5-2013

Self-efficacy in intercollegiate athletics.

Bryan L. Shelangoski
University of Louisville

SELF-EFFICACY IN INTERCOLLEGIATE ATHLETICS

By

Bryan L. Shelangoski
B.S. Iowa State University, 2006
M.B.A. St. Thomas University, 2007

A Thesis
Submitted to the Faculty of the
College of Education and Human Development of the University of Louisville
In Partial Fulfillment of the Requirements
for the Degree of

Master of Arts

Department of Health and Sports Studies
University of Louisville
Louisville, KY

May, 2013

SELF-EFFICACY IN INTERCOLLEGIATE ATHLETICS

By

Bryan L. Shelangoski
B.S. Iowa State University, 2006
M.B.A. St. Thomas University, 2007

A Thesis Approved on

March 22, 2013

By the following Thesis Committee:

_____
Thesis Advisor – Dr. Marion Hambrick

_____
Dr. Jacob Gross

_____
Dr. Jonetta Weber

DEDICATION

This thesis is dedicated to my family, friends, and colleagues, without whom this accomplishment would not be possible.

ACKNOWLEDGEMENTS

I would like to thank my thesis advisor, Dr. Marion Hambrick, for his guidance and insight throughout the entire thesis process, along with my thesis committee, Drs. Weber and Gross, for their expertise along the way. Additionally, I would like to thank my fellow colleagues in the graduate program. Your ideas, feedback, and insight along the way have proven helpful in more ways than I can describe. Finally, I would like to thank my fiancée, Kelsi, for everything she has done and continues to do for me. Your patience, understanding, encouragement, and love every step of the way has been invaluable. I truly could not have accomplished this without you by my side.

ABSTRACT

SELF-EFFICACY IN INTERCOLLEGIATE ATHLETICS

Bryan L. Shelangoski

March 22, 2013

The purpose of this study is to understand Bandura's (1977) self-efficacy and Vealey's (1986) sport confidence implications on intercollegiate athletics and to explore gender and experience level differences related to self-efficacy in intercollegiate athletes. The study attempted to fill two major gaps in previous research, i.e., relationships of gender and playing experience on self-efficacy, specifically by analyzing a variety of sports, expanding upon previous research studies, as well as increasing the generalizability and external validity of the existing self-efficacy theories. The results of the study indicated that student-athletes have high levels of self-efficacy, which supported the first hypothesis; next, that males possessed higher levels than females, which supported the second hypothesis; and finally, that experience levels were not statistically significant in the resulting levels of self-efficacy, which did not support the final hypothesis.

TABLE OF CONTENTS

LIST OF TABLES

TABLE

LIST OF FIGURES

FIGURE

INTRODUCTION

Self-efficacy, or the belief in one's own ability to perform a specific task successfully, is one of the most influential psychological concepts thought to affect achievement endeavors in sport performance (Singer, Hausenblas, & Janelle, 2001). Fascination with this concept is fueled by the dramatic ideations related to, or as a result of, high or low levels of self-efficacy, e.g., choking, slumps, and being in the zone. Vince Lombardi, the famous NFL coach, once said, "Confidence is contagious, but so is lack of confidence" (Making Performance Matter, 2012). Furthermore, one of the greatest Olympic athletes of all-time, Carl Lewis, demonstrated his belief about self-confidence as a vital factor for his plethora of successes by stating, "If you don't have confidence, you'll always find a way not to win" (Machida, 2008). The famous American tennis star, Stan Smith, once portrayed the role of confidence in sport by claiming, "Experience tells you what to do; confidence allows you to do it" (Making Performance Matter, 2012). Finally, world-renowned performance psychologist Jim Loehr emphasized the importance of confidence in athletics by stating, "With confidence, you can reach truly amazing heights; without confidence, even the simplest accomplishments are beyond your grasp" (Making Performance Matter, 2012).

The concept of self-efficacy is vital to coaches, athletes, and even spectators, for several reasons. First, as a coach, knowing what your athletes feel and think about their skills, abilities, and talents is of the utmost importance if development of those

characteristics is desired. Second, a better understanding of an athlete's psyche can significantly improve the resulting sport performances (Moritz, Feltz, Fahrbach, & Mack, 2000). Better performing athletes may lead to better performing teams, and thus, a better overall intercollegiate athletics department. Finally, as a spectator, a better understanding of self-efficacy and its relation to sports performance can increase awareness and appreciation for the sport itself.

Dozens of researchers have conducted studies on the relationship between self-efficacy and performances in various sports (Moritz et al., 2000). From baseball (Hepler & Chase, 2008) to basketball (Vealey, Hayashi, Garner-Holman, & Giacobbi, 1998) and distance running (Heazlewood & Burke, 2011; Martin & Gill, 1991), many populations have been examined to determine the precise impact self-efficacy has on sport performance and how it can be better harnessed to improve the understanding of athletes and their psyches. This area of research is significant for several reasons, but perhaps most importantly for athletes, coaches, practitioners, and others in the field to analyze how much one can accomplish with a given set of skills and how those skills can improve sport performance (Singer et al., 2001).

This chapter will begin by briefly describing the concepts of self-efficacy and sport confidence with the two theoretical frameworks of focus: Bandura's (1977) Self-Efficacy Theory and Vealey's (1986) Sport Confidence Model. Second, it will provide brief introductions of two additional independent variables for the present study: gender and experience level. Finally, this chapter will link the introductory information to the current study by providing distinct hypotheses related to male and female athletes and

their levels of experience, self-efficacy, and sport confidence, thereby explaining the relevance and purpose of the study.

Self-Efficacy Theoretical Framework

The concept of self-efficacy dates back several decades. Psychologist Albert Bandura is one of the first researchers on this topic. Though his work on self-efficacy began in the early 1970s, he gave his most widely utilized definition in 1997, "the belief in one's capabilities to organize and execute the courses of action required for managing prospective situations" (p. 191). In other words, self-efficacy is a person's belief in his or her ability to succeed in a particular situation. Efficacy judgments are based on a complex process of self-persuasion that relies on cognitive processing of diverse sources of confidence factors (Bandura, 1997). Further, self-efficacy is based on what one thinks one can do or is capable of doing. The theory of self-efficacy "was developed within the framework of social cognitive theory, which views individuals as proactive agents in the regulation of their cognition, motivation, actions, and emotions" (Ede, Hwang, & Feltz, 2011, p. 183). Bandura (1997) argues that self-efficacy is not a static trait, but rather dynamic and fluctuating, taking on different forms. Bandura goes on to state, "Beliefs of personal efficacy constitute the key factor of human agency. If people believe they have no power to produce results, they will not attempt to make things happen" (p. 3).

Bandura (1977) postulated, as part of his self-efficacy framework, four main aspects, or sources, of self-efficacy. First, he described successful performance or performance accomplishments, i.e., doing well at an athletic event. Bandura argued that past successful experiences provide the most significant evidence of an individual's capabilities to succeed at a given task (Bandura, 1978, as cited in Machida, 2008). For

example, an athlete's confidence in a task (e.g., track and field relay) could change depending on the success of past attempts. If the athlete had a perfect success rate, he or she would very likely have high self-confidence in this specific task. The second source of self-efficacy according to Bandura (1997) is vicarious experiences. People develop expectations about their own abilities from observing the abilities of others. For example, watching a teammate performing badly before an athlete's race might lower his or her confidence for approaching competition. Conversely, watching a teammate perform well might increase confidence. Third, verbal persuasion also can influence efficacy beliefs. This occurs when someone close to the person, even oneself, expresses support for his or her capabilities to succeed. According to Machida (2008), this includes coaches' positive feedback, parents' encouragement, and self-talk that athletes provide to themselves. Fourth, physiological arousal and affect can influence self-efficacy due to the close association people make between these emotions and their performances. For example, if an athlete associates nervousness (e.g., butterflies in his or her stomach) with a bad performance, this nervousness could lower self-confidence. How one interprets arousal will likely influence self-efficacy, vicarious experience, verbal persuasion, and emotional or physiological arousal. According to Bandura (1977), the more dependable the sources, the greater the changes in self-efficacy. In other words, the more reliable or dependable the coach or parent is, the more likely one is to believe their statements, which would have a positive effect on one's self-efficacy. Consequently, successful performances, i.e., demonstration of mastery, have proven to be the most powerful for affecting psychological changes as well as future self-efficacious and performance

outcomes (Bandura, 1977; Vealey, Hayashi, Garner-Holman, & Giacobbi, 1998). Bandura did, however, explain the strength of all four sources.

