruction (including feedback) occurred during privately scheduled individual sessions reserved for the above average athletes. Some athletes perceived more feedback between the coach and above average athletes through “attention,” and noticed the coach would “give more attention to those that are more important to the performance of the team.” An interesting trend noticed through examination of descriptive statistics from the CBAS scale indicates high expectancy athletes reported more instances of corrective instruction paired with punishment than low expectancy athletes. Although not a significant finding, qualitative findings offer some support for this trend. Participants did not report any instances of punishment directed at above average athletes, but they did notice coaches responded differently after a poor performance by “getting on to them more,” or by pushing “them to make better plays.” Punishment was not mentioned, but the extra pushing or “getting onto” should be examined further to provide additional support for this finding. This trend was related to the perception that above average athletes were held to a higher standard.
Many responses indicated a higher standard for above average athletes was evident through the coach’s choice in type and quantity of feedback after a performance attempt. Athletes who were not in the high expectancy category noticed more encouragement or excitement after a performance than there would have been if the high expectancy athlete had performed the same skill. Most participants knew above average athletes were held to a higher standard based on the response they received after certain skill performances. For example one average athlete explained, “When they make an outstanding play, it is not as exciting as it would be if I made an outstanding play.” Others believed above average athletes received more limit testing and shared, “She has higher expectations for them, and she pushes them to make better plays.” Some athletes knew a different standard was in place for themselves by the amount of correction issued to above average athletes because they noticed instances similar to this example, “He will get on me more just because he expects more.” Below average athletes noticed their coach did not interact often with above average athletes “unless they do bad.” Research on collegiate and elite level athletes has shown high expectancy athletes received more overall feedback, and more feedback that was specific to skill evaluation (Krane et al., 1991; Sinclair & Vealy, 1989). This finding is not surprising considering support from previous literature. Although there was a significant difference in frequency of encouragement from initial to final data collection points, high expectancy athletes, on average, reported experiencing encouragement more often than low expectancy at both time points. As discussed previously, this trend is consistent with some research indicating high expectancy athletes receive more encouragement, praise, or positive reinforcement (Amorose & Weiss, 1998; Horn, 1984; Solomon, 2008).
Another finding was the significant finding of high expectancy athletes experienced less general communication by the end of the study, but still received more than low expectancy athletes at both time points. As mentioned several times, research has found high expectancy athletes tend to receive more overall instruction and feedback (Amorose & Weiss, 1998; Sinclair & Vealy, 1989). Qualitative findings for this study showed evidence that could potentially support previous findings. A friendlier, positive relationship between the coach and above average athletes was noticed by 10% of interview participants. This type of coach-athlete relationship included the coach spending more time outside of softball related functions to interact with above average athletes. Other teammates perceived the coach communicated with above average athletes “like they [the athletes] are on their level.” Other athletes categorized a relationship that appeared to be the coach acting “buddy-buddy” with these athletes. A few athletes believed their coach “enjoyed being around” above average athletes more often. Qualitative findings for this behavior were not a major theme for the study; however, considering the research they should be mentioned. High expectancy athletes reported initial higher levels of general communication, but the decrease in frequency of this behavior cannot be explained by the nature of this study. The overall results of this study produced support for previous findings concerning general communication.

**Average expectancy athletes.**

The average expectancy athletes presented a different angle for data interpretation. Concerning perceived coaching behavior they reported similar mean scores as the high expectancy group with lower instances of ignoring behavior than the low expectancy group, decreased corrective instruction and encouragement pre- to post-study; however, this group experienced more organization than high expectancy athletes. Descriptively, average expectancy
athletes had similar perceptions of coaching behavior as high expectancy athletes. Initially, examination of descriptive data showed this group reported experiencing more positive coaching behaviors than high and low expectancy athletes (e.g., reward, encouragement after mistakes, corrective instruction, instructions, encouragement, organization). By the end of the study, high expectancy athletes reported higher mean scores for more positive coaching behaviors than the remaining groups (e.g., reward, encouragement after mistakes, corrective instruction, and general communication). Interestingly, although this group perceived coaching behaviors and motivation levels similar to high expectancy athletes, perceived competence scores were similar to low expectancy athletes. Average athletes were mostly self-determined in motivation to play softball, but they reported perceiving their competence to be low (e.g., not one of the best, slowest to learn new skills).

Concerning motivation level, average expectancy athletes reported a mixture of self-determined and external motivation with the majority of findings being similar to high expectancy athletes. However, average expectancy athletes were significantly higher in introjected regulation than high expectancy athletes. Introjected regulation typically involves mostly external motivation to avoid guilt, anxiety, or to enhance the ego (Deci & Ryan, 1985). The average expectancy group reported higher mean scores for corrective instruction accompanied by punishment at the end of the study than any other group. This group’s perceived sport competence scores show a trend for lower confidence and competence overall than high expectancy athletes and similar scores as the low expectancy group. Following the guidelines of SDT, one explanation for the significantly higher levels of introjected regulation among this group may have been to avoid punishment or guilt for not performing a skill correctly as depicted by the descriptive trends, or to enhance confidence levels.
Average athletes had lower perceptions of competence, but similar to previous discussion, they did not fully commit to a response. All statements from the PSPP averaged as “sort of true” for average expectancy athletes. Issues with the PSPP-SC subscale apply to this group, and the true initial level of sport competence may not be evident. Most significant results showed average expectancy athletes were similar to high expectancy athletes excluding previously discussed introjected regulation levels, and in the perceived coaching behavior of organization. This group perceived their coach displayed more organizational behavior than high expectancy athletes. Organizational behavior included smooth operation of practices, equipment, and game situations (Cumming et al., 2006). Because this group was overall self-determined in motivation, this finding could show support for research showing athletes who were more self-determined perceived their coaches to display more positive and informational feedback (Amorose & Horn, 2000). Organization requires information to be transmitted to athletes, and may fall within the same category as informational feedback. High expectancy athletes were the most self-determined group, yet they perceived lower levels of organization. An explanation for this difference could be high expectancy athletes in this study received more playing and practice time meaning they were involved in skill performance more often. Average expectancy athletes may not be actively participating on the field in games or practices as often (e.g., non-starters), and may spend more time in the dugout around the coach. These athletes may have more opportunities to witness organizational behaviors than high expectancy athletes because of their playing roles.

There was no research found for the purpose of this study examining perceptions of average expectancy athletes, yet this group comprised more than 40% of participants. The results of the average expectancy group were interesting. Many teams contain a mixture of all skill level
athletes, so the result of an average expectancy group is not surprising. Average expectancy athletes in this study had a combination of characteristics from the low and high groups and were unique. Considering the large percentage of these athletes and distinct results for this study, this population should be examined in further detail and included in future research examining expectancy groups.

Implications for Higher Education Practice

Intercollegiate athletics have been in the spotlight for years for positive and negative reasons. Unfortunately, negative situations seem to be what society remembers about athletics, and the results of this study are relevant to today’s collegiate environment. With the many documented benefits of sports participation for female athletes, and the determination of previous female athletes to gain equal access into the athletic environment, sports participation should be a positive experience for all involved in the process (Fields, 2005; NCAA, 2007; Sabo et al., 1989, 1998). This section provides future recommendations for collegiate athletic coaches and administrators to assist in deterring negative coaching behaviors.

Athletic coaches.

Overall, results for this study indicate athletes perceive coaches treat players differently based on performance expectations. Some treatment was positive based on qualitative results. Athletes believed for the most part coaches provided more instruction and encouragement to low expectancy athletes. However, athletes reported a consistent observation of ignoring or non-rewarding behaviors directed not only to low expectancy athletes but to all athletes. Research has indicated that coaches are largely unaware of behaviors they display consistently to athletes during practices or games (Smith et al., 2006; Krane et al., 1991). Coaches should take progressive steps to assess their actions and words directed to the athletes they coach.
Self-assessment can occur through several methods. One method is to hire an external or internal behavior assessor. Coaches can request or hire an internal or external individual with athletic background and training to observe and offer a report of perceived coaching behaviors and athlete perceptions. External assessment is a common practice in the health professional industry, and internal assessment occurs to some degree in most programs (Shaw, 2001). Assessment could be formal or informal depending on the need of the team. Assessment should consider the athletes’ perspective, but conclusions should not be dependent on athlete responses alone. Coaches can self-assess by videotaping practice sessions and games at angles that show themselves on the film, and should observe feedback (verbal and nonverbal) and behavior during practices and games. Many coaches video record competition games for mechanical analysis or strategy, and including analysis of behaviors could be added. Coaching staff members can assist each other by observing interactions with the coaching staff and listening to feedback from the athletes. Part of the challenge is making coaches aware of behaviors and consequences of behaviors. Once coaches become aware of how they are affecting athletes, behavior changes can begin that will benefit the coach and the athletes.