First, Bandura (1977) claimed that the successful performance component of self-efficacy is particularly influential because it is centered on personal mastery experiences. Thus, if one has personal experience in mastering a particular task, that individual will more likely believe he or she can accomplish that task in future attempts. Bandura did, however, state that successful performance does not include solely meeting personal goals or accomplishments. Instead, Bandura posited that while repeated successes tend to increase levels of self-efficacy, repeated failures tend to lower levels, particularly if the failures occur early in the course of events or training. Second, Bandura stated that vicarious experience is not as dependable an efficacy indicator because it provides only indirect evidence of accomplishment. Third, Bandura stated that verbal persuasion is a weaker source of efficacy because it does not provide an authentic experiential base for measurement. Finally, emotional arousal is not as strong a source of self-efficacy because the actual arousal could be due to threats that turn into fears and lead to a weakened level of efficacy (Bandura, 1977). Bandura, Jeffery, and Gajdos (1975) expanded on this notion by postulating that independent performance can enhance efficacy expectations in many ways, e.g., successful performance experiences reinforce expectations of self-competency. Bandura (1977) also stated the opposite is true--the stronger the efficacy expectation, the higher the likelihood that a specific task is completed. He argued "the positive relationship between strength of self-efficacy and probability of successful performance is virtually identical" (Bandura, 1977, p. 207). As

a result, and for the purpose of this study, Bandura's first, and admittedly most important aspect of self-efficacy, successful performance, was tested.

Sport Confidence Theoretical Framework

The other major theoretical approach to self-efficacy, particularly when related to sport, is Vealey's (1986) Sport-Confidence Model. Vealey defined sport confidence as "the belief or degree of certainty individuals possess about their ability to be successful in sport" (p. 222). The researcher developed this model in order to illustrate the various areas of self-confidence and build a situational theoretical framework, which would assist sport psychologists to better understand, evaluate, and predict behavior in sport. She stated that sport confidence takes into account "sport specificity, the distinction between personality traits and states, and the reciprocity of individual differences and behavior" (p. 222). Moreover, Vealey (1986) argued that success takes on different meanings to different people, thereby showing an athlete's sport confidence is grounded in perceptions of ability.

This argument is consistent with Bandura's (1977) self-efficacy theory in that efficacy information is not automatically positive or negative. Rather, the impact efficacy information will have on self-efficacy judgments depends on how one cognitively appraises the efficacy information. For example, it is not scoring a goal in soccer that increases an athlete's self-efficacy; it is the way in which the athlete views this experience, whether positive or negative, that could impact his or her self-efficacy. If the athlete attributes scoring the goal to his or her own ability, then an increase in self-efficacy could be expected. However, if the athlete attributes scoring the goal to a poor

goaltender or weak team defense, then the athlete would not experience any increase in self-efficacy.

Research shows there are nine main sources of sport confidence (mastery, demonstration of ability, physical/mental preparation, physical self-presentation, social support, coach's leadership, vicarious experience, environmental comfort, and situational favorableness) which incorporate current research and that of Bandura's original research on sources of self-efficacy (Moritz et al., 2000). Additionally, various interactions of self-efficacy components, debilitating factors, and several strategies can enhance self-efficacy (Machida, 2008). That said, one must consider how other variables, i.e., gender and playing experience, play a role in student-athlete self-efficacy.

Independent Variables: Gender and Playing Experience

Both gender and playing experience are considered to have statistically significant effects on the resulting levels of self-efficacy in athletes. First, regarding gender, male athletes of all ages and competing in a wide variety of sports have been found to have higher levels of self-efficacy (Woodman & Hardy, 2003; Chie-der, Chen, Hung-yu, & Li-Kang, 2003; Rattanakoses, Omar-Fauzee, Geok, Abdullah, Choosakul, Nazaruddin, & Nordin., 2009). Woodman and Hardy (2003), in their study examining anxiety and self-confidence in sport, posited self-confidence to reflect an athlete's ability to deal with increased pressure to perform. They found male athletes to be better at dealing with this pressure and, at least in part because of this, had generally higher levels of self-confidence. Rattanakoses et al. (2009) took the conclusion of males having higher levels of self-efficacy a bit farther by stating this notion may be especially true in endurance and aerobic exercises, e.g., long-distance races and higher impact sports.

Playing experience may also have a statistically significant effect, and, was defined for the present study as years playing the given sport in organized manner for primary, secondary, and post-secondary institutions. Researchers have found the more sport experience an athlete has, the higher the resulting level of self-efficacy (Woodman & Hardy, 2003; Hays, Thomas, Maynard, & Bawden, 2009). Specifically, for example, in Rattanakoses et al.'s (2009) study on male and female athletes, the results indicated a significant positive correlation between confidence levels and playing experience. However, very few studies have simultaneously researched the combined variable effects on self-efficacy levels of both gender and playing experience, thus the main purpose of the present study.

Relevance to Present Study

The concept of self-efficacy, or the belief in one's own ability to perform a specific task successfully, has major implications on sport performances. Both Bandura (1977) and Vealey (1986) provided theoretical frameworks to better research and understand this psychological concept. A more detailed discussion of each of the aforementioned interactions of these important efficacy components will be included in the next chapter. A better understanding of self-efficacy and its implications is crucial for athletes, coaches, and administrators in effort to improve athletic ability, knowledge, and performance.

This study quantitatively investigates the predictions of Bandura's model of self-efficacy and Vealey's model of Multidimensional Sport Confidence in the sport performance of male and female student-athletes. Specifically, it tests the relationship of gender and playing experience on sport self-efficacy. Sport confidence reflects an

athlete's ability to deal with this increased pressure, particularly in the examination of college student-athletes. As such, sport confidence is hypothesized to more likely affect subsequent performance in competitive settings. Woody and Hardy (2003) found a stronger relationship between confidence and performance in high-standard athletes, e.g., college level or more advanced, than relatively low-standard athletes, e.g., middle or high school. In dealing with collegiate athletes, the present study will help better understand these athletes and their self-efficacy related to sport performance, i.e., does gender and/or playing experience have an effect on how these athletes perceive their abilities and how do their perceptions lead to differences in performance outcomes?

Thus, the purpose of this study is to understand Bandura's (1977) self-efficacy and Vealey's (1986) sport confidence implications on intercollegiate athletics and to explore gender and experience level differences related to self-efficacy in intercollegiate athletes. The study also attempted to fill two major gaps in previous research. Previous self-efficacy research related to sport performance has concentrated on a small number of sports, e.g. track and field (Martin & Gill, 1991), baseball/softball (Hepler & Chase, 2008), and swimming (Burton, 1988), but not broadly on collegiate athletics. Additionally, no research studies to date have specifically tested the relationship of gender on self-efficacy and the resulting sport performance. In other words, this research expanded upon previous research studies, thereby increasing the generalizability and external validity of the existing self-efficacy theories. Finally, this study assisted in providing insights to athletes about their performances. It helped to identify possible barriers to success and methods of improving sport performance while also identifying possible differences in self-efficacy related to gender.

For the purpose of this study, the research questions were as follows:

RQ1. What level of sport-related self-efficacy do male and female college student-athletes possess?

RQ2. How does sport-related self-efficacy differ between male and female college student-athletes?

RQ3. How does the level of playing experience impact the level of sport-related self-efficacy in male and female student-athletes at the collegiate level?

Figure 1 below depicts a representation of the three hypotheses of the current study; each variable is discussed in subsequent chapters of this thesis:

1. Student-athletes will have generally high levels of self-efficacy (in comparison to the standard bell curve wherein "high" relates to the fourth quartile on the Likert scale of 1-10);
2. Males will have higher levels of self-efficacy than females;
3. And more experienced athletes will have higher levels of self-efficacy levels than less experienced athletes.

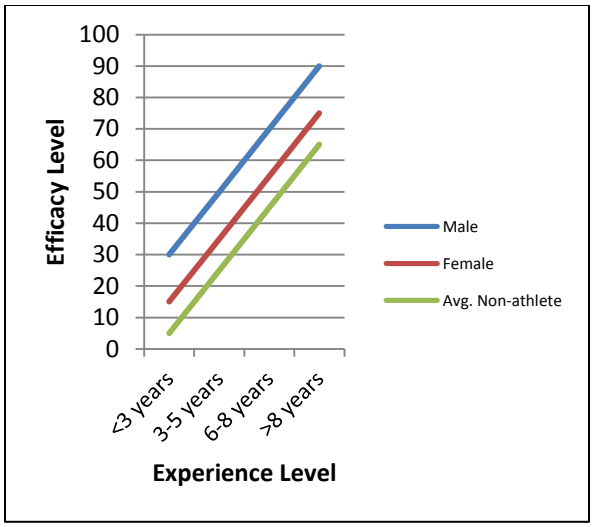

Figure 1. Hypotheses of present study. Comparing experience levels and gender to efficacy levels in collegiate student-athletes.

LITERATURE REVIEW

This chapter will first reintroduce the concepts of sport confidence and self-efficacy, explain the conceptual backgrounds for both the theories and models, and examine the differences between the two. Second, the chapter will describe how self-efficacy relates to sport performance. Third, a review of literature related to sport confidence and self-efficacy with gender differences will be discussed. Fourth, pertinent literature related to sport confidence and self-efficacy with athlete experience levels will be reviewed. Finally, this chapter will portray the importance of the current study and its value to the overall success of college student-athletes.

According to Vealey (1986), sport confidence is a concept firmly based on the foundation of self-efficacy established by Bandura (1977; 1978; 1986; 1997). Vealey extrapolated the principles of self-efficacy and applied them to a sport context, crafting what she called sport confidence, or the efficacious feelings within specific sport situations. Thus, while not completely synonymous, the two concepts, self-efficacy and sport confident, are extremely similar. Due to this similarity, and given the context of the current study, i.e., a sports context involving self-efficacy, it is important to acquire a deeper understanding of both sport confidence and self-efficacy.

Self-Efficacy

According to Bandura (1986, as cited in Lee and Bobko, 1994), “The overall thrust of self-efficacy research is to provide both a mechanism that mediates behavior

change and a parsimonious account of why and how different techniques effect change" (p. 365). According to Vealey, Hayashi, Garner-Holman, and Giacobbi (1998), self-efficacy is the most critical psychological characteristic influencing sport performance. Previous research has shown that a positive relationship exists between athletes and self-efficacy (Singh, Bhardwaj, & Bhardwaj, 2009). Furthermore, dozens of studies examining personality characteristics of athletes suggest that confidence is one of the most common aspects possessed by successful athletes and that athletes and coaches recognize confidence as a critical factor for success in sport (Moritz et al., 2000).

Research shows the idea of self-efficacy is consistent across a variety of demographic variables. According to Vealey et al. (1998), there is much evidence that self-efficacy predicts athletic performance among both adults and children. Positive and significant correlations between self-efficacy and subsequent performance measures have been obtained in the areas of diving, muscular leg endurance, leg lifting, tennis, gymnastics, wrestling, football, baseball, softball, and endurance sports (Ede, Hwang, & Feltz, 2011). Furthermore, in a study conducted by Gould, Dieffenbach, and Moffett (2002) examining Olympic athletes and their personality characteristics, self-efficacy was identified as a commonality amongst the participants. Their research found participants, including athletes, coaches, and other associated members, regarded self-efficacy as important for their successes (Gould et al., 2002). Additionally, studies have found significant differences in gender when related to self-efficacy in that males tend to have higher levels than females (Schunk & Lilly, 1984).

Though Bandura is considered the founding father of the concept, the beginnings of self-efficacy, in fact, precede his discoveries. Dulany (1968, as cited in Bandura,

1977) found that by observing the different effects of one's actions, individuals differentiate which responses are appropriate in which settings and behave accordingly. Furthermore, Baum (1973, as cited in Bandura, 1977), stated, "People process and synthesize feedback information sequences of events over long intervals about the situational circumstances and the patterns and rates of actions that are necessary to produce given outcomes" (p. 192). Self-efficacy is a matter of learning from individual successes and failures over an extended period. Bandura (1977) specifically addresses these successes and failures, stating that self-efficacious behavior is a function of both positive and negative actions. Individuals tend to create self-reward systems for producing positive outcomes in performance, remembering those specific performance occurrences in future similar situations. Conversely, when discrepancies exist between performance outcomes and expectations, dissatisfactions occur, which subsequently motivate corrective changes. However, one must differentiate efficacy expectations from outcome expectations (Bandura, 1977).

Bandura (1977) specifically addresses these fundamental differences through efficacy expectancy and outcome expectancy in an effort to better explain his theory. Efficacy expectancy is the belief that one can successfully perform the behavior necessary to produce a certain outcome, while "outcome expectancy is a person's estimate that a given behavior will lead to a certain outcome" (p. 193). Efficacy expectancies will clarify how much effort one will exert and how long they will persist when facing obstacles or aversive experiences. The stronger the perceived self-efficacy, the greater the effort made. The key difference between efficacy and outcome expectations is that individuals can believe a specific course of action will produce a

certain outcome (i.e., outcome expectation), but if the belief in themselves to make the outcome come to fruition (i.e., efficacy expectation) does not exist, failure is likely. Figure 2 presents the schematic for the interaction between efficacy and outcome expectancies, and how each affects the person, behavior, and subsequent outcome.

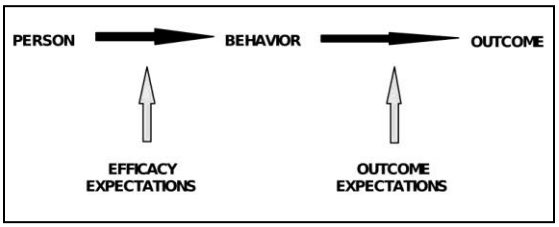

Figure 2. Bandura's (1977) efficacy expectations vs. outcome expectations. Representation of the differences between efficacy expectations and outcomes expectations.

Lee and Bobko (1994) expanded on Bandura's aforementioned definition of self-efficacy as follows:

> Those who have a strong sense of self-efficacy in a particular situation will devote their attention and effort to the demands of the situation, and when faced with obstacles and difficult situations, these individuals will try harder and persist longer. Such individuals are also inclined to attribute failures on insufficient effort. (p. 364)

Rattanakoses et al. (2009) strengthened this notion by stating, "an individual's degree of self-confidence (i.e., self-efficacy) influences performance both directly and indirectly" (p. 131).

There are two other important aspects of self-efficacy that complete the model and help to explain its importance. First, in Bandura's (1977) self-efficacy theory, one of the key factors is what he calls triadic reciprocal causation. This concept is the idea of interrelationships among personal factors, environmental events, and behaviors. Self-

efficacy is not unilateral; rather, Bandura postulated that there are three main areas that affect overall efficacy. Efficacious beliefs have an impact on a person's (a) behavior (effort and persistence), (b) cognition (goals, attribution, and problem solving), and (c) affect (anxiety, arousal, depression, and confidence). Efficacy beliefs significantly impact one's choice of behaviors in any given situation, and people tend to choose more challenging activities when they feel more confident, i.e., when they have higher levels of self-efficacy. Thus, this feeling has an effect on the amount of effort and persistence one will put forth when facing adversities. Furthermore, efficacy influences a person's cognition in that those who perceive higher levels of self-efficacy tend to seek goals that are more challenging and put forth the effort to reach those goals. Finally, efficacy beliefs impact a person's affect in that emotional states such as depression or anxiety can increase or decrease depending on the levels of self-efficacy (Bandura, 1977).

Second, Maddux and Lewis (1995) claimed that the various causes of self-efficacy beliefs may either be from the past (distal) or present (proximal), and the level of self-efficacy for a specific task in a specific situation is typically the result of a combination of this distal and proximal information. For example, an athlete's efficacy in a specific sport context, e.g., a runner's event in one track meet, can be determined by distal sources (e.g., past performance) and also by proximal sources (e.g., current physiological and affective states). According to Maddux and Lewis (1995), proximal sources have a more powerful and immediate impact on current efficacy beliefs than distal sources. Bandura's self-efficacy theory is quite complex and somewhat broad in terms of its application to various contexts. This is one of the key reasons behind Vealey's (1986) innovative work with sport confidence.