Once behavior is identified and recognized, coaches should seek the services of specialized professionals or programs on-campus that will assist in modifications. Considering the finding that communication style was a major contributor to confidence and motivation levels, coaches should examine their communication practices with their athletes. Almost every athlete was more confident and motivated when her coach was open and clear about expectations or corrective instruction. Many universities house a career center, counseling center, or counseling program on-campus or within proximity for university staff and students to use. Licensed counselors are trained professionals with expertise in behavior and communication.
assessment, and are equipped to help individuals show developmental growth (ASCA, 2012). Counselors may provide assistance with a variety of issues between coaches and athletes. Other qualified professionals are licensed sport psychologist. These professionals have extensive background and training with issues pertaining specifically to athletics (APA, 2013). Some universities do not have the financial stability to employ a full-time sport psychologist on campus. Sport psychologist can be hired on a temporary basis, and can be shared by several sports teams. Universities that maintain graduate programs specializing in sport psychology may be able to provide upper level graduate students under supervision of a faculty member as some assistance.

Coaches may benefit by forming a more personal relationship with the athletes. Personal relationships in this instance are not relationships that would be considered inappropriate employee behavior. Relationships relevant to the results of this study are positive coach-athlete relationships that include the coach understanding and knowing each athlete on an individual level. Athletes reported increased confidence and motivation when coaches understood what types of feedback and interactions athletes needed to succeed. Coaches should know what athletes’ technical and psychological strengths and weaknesses are so the coach can create an environment that will enhance confidence and motivation in each athlete.

Coaches may benefit from a strong educational background including, but not limited to, courses studying sport management, sport psychology, coaching education, and student development theory. Many universities offer undergraduate and graduate programs and courses in these areas. Many coaches employed as full time staff already have a bachelor’s degree from an accredited university. Coaches should seek opportunities for continuing education. Some universities, like the University of Mississippi and Florida State University, offer employee
tuition assistance programs that will contribute financial assistance for staff to enable interested staff members to attend graduate programs as a part-time student (UM, 2013; FSU, 2013). Other institutions offer online degree programs that specialize in coach education similar to the programs offered through Georgia Southern University and the University of Southern Mississippi (GSU, 2013; USM, 2013). Some professional organizations offer courses that provide additional training over the course of several weeks spaced throughout the calendar year similar to the courses offered in the Coaches College through the National Fastpitch Coaches Association (NFCA, 2013). Coaches should encourage professional organizations to include both applied and research-based courses and presentations. Some organizations rely almost entirely on experience-based or applied information, but much can be learned from studying research findings. A combination of the two approaches would provide a more complete assessment of the athletic environment.

Coaches should explore the possibility of joining more than one professional organization to ensure they are exposing themselves to all possibilities for learning. For example, the Association for Applied Sport Psychology (AASP, 2013) and the College Sport Research Institute (CSRI, 2013) offer professional development opportunities for members. These organizations provide yearly national and regional conference meetings with research-based presentations and discussions. Coaches should be pro-active in learning new skills, new concepts, and new information concerning athlete development. Professional growth may require examining opportunities outside of sport specific organizations. Coaches must be committed and open to the possibility of self-assessment and continuing education for behavior changes to occur. Coaches are in too powerful of a position to affect athletes both personally and athletically for them to be uneducated or unaware of behaviors.
Athletic administrators.

Athletic administrators at the collegiate level can encourage and assist coaches in providing successful and fulfilling playing experiences for collegiate athletes. Administrators have the authority and resources to provide coaches and athletes with the necessary supplemental materials and opportunities to enhance athletes’ athletic performance. Recommendations for athletic administrators begin with the hiring process. Administrators should put in the necessary time and commitment to research coaching candidates thoroughly. Research should include inquiry into the candidates’ past coaching experiences, or playing experience, through communication with not only listed professional references but other administrators and trusted sources within the specified sport. Administrators should be educated on each sport’s characteristics and successful coaching practices specific to each sport.

Administrators should have professionally developed interview questions and have received training in the hiring process to ensure the appropriate questions are asked, and to be able to understand the implications of certain responses. Administrators should not hesitate to ask candidates about previous negative or questionable instances if applicable. The hiring process may be more effective if the process simulated the faculty hiring process by asking coaching candidates to present a presentation specific to short and long-term goals for the program or demonstrate skill instruction. Candidates could be interviewed by selected team members and other professional staff members outside of the search committee to allow for additional perspectives. This process is similar to the faculty candidate hiring process at many institutions. The University of Virginia posts a public checklist of the hiring process including student interviewers (UVA, 2013). Once a coach is selected, administrators should provide a pre-
developed training session on appropriate and expected behaviors within the given athletic department.

Administrators should encourage or require, and provide opportunities for continuing education for head coaches and their staff members. Continuing education could be offered through guest speakers or instructors invited to campus, weekend or limited period courses, or financial assistance to attend outside courses and conferences. As mentioned previously, some universities offer employee tuition assistance programs, and administrators should encourage coaches to use these programs to continue education. If these programs do not exist, administrators should advocate for implementation of such programs to the university’s executive administration. Many professionals are required to complete a specified number of continuing education units (CEU’s) over a period as required by the profession (e.g., teachers, health professionals) (NursingCEU, 2013; TECU, 2013). Administrators should consider requiring continuing education unit requirements to ensure coaches are receiving current information about their profession.

Many athletic departments struggle with financial issues that may limit the amount of continuing education for college coaches the department can provide. Administrators should encourage coaches to budget education opportunities each year, or participate in fundraising opportunities that would provide additional financial resources. In these situations, administrators should provide coaches with training on how to re-structure team budgets to include financial support for continuing education, how to raise money following compliance rules, and how to make revenue effectively and efficiently.

Finally, administrators should maintain open communication with both coaches and athletes so administrators can prevent potential damaging events. Athletes in this study were
honest and forthcoming during the interview process. They enjoyed sharing about their experiences even if some were negative. Administrators should create a safe environment for athletes and conduct both formal and informal interviews at randomly selected times to assess the environment and the influence of the coach. Administrators should hear the perspective of enough athletes to assess if certain themes are emerging. Coaches should be informed of the results of these athlete assessments (positive or negative) at appropriate times during the academic year. Administrators have the responsibility to inform coaches if athlete interviews reveal a potential negative trend, and provide coaches with resources to enable the coach to correct the issue. Athletic administrators serve an important role in the success and development of athletic coaches and athletes. Administrators should take a proactive approach to the hiring process and continuing education for coaches. Administrators should be diligent in their efforts to hire qualified coaches with appropriate personal characteristics, and remain proactive and involved with the team and staff to avoid as many negative effects on athletes’ motivation and competence as possible.

Implications for Future Higher Education Research

Through the course of this study on female collegiate softball athletes, several areas for additional research emerged. First, an interesting concept that emerged was participants reported negative behaviors affected perceived competence and motivation, but effects appeared to be short-term and situational. Horn et al. (1998, 2006) stressed repeated, consistent exposure to negative coaching behaviors could lead to negative effects on athlete self-perception variables. Research should continue to exam this finding to evaluate more specifically how long the exposure period is, and to define more clearly how often behaviors occur before a negative result occurs. Specific indications can be useful for positive effects as well, and can offer a guide to
better educate coaches to the limits female collegiate athletes hold. Consistent with this topic, research should examine how long after exposure to negative behaviors did feelings of decreased confidence or motivation last for different expectancy group athletes. This information may be individualized, but will provide a more in-depth examination of expectancy athletes. Future research may extend to include coach education on a strategic plan of how to improve motivation and competence in athletes during this window of opportunity if one does exist.

Second, the role of perceived competence for this sample was not clear. Research should continue on the effects of coach expectations and behaviors, but extend to the basic needs theory including perceived autonomy, relatedness, and competence. SDT includes basic needs theory that states individuals must have three basic needs fulfilled before they will feel intrinsically motivated toward a behavior (Deci & Ryan, 1985). Female collegiate athletes may have a stronger need for autonomy or relatedness toward their sport, and more examination of the relationship of these variables needs to be done to determine how to best enhance female athletes’ self-determined motivation. Research should extend to examine differences between expectancy groups on motivational orientation and the three needs to establish if different types of expectancy athletes have different amounts of importance placed on specific needs. This type of information will contribute to existing literature on motivation and SDT, and will provide more material to assist in coach education on female collegiate athletes.

This study examined one population with a sample of Division I female softball athletes. Research on coach expectations and behaviors in connection to motivation should extend to all levels of collegiate sports (e.g., Division II, Division III, NAIA, Junior College) and other female collegiate sports teams. Research on motivation with these types of athletes needs to be extended and examined for consistencies and differences. Female athletes at other divisions of collegiate
athletics may not have the same motivational orientations, perceptions, or respond similarly to the athletes used in this study. More needs to be accomplished to better understand female athletes so coaches can be better prepared for motivation issues. Softball teams used in this study were considered team sports because competition cannot proceed without a certain number of athletes on the playing field at one time, but individualistic athletic teams exists (e.g., tennis, diving, gymnastics, rifle) where athletes are members of a team, but competitions are more dependent on athletes competing one athlete at a time. Motivation and coaching behavior research needs to extend to these sports teams to enhance the understanding of motivational profiles and behaviors across all types of female collegiate athletic teams.

This study had a coach sample consisting of 70% female coaches compared to male coaches. Research examining the differences between male and female coaching behavior is encouraged. Information from this type of research can be used to educate coaches on self-assessment and possible tendencies so coaches can become more aware of their perceived coaching style. Limited current research exists examining the influence of coach gender on female collegiate athletes’ perceptions, motivations, or performance (Holmen & Parkhouse, 1981; Tomlinson & Yorganci, 1997; Weinberg, Revels, & Jackson, 1984). More needs to be accomplished to understand gender interactions and behaviors between male coaches and female athletes and female coaches and female athletes at the collegiate level.

This study used self-report measures to assess coaching behaviors and relied on athletes’ perceptions of behaviors. A more complete and comprehensive approach should be taken to truly understand coaching behaviors, and to distinguish between perception and reality. Future research should include more efforts to visually code behaviors and compare results with responses indicating athlete perception to gain a better understanding of the differences between
perception and actual behavior. Any differences should be examined further to better understand why athletes’ perceptions are not consistent with observed behavior. Results from these types of studies will help coaches know if what they think they are doing is what the athletes perceive to be happening. Behavior adjustments can occur if coaches know perceptions of behaviors and observed behaviors are inconsistent. Self-report measures are more efficient for quickly collecting large quantities of data, but issues with self-report measures may contribute to inconsistencies in findings (Podsakoff & Organ, 1986).

Finally, research in the sport psychology or athletic setting should include more mixed methods research designs. Much of research has relied on quantitative measures to base concepts pertaining to athlete and coach behaviors, motivation, and many other variables within the athletic domain. This study used a mixed methods approach, and several themes emerged that were not consistent or acknowledged in results produced through purely quantitative methods. Using participant perceptions combined with quantitative analyses may help provide more conclusive, accurate, and holistic results rather than relying on one method. Research involving athletes should continue to include more mixed method approaches to strengthen the quality of results produced so audiences are better informed of the issues of examination (Munroe-Chandler, 2005; Poczqardowski, Barolt, & Jowett, 2006).

Implications for Higher Education Policy

The results of this study raised issues with higher education’s responsibility to student-athletes relating to continuing education for coaching staff and assessment. Athletic departments are unique organisms because they function as part of the university in some aspects, but remain separate from academic-related issues, practices, and policy. Collegiate athletic teams are comprised of students who attend the university, and the university as a whole shares
responsibility of the development and well being of the athletes with the athletic department staff. Institutions should consider implementing policies within the athletic department that will encourage continued education for all coaching staff members, and thorough assessment of coach approaches.

Continuing education units (CEU’s), as previously discussed, are a requirement for health, primary and secondary education, financial, judiciary, and management professionals (Harris, 2010; NursingCEU, 2013; TECU, 2013). Higher education and staff associated with higher education including faculty members and coaches are not required to maintain a specified number of CEU’s each year. Professional development opportunities are provided in some instances through membership of professional organizations, guest presentations, or short-term courses located on-campus or at participating locations, but continuing education is not enforced. The University of Maryland Baltimore County (1999) offers suggestions and solutions to the organizational structure of continuing education programs and may be used as a guide for a condensed version within athletic departments. Coaches are in powerful positions to influence athletes’ perceptions of their entire playing experience (Wang et al., 2009) and could affect performance outcomes. Institutions should require coaches to continue education through the course of employment, or at the least offer additional coach training, to encourage coaches to continue learning characteristics about the types of athletes they coach. The more coaches understand about the athletes’ motivation, perceptions, and personalities the stronger the strategies for overall athlete development become. Coaches may be able to create a more holistic approach to their coaching philosophy that will be consistent with the culture of the university.

Another suggestion for higher education is to create policies implementing thorough assessment of the hiring process. The hiring process for faculty members is rigorous and
thorough (UVA, 2013), but the process provides multiple opportunities for current faculty and students to assess the quality of the candidates’ instruction, communication, and research style for the best fit for the particular academic program. Institutions should consider implementing policies requiring athletic departments follow the same format as the faculty hiring process. Coaches are in similar positions as faculty members, and institutions place tough demands on faculty who have comparatively limited contact with students. Coaches have more overall and consistent contact with student-athletes, yet the hiring process is often informal, not thorough, or inconsistent across the department. Policy-makers should be proactive in assisting the athletic department with the hiring process, and should consider offering specialized interview training to staff members to provide a solid foundation for staff who serve in supervisory roles. Institutions should be diligent in efforts to assure athletic administrators are hiring the most qualified and appropriate candidate for each team. Hiring policies should include required and suggested methods of professional reference and character research for serious candidates.

Policy-makers should re-examine the assessment process of coach performance each year. Quantitative and qualitative measures should be combined and studied for accurate information regarding coach behaviors. Assessment should occur at the completion of each competitive season, but also throughout the course of the academic year to ensure administrators, coaches, and athletes perceive situations similarly. Institutions should consider conducting sporadic assessments of the coaching staff using both internal (individuals outside of the athletic department but associated with the university) and external assessors to gain a thorough understanding of how athletic administrators and coaching staff are enabling student-athletes. Strict policy should be in place and enforced for inappropriate behavior or treatment from staff to athlete. Any policy related to the well being of any student should be enforced efficiently, and
guidelines should be clearly and consistently communicated to all staff so each person understands how to follow the policy.

**Summary**

This concurrent, embedded mixed methods study sought to explore the effects of coach expectations on female athletes’ motivation to play softball. Quantitative data and analysis was the focus, and qualitative findings were gathered to enhance quantitative results. Quantitative data was collected through four self-report measures, and assessed coach expectations, athletes’ perceived coaching behaviors, sport competence level, and motivation level in accordance with SDT (Deci & Ryan, 1985). Statistical analyses were guided by four null hypotheses: (1) no distinct expectancy groups would emerge from pre- to post-study indicating coaches’ high or low expectations about athletes, (2) perceived sport competence would not be correlated with intrinsic motivation or with other forms of self-determined motivation, (3) athletes would not experience a change in sport competence of self-determined types of motivation from pre- to post-study, and (4) athletes would not perceive different coaching behaviors based on group assignment over the course of the fall season.

Perceived sport competence was positively correlated, although weak, with the three most self-determined types of motivation at the final time point. Motivation and sport competence levels did not change significantly from pre- to post-study. Coach expectancy ratings showed a significant difference between three types of expectancy athletes: low, average, and high expectancy. Low expectancy athletes had significantly lower levels of the self-determined types of motivation of integrated and identified regulation than average or high expectancy athletes. Low expectancy athletes had descriptively higher levels of amotivation than other expectancy athletes by the end of the study. Low expectancy athletes reported significantly
higher frequencies of non-rewarding (or ignoring behavior) than other groups, and less general communication than high and average expectancy athletes. High expectancy athletes showed descriptive trends indicating this group was more intrinsically motivated than other expectancy athletes, and they reported lower levels of amotivation and introjected regulation than the other groups. High expectancy athletes reported overall lower instances of ignoring behavior than other expectancy athletes. Average expectancy athletes reported significantly higher levels of introjected regulation (extrinsic motivation) than high expectancy athletes, but higher levels of self-determined motivation (integrated and identified regulation) than low expectancy athletes. At the beginning of the study, average expectancy athletes had higher levels of amotivation than high expectancy athletes, but perceived more organizing behaviors from the coach than high expectancy athletes. The perception of frequency of corrective instruction and encouragement changed from pre- to post-study with groups experiencing both behaviors less often from the beginning of the fall season to the beginning of pre-season.

The qualitative portion of this study was guided by the following research question: How do athletes perceived their head coaches to affect their intrinsic motivation to continue playing softball for their current team? Specifically, what types of coaching behaviors do athletes perceived to alter their motivation to play softball? These questions were answered through phone and email interviews guided by a structured interview question protocol. An inductive analysis of each response resulted in four main themes that emerged indicating how athletes believed their head coach affected their motivation to play and confidence in their ability. The four main themes were: (a) perceived competence, (b) coach behaviors and feedback, (c) perceived coach-athlete relationship, and (d) perceived treatment. The most prominent theme that emerged overall that affected competence and motivation levels was part of the coach-
athlete relationship and was coach communication style. Athletes were the most motivated and confident when their coach displayed open, clear, direct communication concerning corrective instruction, performance expectations, and recognition. Athletes were the least motivated or confident when the coach did not communicate, or ignored, performance attempts or physical presence.

Based on the findings from this study, recommendations were made to inform future higher education practice, research, and policy. Recommendations for future practice were specific to collegiate athletic coaches and athletic administrators. These recommendations included providing opportunities and encouraging continuing education or training for coaches, evaluating the hiring process, and ensuring proper assessment techniques of coaching behaviors and performance. Recommendations for future research included further examination of the role of perceived competence in motivation, the duration of lowered competence and motivation after a negative instance, extension of mixed methods research designs in sport psychology research, exploration of coach gender differences and associated coaching behaviors with female athletes, and motivation and competence in congruence with coaching behaviors with other types of sports teams and athletes. Policy suggestions included formal implementation of continuing education units, assessment and training of the staff hiring process, and assessment of athletic department staff performance in relation to coaching behaviors.
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Title IX, 34 C.F.R. § 106.1et seq.