Sport Confidence

Vealey (1986) developed the conceptual foundation of sport confidence from self-efficacy theory (Bandura, 1997), based on a dissatisfaction with the way that self-efficacy and sport confidence had been operationalized across every sport situation. Therefore, she designed her own model of sport confidence in order to operationalize the concept to specific sport situations. Vealey's (1986) revised model had two vital components of sport confidence: trait sport confidence and state sport confidence. She defined trait sport confidence as "the belief or degree of certainty individuals usually possess about their ability to be successful in sport" (p. 223), and state sport confidence as the "belief or degree of certainty individuals possess at one particular moment about their ability to be successful in sport" (p. 223). Trait sport confidence is concerned with how athletes rate their ability to perform across a wide range of sports, while state sport confidence is concerned with how athletes rate their ability to perform in a specific setting, i.e., in the moment. State sport confidence is generally considered the most important moderator of efficacious behavior because it is based on the mutual influence of situational and individual factors (Vealey, 1986). State sport confidence is based on the specific situation one is in, combined with individual personality characteristics, making this concept integral in determining efficacious behavior.

Sport confidence is comprised of several important tenets; the first, and arguably most important is competitive orientation. Vealey (1986) established the term "competitive orientation," or the tendency for individuals to strive toward achieving a certain type of goal in sport. Two types of conceptualized competitive orientations exist: (a) performance orientations (i.e., personally performing well) and (b) outcome

orientations (i.e., winning). Vealey stated that competitive orientation is believed to "reflect an athlete's belief that attainment of a certain type of goal demonstrates competence or success" (p. 222). Manzo, Silva, and Mink (2001) expanded this statement, saying,

> [Competitive Orientation] is the interaction between athletes' trait sport confidence and competitive orientation that are believed to influence how athletes perceive cues during sporting situations. This interaction predisposes the athlete to respond with varying degrees of state sport confidence, which is believed to have the most important impact on behavior. This model and the resulting measures of sport confidence have substantially added to the understanding of sport confidence and how it influences athletic performance. (p. 261)

Competitive orientation is an athlete characteristic that influences sources of sport confidence. The type and level of competitive orientation must be examined in order to explain and predict behavior in athletes. Vealey included competitive orientation in her model in order to account for individual differences in defining success in sport. Figure 3 portrays the relationships between the aforementioned variables as well as how they interact and affect the outcome of sport confidence. Specifically, the model depicts how individual differences in trait sport confidence and competitive orientation are influenced by the sporting context to produce one's outcome of sport confidence.

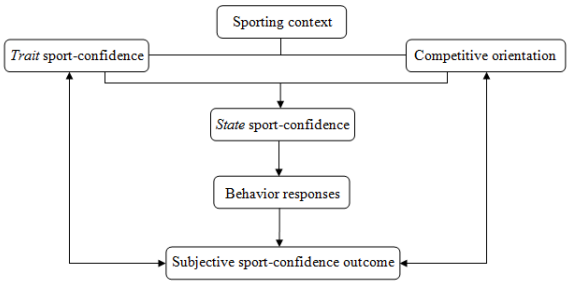

Figure 3. Vealey (1986) sport confidence model. Depiction of two types of sport confidence and their collaborative effect on subjective outcomes.

Vealey and Knight (2002) significantly expanded upon the original model with their revised Multidimensional Sport Confidence Model. Their revisions provided an enhanced explanation of the interactions between the environment surrounding an athlete, the sources of sport confidence, the types of sport confidence, how the athlete's psyche is involved, and the resulting performance. Most importantly, the updated model more closely reflect the concept of sport confidence and how it relates to its foundation, self-efficacy (Vealey & Knight, 2002). In its new form, the model specifically depicts the multidimensionality of sport confidence, portraying the various antecedents of sport confidence and the resulting performance. This information helps to better understand the concept of sport confidence and its benefits for athletes. Figure 4 below illustrates the revised model.

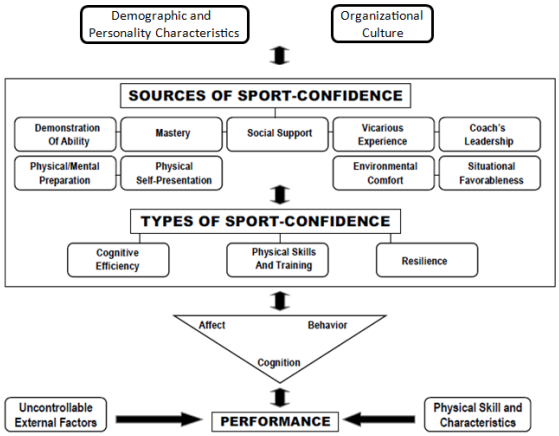

Figure 4. Vealey and Knight (2002, as cited in Machida, 2008) multidimensional sport confidence model depicting various antecedents of sport confidence and the resulting performance.

This extended model includes the following key elements: (a) organizational culture (i.e., the environment surrounding the athlete); (b) athlete demographic and personality characteristics (e.g., socioeconomic status, ethnicity, personality type, etc.); (c) cognition; (d) behavior; and (e) affect. The model depicts how organizational culture factors (competitive level, motivational climate, goals of specific sport program) and athlete characteristics (personality, attitude, values, demographics, and competitive orientation) influence sources and levels of sport confidence. The model also predicts that the various sources of sport confidence directly influence subsequent levels of sport confidence, which then directly influences the affect (e.g., satisfaction and enjoyment), behavior (e.g., effort and performance), and cognitions (state anxiety and state sport confidence). In order to better understand the revised multidimensional model, the two major tenets--sources of sport confidence and types of sport confidence--are discussed below.

Sources of Sport Confidence

According to several researchers, athletes use different sources to develop, enhance, and sustain confidence, and research has supported this notion by distinguishing the sources athletes use to judge confidence in sport (Magyar & Feltz, 2003, as cited in Machida, 2008; Vealey, 1986; Bandura, 1997). Vealey, Hayashi, Garner-Holman, and Giacobbi (1998) conducted a study to identify sources of confidence in athletes within the sport confidence framework created by Vealey (1986; 1988). The purpose of their study was to develop a reliable measure of sources of sport confidence, extend the conceptual framework of sport confidence to include sources, and test predictions made by the expanded model (Vealey et al., 1998).

As previously mentioned, Bandura (1977) established four main sources of self-efficacy: performance accomplishments, vicarious experiences, verbal persuasion, and physiological states. Descriptive research has provided strong support of these four sources (Moritz et al., 2000), with performance accomplishments consistently emerging as the most significant source. The question remained whether these four sources were the most relevant to athletes within a sport-specific context, i.e., Vealey's original intent on developing her own model of sport confidence.

Vealey et al. (1998) sought to answer this question with their study incorporating various sources of sport confidence. The researchers examined high school basketball players over the course of several phases of their study. From their findings, they added several sources of sport confidence to the previous model set forth by Vealey (1986) and Bandura's (1997) sources of self-efficacy: (a) mastery (mastering or improving personal skills); (b) demonstration of ability (when athletes show off their skills to others or

demonstrate more ability than their opponents); (c) physical/mental preparation (feeling physically and mentally prepared with an optimal focus for performance); (d) physical self-presentation (athletes' perceptions of their physical selves); (e) social support (perceiving social support from significant others in sport, e.g., coaches, family, and teammates); (f) coach's leadership (confidence derived from believing in one's coach's skills in decision-making and leadership); (g) vicarious experience (gaining confidence from watching others, such as teammates or friends); (h) environmental comfort (feeling comfortable in a competitive environment such as the specific gymnasium or pool where competition will occur); and (i) situational favorableness (feeling the breaks of the situation are going in one's favor).