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U.S. Const. amend. XIV, § 1.


LIST OF APPENDICES
APPENDIX A: IRB APPROVAL NOTIFICATION
https://mail.google.com/mail/u/0/?ui=2&ik=46a0a992a7&view=pt&search=inbox&msg=13a0886c0dfbbd4f
Megan Buning <meganm@go.olemiss.edu>
IRB approval of protocol 13X-059, "The Affect of Coach Expectations on Female Athletes’ Motivation on Play: A Mixed Methods Approach"
irb@olemiss.edu <irb@olemiss.edu> Thu, Sep 27, 2012 at 11:19 AM

To: "Megan M. Buning (meganm@go.olemiss.edu)" <meganm@go.olemiss.edu>, LORI A WOLFF<lawolff@olemiss.edu>
Cc: TIMOTHY D LETZRING tdl@olemiss.edu

Ms. Buning:
This is to inform you that your application to conduct research with human participants, “The Affect of Coach Expectations on Female Athletes’ Motivation on Play: A Mixed Methods Approach” (Protocol 13X-059), has been approved as Exempt under 45 CFR 46.101(b)(2).

Please remember that all of The University of Mississippi’s human participant research activities, regardless of whether the research is subject to federal regulations, must be guided by the ethical principles in The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research. It is especially important for you to keep these points in mind:

• You must protect the rights and welfare of human research participants.
• Any changes to your approved protocol must be reviewed and approved before initiating those changes.
• You must report promptly to the IRB any injuries or other unanticipated problems involving risks to participants or others.

If you have any questions, please feel free to call me at (662) 915-7482.

Diane W. Lindley
Research Compliance Specialist, Division of Research Integrity and Compliance Office of Research and Sponsored Programs
APPENDIX B: OUTSIDE INSTITUTION IRB CONSIDERATION
Dear IRB:
I am a University of Mississippi doctoral student hoping to recruit research participants from your school. My IRB requires that I ask you whether or not you wish to review my EXEMPT study. The title of my study is “The Affects of Coach Expectations on Female Athletes’ Intrinsic Motivation to Play: A Mixed Methods Approach.” My data collection includes online surveys and phone or email interviews. My protocol number is 13X-059.

My study has been approved by the University of Mississippi IRB as EXEMPT under 45CFR46.101(b)(2), and the approval letter and the protocol application by the IRB are attached. I will be the only researcher, and I will not physically be on campus at any point during the study. Recruitment will occur by contacting the head coach and asking the coach to forward electronic surveys to athletes.

Please let me know whether or not you wish to conduct a review of my research before I can proceed with recruitment. I must forward my IRB your decision before I am permitted to recruit at your school.

If you require review, I will certainly comply with all of your policies and procedures.

Thank you for your time,

**Primary Investigator**
Megan Matthews Buning, M.S.
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**Advisor**
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(662) 915-5791
lawolff@olemiss.edu
APPENDIX C: COACH PARTICIPANT CONSENT FORM
Information Form (Electronic)

**INFORMATION ABOUT A RESEARCH STUDY**

**Title:** Affect of Coach Expectations on Female Athletes’ Motivation to Play

**Primary Investigator**
Megan Matthews Buning, M.S.
Department of Leadership & Counselor Education
141 Guyton Hall
The University of Mississippi
(662) 801-8192

**Advisor**
Lori A. Wolff, Ph.D., J.D.
Department of Leadership & Counselor Education
139 Guyton Hall
The University of Mississippi
(662) 915-5791

**Description**
I want to explore coach expectations and athletes’ motivation to play softball. I want to know if coaches place expectations on athletes about performance ability. I want to examine how female athletes perceive coaching behaviors, and how their perceptions alter motivation to play. To answer my questions, I am asking you to complete a short questionnaire about your expectations for each athlete on your 2013 roster. I am asking you to complete 1 questionnaire per athlete at two different time points: 1) at the beginning of preseason, and 2) at the conclusion of the regular playing season. I want to examine any changes that may occur from pre-to post-season. The surveys for each athlete consist of the same 8 questions and should take approximately 15 minutes or less to complete at each time point. Detailed instructions will be given about how to complete the surveys and return responses.

**Risks and Benefits**
You may feel uncomfortable because you are being asked to record your personal opinions about individual athletes in regards to their playing ability. I do not think that there are any other risks. Your responses will help to contribute to the existing literature on coaching behaviors and motivation. The more research presented allows for more opportunities to learn about issues facing our society. These surveys may benefit you because your responses may cause you to reflect on the reasons why you select certain answers.
**Cost and Payments**
The questionnaire will take about 15 minutes to finish at both the time points. I will send you reminder emails, but no more of your time will be asked. All completed surveys can be returned electronically or through a pre-paid envelope provided to you. There is no other costs involved with this study.

**Confidentiality**
I will not put your name on any of your surveys. Each questionnaire will be coded so I can match responses appropriately. The only information that will be on your survey materials will be your gender (whether you are male or female) and your age. I do not believe that you can be identified from any of your surveys. After responses are received, I will remove athletes’ initials and code surveys so all identifying information is removed.

**Right to Withdraw**
You do not have to take part in this study.

**IRB Approval**
This study has been reviewed by The University of Mississippi’s Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protections obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482.

I have read, understood, and printed a copy of the above information form and desire of my own free will to participate in this study.

(Participant then chooses “Yes” or “No” to proceed)
APPENDIX D: ATHLETE PARTICIPANT CONSENT FORM
Electronic Information Form

INFORMATION ABOUT A RESEARCH STUDY

Title: Affect of Coach Expectations on Female Athletes’ Motivation to Play

Primary Investigator
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Advisor
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(662) 915-5791

Description
I want to explore head coach expectations and female athletes’ motivation to play softball. I want to examine if coaches place expectations on athletes about performance ability. I want to explore how female athletes perceive coaching behaviors, and how their perceptions alter motivation to play. To answer my questions, I am asking you to complete a questionnaire about your perceptions of coaching behavior and your competence and motivation levels. I am asking you to complete 1 questionnaire at two different time points: 1) during the fall practice season, and 2) at the start of pre-season. I want to examine any changes that may occur from practice to pre-season. The surveys for each time point contain the same 42 questions and should take approximately 15-20 minutes or less to complete at each time point. Detailed instructions will be given about how to complete the surveys and return responses. The first questionnaire will ask your willingness to participate in a brief phone or email interview with the primary investigator. The interview should take no more than 30 minutes to complete. The interview questions will ask your perceptions of your motivation/competence level, and your perceptions of your head coach’s behaviors toward you.

Risks and Benefits
You may feel uncomfortable because you are being asked to record your personal reflections about your internal motivation and perceptions of your coach’s behaviors. If you choose to participate in the interview, the interview questions may cause feelings of anxiety or discomfort because you will be asked to recall past experiences that may not have been pleasant to you. I do not think that there are any other risks. Your responses will help contribute to the existing literature on coaching behaviors and motivation. The more research presented allows for more opportunities to learn about issues facing your sport. These surveys may benefit you because your responses may cause you to reflect on the reasons why you select certain answers.
Cost and Payment
The questionnaire will take approximately 15-20 minutes to finish at both time points. I will send you reminder emails, and I will ask for your voluntary participation in phone or email interviews. All completed surveys will be returned electronically by following the prompts at the bottom of each screen. There are no other costs involved with this study.

Confidentiality
Surveys: I will not put your name on any of your surveys, and I will not ask for your name. Each questionnaire will be coded so I can match responses appropriately. Each questionnaire will ask for your month and day of your birth date so that I may match your responses appropriately. This information will be permanently removed once I receive your responses. I will ask for your university issued email address so that I may correspond with you for a potential interview (if you choose to participate), and so I may send you the second questionnaire directly instead of asking your coach to forward the link. Your email address will be used to match your responses from both surveys. Once responses are received, your email address will be removed from all documents. The only information that will be on your questionnaire materials will be your academic year in school and your age. I do not believe that you can be identified from any of the remaining information on your surveys.

Interviews: If you choose to participate in a voluntary interview, you will be given the option to conduct the interview over the phone or email with the primary investigator. You will NOT be asked your name, the name of the institution you attend, or your coach’s name. No identifying information will be asked. All phone calls will be recorded on an audio device by the primary investigator. The primary investigator will be the only person with access to all of your response. At the conclusion of the study, all recorded interviews will be permanently destroyed. All interviews will be transcribed verbatim by the investigator for data analysis purposes. No identifying information will be retained. You will be sent a summary of your responses before data analysis begins to check for accuracy of response. You will have the option to correct, clarify, or withdraw any information you choose.

Right to Withdraw
You do not have to take part in this study.

IRB Approval
This study has been reviewed by The University of Mississippi’s Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protections obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482.

Release of Rights to Written or Recorded Information
My agreement to participate below indicates that I release all rights, including copyrights for the use of any recorded or written information that I provide during this study. With this release, I grant the University of Mississippi and the afore mentioned researchers the permission to use, reproduce, copy, and distribute my words in whole or in part into derivative works without
limitation. I indemnify and hold the University and the researchers harmless from any claims of infringement by any third party regarding my words. I agree that I will receive no further consideration and no royalty payments for the use of my words. By agreeing to this statement as part of consent to participate in this study, the investigator may directly quote my interview responses without concern of copyright infringement.

I have read, understood, and printed a copy of the above information form and desire of my own free will to participate in this study.

(Participant then chooses “Yes” or “No” to proceed)
APPENDIX E: RESEARCHER PHONE SCRIPT TO COACH PARTICIPANTS
Researcher:
Hi Coach (insert name of participant),

My name is Megan Matthews Buning. I am a former Division I softball player from the University of South Carolina. I have seven years of Division I coaching experience at Florida State University, Coastal Carolina University, and the University of Mississippi. I am currently completing my doctoral degree in Higher Education Administration at the University of Mississippi. I am contacting you because you and your team were randomly selected to participate in my dissertation research. I am studying the effects of coach expectations on female athletes’ motivation to play softball. My study will contribute to existing literature on coaching behaviors and motivational deterrents and enhancers. I do have IRB approval for this study, and that reference number will be listed on the consent form I send you. Do you have any specific questions about what I am studying? My advisor is Dr. Lori Wolff. She is a professor in the Department of Leadership and Counselor Education at the University of Mississippi. If you have any questions for her, please contact her directly at (662)915-5791 or lawolff@olemiss.edu.

Procedure

If you choose to participate, my study would involve completing expectancy surveys about each athlete on your current roster. The surveys contain eight questions pertaining to your personal feelings about individual athlete’s performance ability. One questionnaire will be issued to you the week of October 1, 2012, and a second questionnaire will be issued the week of January 14, 2013. I anticipate completing single surveys for each athlete to take approximately 15 minutes of your time at each time point (pre- and post-practice season). If you choose to participate, I will be asking your athletes to participate because the data analysis requires me to examine affects on intact groups. I will need your help to distribute surveys to athletes. If you choose to participate, I will send you an electronic link to an online questionnaire for your athletes. I will ask you to email the link to each athlete on your roster. They will be asked to fill out surveys examining their motivation levels and perceived coaching behaviors at the same time points as you. Although their surveys are slightly longer, they should be able to complete the surveys in less than 25 minutes. All participation is voluntary, and any participant can choose to terminate participation at any time during the study. All data collected from all participants will be anonymous and confidential. More detailed information about confidentiality and participation will be available on the consent form I send you, but do you have any questions about confidentiality or procedures? If you do not feel comfortable issuing this link to your athletes, I completely understand. I will not be able to use your team for this study.

I would like to ask you if you are willing to participate in this study?
If NO: Thank you very much for your time. Good luck this season.
If YES: Thank you very much! I am giving coach participants the option of completing a paper version of the questionnaire or an electronic version. Please let me know which version you would prefer: a mailed paper version with a self-addressed return envelope, or an electronic link sent through email? You will be receiving a (paper or electronic) version of the first set of surveys the week of October 1, 2012. This first set of surveys will contain an informed consent form that is required for participation. Instructions for completing the questionnaire will be included. I will send you a reminder email of the upcoming study the week of September 17, 2012. This email will serve to remind you of your agreement to forward the survey link to your athletes. The week of October 1, 2012 you will receive your surveys and a separate email.
containing the link to the athlete surveys. I am hoping to receive responses within two weeks of issuing surveys. If I have not received responses within that period, I will send courtesy reminders to help with response rate. I will send you a reminder email one-week before I issue the second and final set of surveys.

I am extremely grateful for your participation in my study! Your contribution will hopefully enhance what we already know about the art of coaching, but will help to shed light on some issues that are not clear. Thank you again, and I look forward to learning from you!

Sincerely,

Megan Matthews Buning
APPENDIX F: COACH REMINDER EMAILS OF APPROACHING DATA COLLECTION POINT
Dear Coach (insert participant name),

This is Megan Matthews Buning, the former coach and current doctoral student from the University of Mississippi. I spoke with you several weeks ago about participating in my dissertation study. I am contacting you to remind you about the upcoming data collection time point. You will be your last survey from me the week of January 7, 2013. The electronic link contained in this correspondence will take you to the survey, and you will be asked to complete eight questions about each player on your current roster. You will need jersey numbers available, and the survey may take 20-30 minutes to complete, and you will be able to start and complete later if necessary. I would greatly appreciate your responses as soon as possible, and the survey and study will end on January 20, 2013. If you have any questions about the surveys, please contacting me through email or by phone. Thank you again for your participation.

Sincerely,

**Investigator**
Megan Matthews Buning, M.S.
Department of Leadership & Counselor Education
141 Guyton Hall
The University of Mississippi
(662) 801-8192
meganm@go.olemiss.edu

**Advisor**
Lori A. Wolff, Ph.D., J.D.
Department of Leadership & Counselor Education
139 Guyton Hall
The University of Mississippi
(662) 915-5791
lawolff@olemiss.edu
APPENDIX G: COACH PARTICIPANT SURVEY
The following statements ask for information concerning your personal characteristics. You do not have to answer any or all of the following statements. Any information you provide will aid the researcher in forming a more complete study.

1. Please select your age range:
   - 20-24
   - 25-29
   - 30-34
   - 35-39
   - 40-44
   - 45-49
   - 50-54
   - 55-59
   - 60 and older

2. Please select your gender: Male Female

3. Please select your racial identity:
   - Caucasian (white)
   - African American
   - Hispanic
   - Other

4. Total number of years of softball coaching experience (including non-collegiate coaching):
   - < 1 year
   - 1-4 years
   - 5-9 years
   - 10-14 years
   - 15-19 years
   - 20+ years

5. Total number of years coaching (softball) at all institutions:
   - < 1 year
   - 1-4 years
   - 5-9 years
   - 10-14 years
   - 15-19 years
   - 20+ years

6. Total number of years coaching (softball) as a head coach at your current institution:
   - < 1 year
   - 1-4 years
   - 5-9 years
   - 10-14 years
   - 15-19 years
   - 20+ years

The following questions will ask you to rate each of your athletes on each item from 1 (not true) to 5 (very true) by comparing them to other athletes at their competitive level. Please complete ONE form for EACH ATHLETE on your current roster. You will be prompted at the end of each set of questions to “add another athlete.” This prompt will lead you to a separate form for each additional athlete.

Please record the Jersey Number & First/Last Initials of the Athlete you are answering questions about.

This information will only be used for matching responses for both time points. Your athletes will NOT be identified or discussed in any way that will jeopardize their identity.

First/Last Initials of Athlete: __________
Athlete’s Jersey Number: __________
Directions: Please rate each athlete individually on each item from 1 (not true) to 5 (very true) by comparing them to other athletes at their competitive level. Your honest opinion is important to the success of this study. All of your answers will remain confidential.

1. This athlete possesses sound softball fundamentals…………………………………... 1 2 3 4 5

2. This athlete has the aptitude to become an exceptional softball player…………………………………… 1 2 3 4 5

3. This athlete possesses the natural physical attributes necessary to become an exceptional softball player……………... 1 2 3 4 5

4. This athlete is receptive to coaching….. 1 2 3 4 5

5. This athlete is a hard worker…………… 1 2 3 4 5

6. This athlete possesses a high level of competitiveness………………………………... 1 2 3 4 5

7. This athlete is willing to listen and learn…………………………………………... 1 2 3 4 5

8. Overall, this athlete will be an exceptionally successful softball player at this level of competition……… 1 2 3 4 5

Do you have another athlete to add?

YES  NO

(a “YES” selection will lead to a repeat of this measure. A “NO” selection will lead to the end of the survey and record responses).
APPENDIX H: PARTICIPANT RESPONSE REMINDERS
Dear Participant,

I am contacting you with a friendly reminder that you are currently participating in a doctoral research study for Megan Matthews Buning from the University of Mississippi. If you choose to continue participation, please remember to complete your questionnaire as soon as possible. This survey will close (either November 4, 2012 or January 20, 2013). If you have any questions about the questionnaire or the study, please feel free to contact me or my advisor. I appreciate your participation. Your contribution to this study will help make this study successful.

Sincerely,

Megan Buning

(662)801-8192

meganm@go.olemiss.edu
MODIFIED EXPECTANCY RATING SCALE (MERS)

Jersey Number & First/Last Initials:

(This information will only be used for matching responses for both time points. Your athletes will NOT be identified or discussed in any way that will jeopardize their identity)

Directions: Please rate each of your athletes on each item from 1 (not true) to 5 (very true) by comparing them to other athletes at their competitive level. Please fill out one form for each athlete on your current roster.