All nine of the aforementioned sources were found to have an effect on sport confidence. However, several of the sources were much stronger than others, e.g., mastery, social support, coach's leadership, physical/mental preparation, and demonstration of ability. Their results indicated that different types of athletes' sport confidence were associated with the importance athletes place on different sources of confidence. The researchers concluded that it is imperative to understand each athlete's particular sources of sport confidence before making an effort to enhance that confidence (Vealey et al., 1998).

Having moved through the sources of sport confidence, it is important to review the types of sport confidence. Vealey and Knight (2002, as cited in Machida, 2008) identified three multidimensional components of sport confidence important to athletes: (a) physical skills and training, (b) cognitive efficiency, and (c) resilience. Sport-confidence with physical skills and training refers to an athlete's degree of confidence or

belief in his or her ability to successfully execute the necessary skills to perform in a sport (Vealey & Chase, 2008). Cognitive efficacy is defined as how certain an athlete is that he or she can mentally focus while maintaining enough concentration to make well thought-out decisions and perform successfully (Vealey & Chase, 2008). Third, resiliency is defined as how certain an athlete is that he or she can regain focus after performance errors; bounce back from performing badly; and overcome doubts, problems, and setbacks to perform successfully (Vealey & Chase, 2008, p. 12). These three types of sport confidence (physical skills and training, cognitive efficiency, and resilience) have proven to be independent, which falls in line with Bandura's (1977) self-efficacy theory and further supports the multidimensionality of self-confidence in athletes. In other words, resiliency does not depend on cognitive efficiency or physical skills and training; they operate independently of each other. These multidimensional components are important in order to fully understand the idea of sport confidence and its role in athlete performance. How these three components interact plays a key role in the resulting sport performance.

Multidimensional Model Related Research

Having discussed Vealey and Knight's (2002) revised multidimensional model of sport confidence, it is important to review related research that emphasizes important characteristics of sport confidence. This further research has expanded on Vealey et al.'s (1998) work with sources of sport confidence. Manzo, Silva, and Mink (2001) conducted a multi-phased study related to sport confidence with the purpose of testing their proposed three-factor model, explaining the interaction of the specific sport confidence components. According to their study, the three factors are (a) sport competence, (b)

dispositional optimism, and (c) perceived control. Sport competence provides a specific framework for athletes to judge their abilities, and includes the perception of one's sport and athletic abilities, the ability to learn various sport-specific skills, and the level of confidence in the sport environment (Fox & Corbin, 1989, as cited in Manzo et al., 2001). Therefore, sport competence represents a portrayal of an individual athlete's success and failure experiences in a sport-specific context (Manzo et al., 2001). Dispositional optimism, on the other hand, is a general expectancy, which represents a cohesion of positive expectations about one's future. Finally, perceived control "addresses how individuals are likely to interpret and make sense of success and failure within the athletic domain" (Manzo et al., 2001, p. 263). In other words, perceived control is the degree to which one believes their performances and outcomes are linked directly to their own attributes and abilities, to the attributes and abilities of someone else, or even to uncontrollable causes such as luck (Connell, 1985, as cited in Manzo et al., 2001).

Manzo et al. (2001) went on to provide their own definition of sport confidence based on the hypothesized model:

> A relatively enduring belief system which is the result of the interaction between possessing an expectation that good things will happen (dispositional optimism), believing one's skills and abilities can successfully fulfill the demands of a sport task (sport competence), and a positive estimation of the cause and effect contingency between one's ability and the resultant performance and outcome (perceived control). (p. 264)

The interaction of these three factors, as the researchers proposed it, will result in either high or low levels of situational confidence in a sport context. The results of their multi-

phased study proved significant, demonstrating validity and reliability to their proposed model of sport confidence, and ultimately led to the creation of the Carolina Sport Confidence Inventory (CSCI) (Moritz et al., 2000).

Debilitating Factors of Sport Confidence

Researchers have also identified further antecedents to Vealey and Knight's (2002) expanded multidimensional model of sport confidence, and several factors exist that may decrease or debilitate sport confidence. Most recently, Hays et al. (2009) postulated seven main categories of debilitation: (a) poor performances, (b) injury/illness, (c) poor preparation, (d) coaching, (e) pressure and expectations, (f) psychological factors, and (g) athlete specific factors. First, poor performance means unsuccessful results or starting a competition badly, reducing confidence for the remainder of the competition. Second, injury/illness is defined as a physical condition negatively affecting an athlete's performance, and was described best by one of the study participants as, "It was not the lack of confidence in my own ability, it was the lack of confidence in my ankle performing to the level that I needed it to in the game situation…So if I was going into contact, I'd go a bit slower" (Hays et al., 2009, p. 1193). Third, poor preparation relates primarily to poor physical training, or simply not doing enough training, which leads to a feeling of unpreparedness. Fourth, coaching is referenced as a debilitating factor when athletes note a lack of one-on-one contact with a coach, have a falling out or argument with a coach, or doubt a coach's ability. Fifth, pressure and expectations are associated with debilitation when related to unrealistically high expectations that create self-doubt. Interestingly, pressure and expectations have been shown to negatively affect confidence levels in female athletes but increase levels in male athletes (Hays et al.,

2009). Sixth, psychological factors such as focusing on uncontrollable situations, worrying about losing control, negative thinking, and stress have been shown to negatively affect sport confidence. This is in opposition to focusing on controllable psychological situations, such as mastering one's own skill. Finally, athlete-specific factors such as fate and a volatile crowd, though dependent on the individual athlete, have been shown to negatively affect levels of sport confidence (Hays et al., 2009). It is important to understand what can essentially take away from an athlete possessing high levels of sport confidence in order to hopefully prevent these things from happening.

Strategies to Enhance Sport Confidence

In contrast to debilitating factors, there are a number of mental training strategies and training intervention studies shown to increase sport-confidence in athletes. Hanton and Jones (1999) implemented a multidimensional intervention program consisting of several aspects. First, they suggested it is possible to ensure performance accomplishments by utilizing specific goal-setting, good instruction, and reinforcement; focusing on technique improvement instead of outcome; and emphasizing on lack of effort instead of lack of ability for failure. Second, they posited the ability to improve or increase vicarious experience by imagery training and modeling. Third, the researchers stated that utilizing positive self-talk and thought-stopping techniques could enhance verbal persuasion. Finally, the researchers argued that one can control arousal and anxiety by implementing relaxation training, or learning to view anxiety as readiness and not fear, and changing the way athletes view their own levels of stress--essentially turning stress into a positive, motivational tool (Hanton & Jones, 1999).

Though the strategies to enhance sport confidence are important, there are a few other components worthy of discussion. The studies above outlined and detailed the various elements of the multidimensional sport confidence model developed by Vealey and Knight (2002). The model accounts for elements of social cognitive theory, consistent with the work of Bandura's self-efficacy theory (1997). Social cognitive theory is based on the idea that people learn by watching what others do or do not do. Social cognitive theorists believe learned behavior, i.e., the environment, is important to moral development. In fact, the environment around the individual is as important to what defines the individual and how they act as their internal components or personality characteristics. This model helps to explain this concept, while also emphasizing the importance of individual social cognitive thought processes (Vealey & Chase, 2008). Sport confidence is portrayed as multidimensional with different types of confidence. Finally, the model contends that sport confidence levels will fluctuate and continuously change (Vealey & Chase, 2008). This is again consistent with Bandura's (1997) self-efficacy theory, postulating that perceived efficacy is a dynamic and fluctuating concept and not a static trait.

Self-Efficacy and Its Relation to Sport Performance

As noted above, self-efficacy in sport represents a very similar concept to sport confidence, and is the primary focus of the current study. Relevant research in this area is driven by a desire to determine what can make athletes, and therefore their teams, more successful. Hays et al. (2009), in their research on a variety of world-class athletes of multiple ages, contended that "confident [i.e., efficacious] individuals tend to be more skilled and effective for sporting success" (p. 1185). The researchers also found that all

athletes involved in their study performed more successfully when their feelings of sport confidence were high, and much less successfully when experiencing low sport confidence. These findings support Bandura's (1977) original hypothesis in that higher levels of self-efficacy, or sport confidence, lead to better sport performance.