Example:

<table>
<thead>
<tr>
<th>This athlete possesses natural ability</th>
<th>Not True</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. This athlete possesses sound softball fundamentals…………………………………… 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2. This athlete has the aptitude to become an exceptional softball player…………………………………… 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>3. This athlete possesses the natural physical attributes necessary to become an exceptional softball player……………… 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4. This athlete is receptive to coaching….. 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5. This athlete is a hard worker…………… 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6. This athlete possesses a high level of competitiveness…………………………………… 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7. This athlete is willing to listen and learn……………………………………… 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>8. Overall, this athlete will be an exceptionally successful softball player at this level of competition……… 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX J: ATHLETE QUESTIONNAIRE
ATHLETE QUESTIONNAIRE

Please provide your university issued email address. This information will be used to match your questionnaire responses for both time points. This information will be used to contact you directly to issue the second questionnaire. Your email address will only be used for the purposes of this study, and will remain confidential. This information will be deleted after the second questionnaire is complete. The primary researcher will be the only person with access to your information.

University or school issued email address: ___________________

The following question will ask for identifying information so that the researcher can match your responses from the first questionnaire to the second questionnaire. This information will be used for coding purposes only, and will be removed permanently once responses are received.

Please provide ONLY the MONTH and DAY you were born:
Month ___________
Day ___________

The following statements ask for information concerning your personal characteristics. You do not have to answer any or all of the following statements. Any information you provide will aid the researcher in forming a more complete study. Each statement will ask you to choose the single most accurate selection.

1. Please select your age: 18 19 20 21 22 23 24 or older

2. Please select your race:
   Caucasian (white) African American Hispanic Other

3. Total years of softball playing experience (choose one):
   < 1 year 1-4 years 5-9 years 10-14 years 15+

4. Total number of completed years playing softball at your current institution (choose one):
   < 1 year 1 year 2 years 3 years

5. Total number of completed years playing softball for the CURRENT head coach (choose one):
   < 1 year 1 year 2 years 3 years

6. What is your primary playing position?
Catcher       Pitcher       1st Base       2nd Base       Short Stop
3rd Base       Outfield

7. Were you considered a “starter” last year (for this team or previous team):  
   YES       NO

8. Do you think you will be a starter for this season?  
   YES       NO

9. I would like to ask you more specifically about your perceptions of coaching behavior  
and motivation. Would you be willing to participate in a brief phone or email interview  
conducted within the next two months?  
   YES       NO

The remainder of this questionnaire contains three different surveys. Please answer each question  
as honestly as you can. There are a total of 42 questions. You should finish this questionnaire in  
approximately 15-20 minutes. All of your answers will remain confidential forever.

WHAT AM I LIKE?

These are statements that allow people to describe themselves.  
There are no right or wrong answers since people differ a lot.

DIRECTIONS:

First, decide which one of the two statements best describes you.

Then, go to that side of the statement and drag it to the appropriate box: Either “sort of true” or  
“really true” FOR YOU.

Select ONLY ONE statement for each question.
Drag ONE of the two statements to the appropriate box.

Select ONLY ONE statement.

**Question 1 Items**

I feel I am not very good when it comes to playing sports.

I feel I am really good at just about every sport.

**Question 2 Items**

I feel I am among the best when it comes to athletic ability

I feel I am not the most able when it comes to athletics
Drag ONE of the two statements to the appropriate box.
Select ONLY ONE statement.

**Question 3 Items**

I am not quite so confident when it comes to taking part in sports activities.

I am among the most confident when it comes to taking part in sports activities.

**Question 4 Items**

I feel that I am always among the best when it comes to joining in sports activities.

I feel that I am not among the best when it comes to joining in sports activities.
Drag ONE of the two statements to the appropriate box.
Select ONLY ONE statement.

**Question 5 Items**

I am sometimes a little slower than most when it comes to learning new skills in a sports situation.

I seem to be among the quickest when it comes to learning new sports skills.

Drag ONE of the two statements to the appropriate box.
Select ONLY ONE statement.

**Question 6 Items**

Given the chance, I am always among the first to Join in sports activities.

I sometimes hold back, and am not among the first when it comes to joining in sports groups.
We want to see how well you remember what kinds of things your head coach has done. We also want to know how often your head coach did things during games and practice sessions. In answering the questions, think only about the actions of your HEAD coach.

DIRECTIONS: Please select ONE response from the selection box that most accurately represents your opinion. You should rate your answer along the scale from 7 (almost always) to 1 (never).

7. The first thing is called Reward. Coaches reward or praise athletes when they do something well or try really hard. Some coaches give a lot of Reward while others do not. How often did your coach Reward you for good plays or effort? Circle the number that indicates how often your coach Rewarded you.
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never

8. Non-reward is when a coach does not reward or praise an athlete after he/she makes a good play or tries hard. In other words, the coach ignores it. Circle the number that indicates how often your coach did not reward you when he/she should have.
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never

9. Sometimes athletes mess up and make mistakes. Some coaches give a lot of Encouragement after Mistakes. For example, he/she might say, "That's OK, don't worry about it. You'll get it next time." Other coaches don't give their athletes much encouragement after they make a mistake. Circle how often your coach gave you Encouragement after Mistakes.
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never
10. Another thing a coach might do after a mistake is show or tell the athlete how to do it right. For example, a football coach might tell or show a player the right way to tackle after he misses the ball carrier. This is called **Corrective Instruction**. Circle how often your coach did this with you.

7 - Almost always  
6 - Very often  
5 - Quite often  
4 - Sometimes  
3 - Seldom  
2 - Hardly ever  
1 - Never

11. **Punishment** includes things like yelling at an athlete who has made a mistake. **Punishment** is also saying or doing something that hurts an athlete’s feelings, or embarrass him/her. Circle how often your coach did this with you.

7 - Almost always  
6 - Very often  
5 - Quite often  
4 - Sometimes  
3 - Seldom  
2 - Hardly ever  
1 - Never

12. Sometimes a coach will show you how to correct a mistake, but in an unpleasant, punishing way. This is a combination of **Corrective Instruction** and **Punishment**. For example, a basketball coach might angrily say, "Pass the ball, don't dribble so much, Dummy!" Circle how often your coach did this with you.

7 - Almost always  
6 - Very often  
5 - Quite often  
4 - Sometimes  
3 - Seldom  
2 - Hardly ever  
1 - Never

13. Sometimes when you make a mistake is made, coaches say or do nothing. They simply **Ignore Mistakes**. Circle how often your coach did this with you.

7 - Almost always  
6 - Very often  
5 - Quite often  
4 - Sometimes  
3 - Seldom  
2 - Hardly ever  
1 - Never
14. The next thing is called *Keeping Control*. Coaches do this when their athletes are misbehaving or not paying attention. For example, if athletes are fooling around, the coach might say, "Knock it off and pay attention." How often did your coach do that?
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never

15. Some coaches do a lot of teaching. A coach might give *Instructions*, not because a mistake has been made, but just to show athletes how to do things correctly. How often did your coach give you *Instructions*?
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never

16. Coaches don't give *Encouragement* only after mistakes. They may do it any time, even when things are going well. For example, a coach may clap his/her hands and shout encouragement at any time during practices and games. How often did your coach give you *Encouragement*?
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never

17. The next thing is called *Organization*. This includes things like keeping practices running smoothly, making sure the equipment is in the right place, announcing substitutions -- in other words, keeping things organized. How often did your coach do things like that?
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never
18. Some coaches talk or joke with their athletes a lot. They might talk about school, professional sports, vacations, or about when they used to be an athlete. This is called General Communication. Circle how often your coach did this with you.

7 - Almost always
6 - Very often
5 - Quite often
4 - Sometimes
3 - Seldom
2 - Hardly ever
1 – Never

Why Do You Participate in Your Sport?

DIRECTIONS:
Below are some reasons why people participate in sport. Using the scale provided, please indicate how true each of the following statements is for you. When deciding if this is one of the reasons why you participate, please think about all the reasons why you participate. There are no right or wrong answers so do not spend too much time on any one question and please answer as honestly as you can. Some items may appear similar, but please respond to all the statements by selecting the appropriate rating. Please use the stem sentence, “I participate in my sport” before each statement. Please rate each statement located on the left from 1 (Not true at all) to 7 (Very true).