Some researchers have even found self-efficacy to predict future performance. Feltz (1982), in her study on female collegiate divers, found self-efficacy to be the single-best predictor when it came to future diving performance. Moreover, Woodman and Hardy (2003) found 76 percent of the studies included in their meta-analysis (n = 48) to report a positive relationship between self-confidence and performance. Finally, Hepler and Feltz (2012) conducted research on decision-making related to sport, specifically regarding the use of take-the-first (TTF). The premise of TTF is that individuals generate options in a meaningful order, and early decisions most often have better outcomes than those generated later. Their research on collegiate basketball players' decisions found that decision-making self-efficacy positively predicted TTF, as players with higher levels of self-efficacy used TTF more frequently and made decisions faster than those with lower levels of self-efficacy (Hepler & Feltz, 2012). Clearly these results highlight the importance of self-efficacy in sport performance.

Research has shown a direct correlation with confidence to success with athletes. Rattanakoses et al. (2009) posited the following: successful athletes exhibit higher self-confidence than unsuccessful athletes, athletes who have higher self-confidence during competitions are more likely to be successful, confident athletes believe in their ability to perform well, and personal self-confidence strongly contributes to success or failure. The overall thrust of self-efficacy research has been to provide both a mechanism that

mediates behavior change and a parsimonious account of why and how different techniques affect change (Bandura, 1977).

Some research involving self-efficacy has moved past the micro level to a broader scale. Bandura (1997) established a type of efficacy that goes beyond the individual level; he termed this concept collective efficacy, defined as "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainment" (Bandura, 1997, p. 447). Feltz, Short, and Sullivan (2008) provided their own definition as a shared belief among team members--that it is task-specific and situational, and involving interdependence among team members. Sources of this type of efficacy mirror those of more General Self-Efficacy, including previous performances and vicarious experiences. However, other factors influencing collective efficacy are team size, amount of time members have played together, and stage of team development (Feltz et al., 2008). Most importantly, research has shown that when individuals feel like they are truly part of a team, it can positively impact individual self-efficacy and the subsequent individual performance (Hanton & Jones, 1999).

Not only does having or not having self-efficacy matter, so does the level of self-efficacy. Singh et al. (2009) state that when individuals have higher levels of self-efficacy, they are more likely to put forth intense effort. Conversely, the lower levels of self-efficacy one has, the less effort will be put forth; additionally, difficult tasks will likely be viewed negatively, or even as threats. Hays et al. (2009), in their study on world-class athletes, found that all athletes who were interviewed performed successfully when their feelings of sport confidence were high and unsuccessfully when experiencing lower levels of sport confidence. According to Vealey (1986), cognitive changes, or

fluctuations in self-efficacy, are not necessarily determined by behavior, but by how individuals perceive their behavior. Therefore, not only is self-efficacy in sport vital, so is the level within the individual athletes and how they perceive those levels. However, as previously described in self-efficacy and sport confidence, self-confidence is a dynamic construct, meaning it fluctuates and is not static (Vealey & Chase, 2008).

Vealey et al. (1998) suggested that the dynamic nature of confidence over time depends on the sources upon which that specific confidence is based. Athletes who rely on controllable sources (mastery, demonstration of ability, physical/mental preparation) would likely have more stable confidence than athletes who rely more on uncontrollable sources (social support, environmental comfort). If an athlete relies on something he or she can control, such as their own ability to perform a task successfully, as opposed to an uncontrollable source, such as coach's leadership, the athlete will likely have stable levels of confidence or efficacy. Finally, the idea of stability in confidence originally was considered to be essential to better performance (Vealey, 1998); however, additional research might prove otherwise.

There are yet even more important elements encompassed within the concept of self-efficacy. Bandura (1997) introduced the idea of resiliency in self-efficacy. He stressed the importance of athletes obtaining efficacious beliefs in their developmental stages and holding onto these beliefs throughout the stages of competition and performance. According to Bandura (1997), athletes who have unstable efficacy beliefs could be vulnerable in such situations. Bandura argued that athletes should have high levels of self-efficacy immediately prior and during competition in order to be successful. However, Vealey and Chase (2008) suggested that when athletes are in their preparation

or learning phases, it might be beneficial for them to have lower levels of self-efficacy in order for motivation levels to increase, thereby increasing the athletes' preparation and readiness for competition as well as their levels of self-efficacy and subsequent performance.

The framework for the current study is based on Vealey's (1986) trait and state sport confidence model in conjunction with Bandura's (1977; 1978; 1997) research on self-efficacy. Providing support for the construct framework for the present study, Martin and Gill (1991) as well as Hepler and Chase (2008) examined self-efficacy as it relates to both the situation and the innate abilities of the athletes, i.e., the state and trait types of self-efficacy, respectively. Both studies examined high school and collegiate athletes in their respective sport settings: track and field, baseball, and softball. They set out to investigate the relationships of trait sport confidence and competitive orientation to state measures of sport confidence, self-efficacy, and the relationships of these measures to performance. They found higher levels of both state and trait types of self-efficacy produced higher levels of performance in athletes. However, neither study differentiated between male and female athletes, thereby revealing a gap in the previous research (Hepler & Chase, 2008; Martin & Gill, 1991).

Most recently, both Chiu (2009) and Heazlewood and Burke (2011) attempted to further sport-related self-efficacy research with their studies. Chiu's study of undergraduate students attempted to quantitatively identify influences of attitude, self-efficacy, and motivation on leisure time physical activity participation in students. Chiu hoped to determine predictors of participation in order to assist university management in planning and organizing programs to help develop future students and their physical

activity participation. The results showed positive correlations between leisure attitude, motivation, and self-efficacy with leisure time physical activity participation among undergraduate students. The study also revealed that motivation and self-efficacy were the best predictors of leisure time physical activity participation, (Chiu, 2009).

Heazlewood and Burke (2011) quantitatively investigated self-efficacy measurement in athletes participating in a competitive ultra-endurance triathlon setting. The researchers attempted to establish relationships between self-efficacy and selected sport psychological constructs in the prediction of performance in Ironman triathlons. They found the task specific self-efficacy scales, both outcome and performance orientation, were significantly related to performance. Additionally, high inter-correlation existed between the two task specific self-efficacy scales (Heazlewood & Burke, 2011). Despite finding positive relationships of self-efficacy constructs in student-athletes, once again, neither study addressed the differences between males and females, nor did they focus on multiple sports, leaving potential research gaps.

Gender Differences and Self-Efficacy

Now that its relationship with sport has been established, self-efficacy and the first of two independent variables specific to the present study must be examined. Though self-efficacy research related specifically to the differences between males and females has been in the minority, there have been a few studies addressing this interaction. Overall, according to the meta-analysis performed by Moritz et al. (2000), most self-efficacy research has concluded that male athletes have higher levels than females. Chie-der, Chen, Hung-yu, and Li-Kang (2003) concurred with this finding in their study involving high school basketball players. Their results showed male

participants to record higher levels of sport-related confidence than the female student-athletes. Additionally, according to Woodman and Hardy's (2003) meta-analysis of 48 studies related to sport confidence in sport, women typically report lower self-confidence levels than men; the self-confidence effect sizes for men were significantly larger than those for women.

Vealey et al. (1998, as cited in Machida, 2008) found important differences between male and female individual sport collegiate athletes when related to sources of sport confidence. The results of their study demonstrated that female athletes determined sources of social support (e.g., positive feedback from teammates, encouragement from significant others, etc.) and physical self-presentation (feeling good about one's weight or looks) to be more important. The gender differences also existed in high school team sport athletes. Again, social support was considered to be significantly more important to the female athletes and demonstration of ability (i.e., showing ability by outperforming others or winning) significantly more important for the male athletes (Vealey et al. (1998) as cited in Machida, 2008). Hays, Maynard, Thomas, and Bawden (2007) supported this conclusion with their research on world-class athletes. They found female athletes more susceptible to external confidence debilitating factors (e.g., playing a better opponent or perceiving the opponent to have more skill) as opposed to internal confidence debilitating factors (e.g., a perceived lack of adequate effort). Their explanation for this phenomenon was that these athletes derived confidence more from the social support of their coach, whereas males derived confidence from a belief in their coach giving them the right direction and training regimen (Hays et al., 2007). The findings proved similar to the aforementioned research.