Questions 19-42

I participate in my sport…

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>because I enjoy it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>because it’s a part of who I am</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>because it’s an opportunity to just be who I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>because I would feel ashamed if I quit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>but the reasons why are not clear to me anymore.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>because I would feel like a failure if I quit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Not True at all</td>
<td>Somewhat true</td>
<td>Very True</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>---------------</td>
<td>-----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. but I wonder what’s the point.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. because what I do in sport is an expression of who I am.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. because the benefits of sport are important to me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. because if I don’t other people will not be pleased with me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. because I like it.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. because I feel obligated to continue.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. but I question why I continue.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. because I feel pressure from other people to play.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. because people push me to play.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. because it’s fun.</td>
<td>1 2 3 4 5 6 7</td>
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<td>35. because it teaches me self-discipline.</td>
<td>1 2 3 4 5 6 7</td>
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<td>36. because I would feel guilty if I quit.</td>
<td>1 2 3 4 5 6 7</td>
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<td>37. because I find it pleasurable.</td>
<td>1 2 3 4 5 6 7</td>
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<td>38. because I value the benefits of my sport.</td>
<td>1 2 3 4 5 6 7</td>
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<td>39. but I question why I am putting myself through this.</td>
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<td>Not True at all</td>
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<td>40. because it is a good way to learn things which could be useful to me in my life.</td>
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<td>41. in order to satisfy people who want me to play.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>42. because it allows me to live in a way that is true to my values.</td>
<td>1 2 3 4 5 6 7</td>
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</table>
APPENDIX K: COACH PARTICIPANT DEMOGRAPHIC INFORMATION
The following statements ask for information concerning your personal characteristics. You do not have to answer any or all of the following statements. Any information you provide will aid the researcher in forming a more complete study. Each statement will ask you to choose the single most accurate selection.

1. Please select your age range:
   - 20-24
   - 25-29
   - 30-34
   - 35-39
   - 40-44
   - 45-49
   - 50-54
   - 55-59
   - 60 and older

2. Please select your gender: Male Female

3. Please select your racial identity:
   - Caucasian (white)
   - African American
   - Hispanic
   - Other

4. Total number of softball coaching experience (including non-collegiate coaching):
   - < 1 year
   - 1-4 years
   - 5-9 years
   - 10-14 years
   - 15-19 years
   - 20+ years

5. Total number of years head coaching (softball) at all institutions:
   - < 1 year
   - 1-4 years
   - 5-9 years
   - 10-14 years
   - 15-19 years
   - 20+ years

6. Total number of years coaching (softball) as a head coach at your current institution:
   - < 1 year
   - 1-4 years
   - 5-9 years
   - 10-14 years
   - 15-19 years
   - 20+ years
APPENDIX L: ATHLETE PARTICIPANT DEMOGRAPHIC INFORMATION
The following statements ask for information concerning your personal characteristics. You do not have to answer any or all of the following statements. Any information you provide will aid the researcher in forming a more complete study. Each statement will ask you to choose the single most accurate selection.

1. Please select your age: 18 19 20 21 22 23 24 or older

2. Please select your race:
   Caucasian (white)  African American  Hispanic  Other

3. Total years of softball playing experience (choose one):
   < 1 year  1-4 years  5-9 years  10-14 years  15+

4. Total number of completed years playing softball at your current institution (choose one):
   < 1 year  1 year  2 years  3 years

5. Total number of completed years playing softball for the CURRENT head coach (choose one):
   < 1 year  1 year  2 years  3 years

6. What is your primary playing position?
   Catcher  Pitcher  1st Base  2nd Base  Short Stop  3rd Base  Outfield

7. Were you considered a “starter” last year (for this team or previous team):
   YES   NO

8. Do you think you will be a starter for this season?
   YES   NO

9. I would like to ask you more specifically about your perceptions of coaching behavior and motivation. Would you be willing to participate in a brief phone or email interview conducted within the next two months?
   YES   NO
APPENDIX M: PHYSICAL SELF-PERCEPTION PROFILE-SPORT COMPETENCE SUB-SACLE (PSPP-SC)
WHAT AM I LIKE?

These are statements that allow people to describe themselves. There are no right or wrong answers since people differ a lot.

First, decide which one of the two statements best describes you.

Then, go to that side of the statement and check if it is just “sort of true” or “really true” FOR YOU.

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

X 

Some people are very competitive BUT Others are not so competitive

REMEMBER to check only ONE of the four boxes

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

Some people feel that they are not very good when it comes to playing sports BUT Others feel that they are really good at just about every sport

Some people feel that they are among the best when it comes to athletic ability BUT Others feel that they are not among the most able when it comes to athletics

Some people are not quite so confident when it comes to taking part in sports activities BUT Others are among the most confident when it comes to taking part in sports activities
<table>
<thead>
<tr>
<th>Really</th>
<th>Sort of</th>
<th>Really</th>
<th>Sort of</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>True</td>
<td>True</td>
<td>True</td>
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<tr>
<td>For Me</td>
<td>For Me</td>
<td>For Me</td>
<td>For Me</td>
</tr>
</tbody>
</table>

Some people feel that they are always **BUT** among the best when it comes to joining in sports activities.

Others feel that they are not among the best when it comes to joining in sports activities.

Some people are sometimes a little slower **BUT** than most when it comes to learning new skills in a sports situation.

Others always seem to be among the quickest when it comes to learning new sports skills.

Given the chance, some people are **BUT** always among the first to join in sports activities.

Other people sometimes hold back and are not usually among the first to join in sports.
APPENDIX N: COACHING BEHAVIOR ASSESSMENT SYSTEM-PERCEIVED BEHAVIOR SCALE (CBAS-PBS)
We want to see how well you remember what kinds of things your head coach did. We also want to know how often your coach did things during games and practice sessions. In answering the questions, think only about the actions of your HEAD coach.

1. The first thing is called **Reward**. Coaches reward or praise athletes when they do something well or try really hard. Some coaches give a lot of **Reward** while others do not. How often did your coach **Reward** you for good plays or effort? Circle the number that indicates how often your coach **Rewarded** you.
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never

2. **Non-reward** is when a coach does not reward or praise an athlete after he/she makes a good play or tries hard. In other words, the coach ignores it. Circle the number that indicates how often your coach did not reward you when he/she should have.
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never

3. Sometimes athletes mess up and make mistakes. Some coaches give a lot of **Encouragement after Mistakes**. For example, he/she might say, "That's OK, don't worry about it. You'll get it next time." Other coaches don't give their athletes much encouragement after they make a mistake. Circle how often your coach gave you **Encouragement after Mistakes**.
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never
4. Another thing a coach might do after a mistake is show or tell the athlete how to do it right. For example, a football coach might tell or show a player the right way to tackle after he misses the ball carrier. This is called Corrective Instruction. Circle how often your coach did this with you.
   7 - Almost always
   6 - Very often
   5 - Quite often
   4 - Sometimes
   3 - Seldom
   2 - Hardly ever
   1 - Never

5. Punishment includes things like yelling at an athlete who has made a mistake. Punishment is also saying or doing something that hurts an athlete's feelings, or embarrass him/her. Circle how often your coach did this with you.
   7 - Almost always
   6 - Very often
   5 - Quite often
   4 - Sometimes
   3 - Seldom
   2 - Hardly ever
   1 - Never

6. Sometimes a coach will show you how to correct a mistake, but in an unpleasant, punishing way. This is a combination of Corrective Instruction and Punishment. For example, a basketball coach might angrily say, "Pass the ball, don't dribble so much, Dummy!" Circle how often your coach did this with you.
   7 - Almost always
   6 - Very often
   5 - Quite often
   4 - Sometimes
   3 - Seldom
   2 - Hardly ever
   1 - Never

7. Sometimes when you make a mistake is made, coaches say or do nothing. They simply Ignore Mistakes. Circle how often your coach did this with you.
   7 - Almost always
   6 - Very often
   5 - Quite often
   4 - Sometimes
   3 - Seldom
   2 - Hardly ever
   1 - Never
8. The next thing is called *Keeping Control*. Coaches do this when their athletes are misbehaving or not paying attention. For example, if athletes are fooling around, the coach might say, "Knock it off and pay attention." How often did your coach do that?
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never

9. Some coaches do a lot of teaching. A coach might give *Instructions*, not because a mistake has been made, but just to show athletes how to do things correctly. How often did your coach give you *Instructions?*
   - 7 - Almost always
   - 6 - Very often
   - 5 - Quite often
   - 4 - Sometimes
   - 3 - Seldom
   - 2 - Hardly ever
   - 1 - Never

10. Coaches don't give *Encouragement* only after mistakes. They may do it any time, even when things are going well. For example, a coach may clap his/her hands and shout encouragement at any time during practices and games. How often did your coach give you *Encouragement?*
    - 7 - Almost always
    - 6 - Very often
    - 5 - Quite often
    - 4 - Sometimes
    - 3 - Seldom
    - 2 - Hardly ever
    - 1 - Never

11. The next thing is called *Organization*. This includes things like keeping practices running smoothly, making sure the equipment is in the right place, announcing substitutions -- in other words, keeping things organized. How often did your coach do things like that?
    - 7 - Almost always
    - 6 - Very often
    - 5 - Quite often
    - 4 - Sometimes
    - 3 - Seldom
    - 2 - Hardly ever
    - 1 – Never
12. Some coaches talk or joke with their athletes a lot. They might talk about school, professional sports, vacations, or about when they used to be an athlete. This is called **General Communication**. Circle how often your coach did this with you.

- 7 - Almost always
- 6 - Very often
- 5 - Quite often
- 4 - Sometimes
- 3 - Seldom
- 2 - Hardly ever
- 1 - Never
APPENDIX O: BEHAVIOR REGULATION IN SPORT QUESTIONNAIRE (BRSQ)
BEHAVIOR REGULATION IN SPORT QUESTIONNAIRE (BRSQ)

Below are some reasons why people participate in sport. Using the scale provided, please indicate how true each of the following statements is for you. When deciding if this is one of the reasons why you participate, please think about all the reasons why you participate. There are no right or wrong answers, so do not spend too much time on any one question and please answer as honestly as you can. Some items may appear similar but please respond to all the statements by rating your answers to the following questions as to why you participate in softball.

I participate in softball…

<table>
<thead>
<tr>
<th></th>
<th>Not True at all</th>
<th>Somewhat true</th>
<th>Very True</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>because it allows me to live in a way that is true to values</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>2.</td>
<td>but I wonder what’s the point.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>3.</td>
<td>but I question why I am putting myself through this.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>4.</td>
<td>because I enjoy it.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>because I find it pleasurable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>to satisfy people who want me to play.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>7.</td>
<td>because I value the benefits of my sport.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>8.</td>
<td>to satisfy people who want me to play.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>9.</td>
<td>because it teaches me self-discipline.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>10.</td>
<td>because the benefits of sport are important to me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not True at all</td>
<td>Somewhat true</td>
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<td>11. but the reasons why are not clear to me anymore.</td>
<td>1 2 3 4 5 6 7</td>
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<td>12. but I question why I continue.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>13. because it’s a part of who I am.</td>
<td>1 2 3 4 5 6 7</td>
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<td>14. because I feel obligated to continue.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>15. because I would feel ashamed if I quit.</td>
<td>1 2 3 4 5 6 7</td>
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<td>16. because if I don’t other people will not be pleased with me.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>17. because I like it.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>18. because I would feel guilty if I quit.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>19. because people push me to play.</td>
<td>1 2 3 4 5 6 7</td>
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<td>20. because I feel pressure from other people to play.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>21. because what I do in sport is an expression of who I am.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>22. because it’s fun.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>23. because it’s an opportunity to just be who I am.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>24. Because it is a good way to learn things which could be useful to me in my life.</td>
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APPENDIX P: ATHLETE PARTICIPANT EMAIL INTERVIEW ARRANGEMENT
Hi,

This is Megan Matthews Buning. You are currently participating in my dissertation study on the effects of coach expectations on female athletes’ motivation to play. I cannot tell you how grateful I am for your participation. Your responses will help me contribute to research on coaching behaviors and female athlete motivation. I hope my findings will help your sport by providing another avenue of understanding.

In the first survey you recently finished, you indicated you would be willing to participate in a phone or email interview to add to my results. I would like to arrange this interview with you if time permits. If you will let me know a convenient day and time within the next three weeks (including weekends) that will work for you for a phone interview, I will send you my cell phone number for you to call. If you prefer, I can call you at our designated time, but you will need to send me your phone number. Please remember that I am not saving any phone numbers regardless of if you call me or if I call you. The length of the interview really depends on you. Most of them are done in around 20 minutes. If you would prefer to answer the questions by typing your responses, I can attach the questions and send them to you. Phone interviews seem to flow more smoothly and go faster, but you let me know what will work best for you. I look forward to hearing from you.

Sincerely,

Megan Matthews Buning

meganm@go.olemiss.edu
APPENDIX Q: INTERVIEW PROTOCOL
Introduction

1. **SMILE-make the participants feel comfortable**

**Interviewer**: Hi, my name is Megan Matthews Buning. I am contacting you today because you are currently participating in my dissertation study through the University of Mississippi. You selected to participate in the interview portion of this study. The purpose of this interview is to hear your perspective on how you perceive certain actions or behaviors from your head coach. You may quit the interview at any time. If you do not feel comfortable answering a question, all you need to do is request to move on or skip that question. I will be recording your interview with an audio recording device so that I may accurately capture your viewpoint. I will be taking notes during the interview to make sure I understand exactly what you are saying. There will be no identifying information on your interview recording or notes. I had you choose a pseudonym that will be used in place of your name. After we complete the interview, I will transcribe our conversation from the recording device. I will send you a summary of our conversation through email so that you may check my transcription for accuracy. After you have confirmed the information is exactly as you want it, I will permanently destroy the audio-recorded interview. No information will be used in any way that could possibly identify you. All the information you provide will be valuable to my study, and I appreciate your input. Do you have any questions about the interview procedure or the study?

1. **Test audio recording equipment**
2. **Smile again & ask if they are ready to begin?**

1. Let’s start with you telling me a about your sport background.
   a. **Probe 1**: Describe your softball playing experience growing up to now.

2. Sport competence is defined as your perceptions of how good you are at your; ability to learn new sport skills, and confidence in your abilities on the softball field. What are some factors in your environment that you feel affect your competence toward your softball skills?
   a. **Probe 1**: How does your coach influence your feeling that you are good at softball and your softball skills?
   b. **Probe 2**: How does your coach influence your perception, if at all, of how well or how quickly you learn new softball skills?
   c. **Probe 3**: Explain how, if you feel, your coach influences you’re feeling of being a valued member of the team.

3. Think back to a time in your softball career where you have felt the most confident in your softball playing ability. This could be any time in your career from years ago to a day ago. Compare that time to now. How, if at all, has your confidence changed in regards to your softball playing ability? Remember, competence is how good you think you are at softball or how confident you feel in your softball skills and abilities.
a. Probe 1: (If there was a change in confidence): What do you think caused a change in your perceptions of your playing ability?

4. Describe the types of verbal and nonverbal behaviors, if any, that your coach displays that you feel improve your confidence in your playing ability.
   a. Probe 1: Specifically, what types of things does your coach do that make you feel like you are good at your sport or that you are playing well?

5. Describe the types of verbal and nonverbal behaviors, if any, that your coach displays that you feel hurt your confidence in your playing ability.
   a. Probe 1: Specifically, what types of things does your coach do that can make you doubt your ability?

6. Motivation is defined as the reasons why you start and participate in an activity or action. Think back to a time in your softball career where you have felt the most motivated to play softball. This could be any time in your career from years ago to a day ago. At your most motivated moment, why did you play softball?
   a. Probe 1: Because you enjoyed the recognition? Because you enjoyed the involvement in the game itself? Because you enjoyed the approval from your friends, teammates, parents, and coaches?
   b. Probe 2: Compare that time to now. Explain how, if at all, your motivation changed toward playing softball?

7. What motivates you to play for this team?

8. What types of things does your coach do that make you more motivated to practice and/or play softball? (Recent things or past things, but specific to the current head coach)
   a. Probe 1: What a type of things does your coach do that can make you less motivated to practice and/or play softball?

9. Now I want you to think about coach and team expectations on your current team. Do you think your head coach has expectations about you and your teammates (individually)?
   a. Probe 1: How do you think the coach forms expectations about you and your teammates playing ability?
   b. Probe 2: How do you, as an individual player, know what expectations the coach has for you?
   c. Probe 3: Explain how you think these behaviors affect your motivation and feelings of competence if at all.

10. Compared to your teammates, describe your softball playing abilities. (e.g., do you perceive you are one of the best/average/weakest on the team?)

11. Think about other teammates who you feel are not the best on the team in their softball playing abilities. Describe any behaviors from the head coach that you notice are different toward those teammates than ones you receive.
   a. Probe 1: Describe how you perceive your head coach’s behaviors are different, if at all, toward other teammates compared to yourself.
12. Now think about other teammates who you feel are the best on the team in their softball playing abilities. Describe any behaviors from the head coach that you notice are different toward those teammates than ones you receive.

13. Do you have any other thoughts or comments about any of the questions I have asked that you would like to add?

Interviewer: That is the end of the interview! Thank you for your time and patience! Within the next week, I will send you an email with a summarized version of your responses. I would like you to check to make sure I have understood what you have said exactly as you would like. You will have the opportunity to make corrections, add, or delete any comments you would like. If you are happy with your answers so far, and you do not have any other questions, then we are done! Thank you again!
VITA

Megan M. Buning is a former Division I softball athlete and coach. Megan lives in Oxford, MS with her husband, Shaun W. Buning, and three year old daughter, Emory. Megan began her professional journey assuming she wanted to impact athletes’ lives by teaching them what she knew best: softball. After seven grueling years of traveling, winning, and losing, Megan decided to pursue an alternate path through continued higher education. Megan earned a master’s degree in sports psychology while coaching full-time from Florida State University in 2008. After completing her master’s degree, she made a career move to coach at Coastal Carolina University where she spent two years as an associate head coach. She arrived at Ole Miss as part of a career climb, and enrolled in her doctoral program with the foresight of knowing she would not retire as a coach. She coached full time for the first year of her degree before making a career change in 2010. She served as the graduate assistant for the department for her final two years. While serving as a GA she learned many valuable lessons on how to transfer previous knowledge gained from the athletic department to the academic department. Megan is a member of Phi Kappa Phi National Honors Society, Association for the Study of Higher Education (ASHE), College Sport Research Institute (CSRI), and North American Society for Sport Management (NASSM). She has presented at National and local conferences, and has a manuscript in press in the form of a book chapter.