More recently, Singh et al. (2009) discovered male athletes to have significantly higher levels of self-efficacy and confidence in physical activity than their female counterparts. However, not all studies related to self-efficacy have found significant differences in gender. Shunk and Lilly (1984), in their study on self-efficacy and attributions between male and female students, found "no sex differences in students' demonstrated skills" (p. 207). Vealey (1988) posited that gender differences in sport confidence did not exist in elite athletes. She claimed this was due to both genders possibly experiencing similar levels of trait sport confidence. Busch (1995), who studied self-efficacy as it related to academic performance, found that "except for statistics, where female students outperform their male counterparts, there were no significant gender differences in academic performance" (p. 313). One final possible explanation of gender differences in self-confidence is in reporting systems of self-confidence. Krane and Williams (1994, as cited in Hays et al., 2009) suggested that female athletes are generally more honest and open in reporting levels of anxiety and confidence.

Hays et al. (2007) were the first researchers to investigate sport confidence in world-class athletes. Their study identified sources and types of confidence utilized by elite athletes competing on the world stage, and demonstrated significant differences between men and women. For example, the female athletes derived confidence from a perceived competitive advantage, such as seeing their competitors crack under pressure or fail at their respective athletic tasks. Conversely, the men simply believed they were better than their competitors. The researchers concluded that even though the male athletes generally demonstrated higher levels of confidence than female athletes, they were also less susceptible to changes in pre-competition levels of confidence, meaning

they were, in general, left with their current state of confidence (Hays et al., 2007). Similarly, research with university athletes (e.g., Jones, Swain, & Cale, 1991, as cited in Hays et al., 2009), has shown a reduction in confidence levels for both male and female athletes, but a greater decrease in females than in males. Thus, stark differences exist between males and females in relation to self-efficacy. The previous studies have portrayed specific examples, across a variety of sports, wherein male athletes have shown to possess higher levels and different points of origin of self-efficacy than females. This is important because the second research question, and related hypothesis, is regarding male student-athletes and their corresponding levels of self-efficacy. For the purposes of the current study, it was hypothesized that the male student-athletes would possess higher levels of self-efficacy levels than females, supporting this previous research.

Athlete Experience Level and Self-Efficacy

Gender, as a variable in conjunction with sport self-efficacy, is an area of research given little attention by researchers. Similarly, very few research articles have addressed athlete experience level and its effect on self-efficacy. As previously mentioned, for the present study, experience level is defined as years playing the given sport in organized manner for primary, secondary, and post-secondary institutions. Rattanakoses et al. (2009) explored the issues of gender differences in sport-related self-efficacy and the athletes' level of experience and how it impacts their efficacy and the resulting performance. The study concluded that the more self-confidence the athlete has, the more successful they are in their sport. Moreover, the researchers found significant gender differences in self-confidence with male athletes demonstrating higher levels than females. Finally, the research indicated the level of self-confidence depended on the

amount of experience the athlete had because the athletes with more experience tended to have higher levels of self-confidence (Rattanakoses et al., 2009).

A number of studies have been conducted to understand on what athletes at different skill levels base their confidence. The following studies portray differences in the vital sources of confidence depending on the experience levels. Chase (1998), in her study to examine children's sources of self-efficacy in the specific context of physical education and sport, found subjective successful performance, significant others' praise and encouragement (social support), and practicing hard (physical preparation) to be the most important sources of self-efficacy. Vealey et al. (1998) conjectured that high school athletes value mastery, social support, physical and mental preparation, coaches' leadership, and demonstration of ability as the most important sources of sport confidence. The researchers also found college-aged athletes from individual sports to demonstrate the most important sources of sport confidence to be physical and mental preparation, social support, mastery, demonstration of ability, and physical self-presentation (Vealey et al., 1998). Wilson, Sullivan, Myers, and Feltz (2004) found physical and mental preparation and mastery to be important sources of sport confidence for master athletes. Finally, Hays et al. (2007) showed that world-class athletes identified preparation and performance accomplishments as the most important sources of self-confidence.

Only one study specifically analyzed the athletes' playing experience and its relation to levels of self-efficacy or sport confidence, while another study used playing experience as a secondary variable. Perry and Williams (1998) conducted a study related to confidence levels in tennis players with varying skill levels: novice, intermediate, and

advanced. They found athletes with advanced skill levels had significantly higher levels of confidence than intermediate or novice athletes (Perry & Williams, 1998). This finding is consistent with other research findings and the current study's third hypothesis that more experienced athletes will exhibit higher levels of self-efficacy. Similarly, Rattanakoses et al. (2009), in their study on imagery and self-confidence in male and female athletes, discovered experience level to demonstrate significant differences. Specifically, the results of the study indicated a significant positive correlation for both male and females, though higher for males, and directly related to experience level (Rattankakoses et al., 2009). However, because these were the only studies directly related to athletes' playing experience, it yet again left another gap in the research.

The studies present intriguing findings aligned with one of the current study's hypotheses--more playing experience correlates with higher levels of self-efficacy--and more research should investigate these results. Based on the aforementioned review of literature and findings, it is hypothesized that both male and female student-athletes will have generally high levels of self-efficacy (in comparison to the standard bell curve wherein "high" relates to the fourth quartile on the Likert scale of 1-10), that the male student-athletes will have higher levels of self-efficacy than females, and that student-athletes with more playing experience will have higher levels of self-efficacy than those of their less experienced teammates.

Summary of Literature

Self-efficacy and sport confidence have been found to be a vital determinant in the success of athletes and their teams. Over the past 40 years, researchers have postulated self-efficacy and sport confidence to be one of the most important

determinants in sport performance (Vealey, 1986; Martin & Gill, 1991; Vealey et al., 1998; Moritz et al., 2000). According to Ede et al., (2011) since Bandura's first publication in 1977 emphasizing the self-efficacy phenomena, there have been over 300 research articles published on efficacy related to sport performance. However, few of these studies have examined self-efficacy and sport confidence in conjunction with gender differences and playing experience. As such, the present study will add to the existing literature by focusing on the levels of self-efficacy in collegiate student-athletes, the gender differences of those levels, and the differences in playing experience, thereby helping athletes, coaches, and practitioners alike to determine even better paths to success in sport.

As previously stated, the purpose of this study is to understand Bandura's (1977) self-efficacy and Vealey's (1986) sport confidence implications on intercollegiate athletics and to explore gender and experience level differences related to self-efficacy in intercollegiate athletes. The study attempted to fill two major gaps in previous research: the relationship of gender and playing experience on levels of self-efficacy, thereby expanding upon previous research studies and increasing the generalizability and external validity of the existing self-efficacy and sport confidence theories.

METHODOLOGY

This chapter will begin by presenting the sample and procedure. Subsequently, there will be a review of the present study's instrumentation, discussing the dependent variable, self-efficacy and the independent variables, gender and playing experience. Finally, the data analysis will be reviewed, followed by a synopsis of the present study..

Population and Sample

The target population for this cross-sectional design study consisted of all University of Louisville student-athletes, approximately 307 male and 344 female, comprising 21 varsity sports. The University of Louisville, founded in 1798, was the first city-owned public university in the United States. The current enrollment is approximately 23,000 students, comprised of representation from all 50 states and over 115 countries. In terms of athletics, there are 13 women's sports and 10 men's sports that all participate in the Big East Conference, competing against programs such as University of Connecticut, West Virginia University, and University of South Florida. Most notably, its men's and women's basketball, soccer, and volleyball teams have all been ranked in the top 25 nationally and have made the NCAA tournaments in recent years (University of Louisville, 2012).

There are several reasons for selecting collegiate athletes as the population for this study. First, the student-athletes were selected because of their convenient accessibility and proximity to the researcher. Second, according to the meta-analysis conducted by Moritz et al. (2000), a significant relationship was found between self-efficacy and sport

performance in collegiate athletes. As such, they proposed future similar research across a broader range of sports and topical areas related to self-efficacy in collegiate athletics. Third, according to Woodman and Hardy (2003), higher-standard competition, i.e., college athletics as opposed to middle or high school, may be associated with increased pressure to perform well and be more successful. Their meta-analysis *t*-test revealed the mean self-confidence effect size for high-standard athletes was significantly larger than that for low-standard athletes (Woodman & Hardy, 2003). Thus, collegiate student-athletes were selected as the sample for the present study in lieu of others, e.g., middle or high school student-athletes, in hopes of obtaining the largest possible effect size. This sample is appropriate for this particular study in that it is representative and therefore generalizable to the target population: male and female collegiate student-athletes at the University of Louisville.

Consequently, self-confidence reflects an athlete's ability to deal with this increased pressure (Woodman & Hardy, 2003). As such, self-confidence is more likely to affect subsequent performance in higher-standard competitive settings. Woodman and Hardy (2003) found a stronger relationship between self-confidence and performance in high-standard athletes than relatively low-standard athletes. Therefore, in dealing with collegiate athletes, the present study will help better understand these athletes and their self-efficacy related to sport performance, i.e., does gender and/or playing experience have an effect on how these athletes perceive their abilities, leading to a difference in performance outcomes, and how do their perceptions lead to differences in performance outcomes?

Procedure

This IRB-approved cross-sectional study utilized quantitative data to examine the relationship between self-efficacy and athletic performance in male and female collegiate student-athletes. These student-athletes were asked to participate voluntarily by the researchers via a preamble consent form distributed at the first team meeting of the season, and orally by their head coaches in the same team meeting. The goal was to survey 200 total student-athletes from a possible 650, receiving a 30 percent response rate. This level of response rate allowed for sufficient statistical analyses to be performed, i.e., ANOVAs (Vealey, 1986). However, due to time constraints, only fall sports were included in the study. The fall teams included 86 student-athletes; this comprised the present study's sample. Thus, the goal was revised to reflect this change. The included sports were men's and women's cross-country, men's and women's soccer, women's volleyball, and women's field hockey. The new goal was to receive at least a 90 percent response rate from the fall sport student-athletes; this calculated to at least 77 respondents.

Subsequent to agreeing to participate, the student-athletes were asked to fill out the brief questionnaire. Simple oral instructions, including an assurance of anonymity, were given to the student-athletes immediately prior to distributing the questionnaires, and these same instructions were repeated in writing at the top of the first page. The questionnaires were distributed in random order at both the men and women's team meetings. No time limit was imposed on the student-athletes for completing the questionnaires, though it was explained that the questionnaire should take 5-10 minutes

to complete. The questionnaires were collected immediately after being completed at the team meetings.

Instrumentation

Self-Efficacy

There are hundreds of studies involving the concept of self-efficacy (Ede et al., 2011), most of which base their methodologies on Bandura's (1977) recommendations. The late 1980s were very dynamic in the field of self-efficacy research in sport settings. Several significant micro-analytic measurement techniques, specific to particular domains of functioning and predominately in the form of questionnaires, were created during this time period (Singer et al., 2001). Among them, the Sport Orientation Questionnaire, Competitive Orientation Inventory, Trait Sport Confidence Inventory (TSCI), State Sport Confidence Inventory (SSCI), and the Competitive State Anxiety Invetory-2 were created and extensively utilized in many subsequent research studies related to self-efficacy (Moritz et al., 2000).

Vealey (1986) created the TSCI and SSCI due to a lack of pertinent inventories or instruments for her newly created sport confidence model. In doing so, she utilized recommendations of the American Psychological Association's *Standards for Educational and Psychological Tests and Manuals* (1974) as guidelines for the development and standardization. The original TSCI and SSCI had 20 items and 19 items, respectively, until reviewed by four judges with extensive sport psychology experience, after which 16 items and 15 items remained. Vealey (1986) put the revised instruments through five phases of tests in order to ensure legitimacy and accuracy. The purpose of phase one was to assess the internal structure of the inventories, the individual item characteristics, and the degree to which social desirability influenced responses to

the questions. The purpose of phase two was to replicate phase one using the modified versions of the instruments after receiving the feedback from phase one. The purpose of phase three was to analyze the test-retest reliability of the instruments. The purpose of phase four was to analyze the concurrent validity of the instruments. Finally, the purpose of phase five was to analyze the construct validity of the instruments (Vealey, 1986).

These instruments were tested and analyzed with intentionality, precision, and thoughtfulness in order to ensure their effectiveness for utilization in the sport confidence field. Martin and Gill (1991) utilized many similar methodological procedures. The researchers, in their study on 73 high school track and field athletes, focused their Confidence Measures, i.e., measurements of self-confidence, on the TSCI and the SSCI, based on Vealey's (1986) original work. Additionally, combined with measurements of anxiety and competitive orientation, the researchers attempted to establish how efficacious runners felt about achieving performance goals and outcome goals. They followed closely Bandura's (1977) recommendation on unique self-efficacy measurements utilizing a percentage from *no confidence* (0) to *absolute confidence* (100) (Martin & Gill, 1991).

One of the most comprehensive methodologies in the aforementioned studies was utilized in Heazlewood and Burke's (2011) study involving psychological constructs in the prediction of performance in Ironman triathlons. Following Bandura's (1977) recommendations, a hierarchy of questions that reflected increasing degrees of difficulty measured the various levels of the athletes' types of self-efficacy. The questions related directly to athletic performance, and included items such as "How certain are you of placing in the top 750 finishers?" The subjects would then indicate their degree of

confidence or certainty of achieving these tasks by choosing a percentage from *no uncertainty* (0) to *high certainty* (100). This methodological formatting was based on the Competitive State Anxiety (CSAI-2) along with the TSCI and SSCI, and the scales helped measured psychological variables with the triathletes. The relationships of the involved constructs were measured by predominately by correlation and multiple linear regression (Heazlewood & Burke, 2011).

The methodological similarities and justifications in the aforementioned studies justify use for the present research. The present study will mimic several aspects of the Heazlewood and Burke study (2011), primarily incorporating aspects of the three scales and the question format. Because of their sport focus, and similar to Heazlewood and Burke (2011) in their study on Ironman triathletes, a combination and derivation of the TSCI and the SSCI was utilized for this particular study. Similar questions were utilized and refocused to relate more to collegiate student-athletes and this particular study.

Bandura (n.d.) posited specific structure specifications, when related to self-efficacy survey instruments, in order to establish a high level of content validity. First, he stated, "preliminary instructions should establish the appropriate mindset that participants should rate the strength of belief in the personal capability" (Badura, n.d., 12). He went on to state that people should judge their operative capabilities as of now, not their potential capabilities or their expected future capabilities. It is easy for people to imagine themselves as fully efficacious in some hypothetical future (Bandura, n.d.). For these reasons, the questionnaire in this study included both an intentional instructions section as an introduction and an explanation of the measurement of current self-efficacy.

Second, Bandura (n.d.) posited, "scales that use only a few steps should be avoided because they are less sensitive and less reliable" (p. 10). Survey respondents may avoid the extreme positions so a scale with only a few steps may, in actual use, shrink to one or two points. Including too few steps loses differentiating information because people who use the same response category may differ if intermediate steps were included. Therefore, an efficacy scale with the 0-100 response format may represent a stronger predictor of performance than one with a five-interval scale. As such, a scale from 0-100, explained in the instructions section on the survey, was utilized for this specific survey instrument.

Third, Bandura stated, "…if the scale is labeled, use a nondescript title such as, 'Appraisal Inventory' rather than 'Self-Efficacy'" (Bandura, n.d., 10). According to Bandura, this significantly minimizes response bias. He explained:

> To encourage honest answers, without bias, explain to the respondents the importance of their contribution to the research. Inform them that the knowledge it provides will increase understanding and guide the development of programs designed to help people to manage the life situations with which they have to cope (p. 10).

Therefore, the questions in the survey instrument for this study were labeled as Appraisal Inventory questions instead of Self-Efficacy questions, and an explanation of the importance of the study were provided.

The questionnaire was separated into two main sections: an instruction and practice page and a subsequent page which included all 22 measured questions split into three sections, or constructs, with a succeeding fourth section for general questions about

the student-athletes. Following analysis of the survey, an average of all three appraisal inventories was taken, leaving a fourth type of analyzed self-efficacy, hereafter titled Overall Self-Efficacy. The details of the measured questions from the survey instrument were as follows:

Appraisal Inventory 1 (General Self-Efficacy): five questions designed to provide the researchers with basic descriptive statistical values of the student-athletes' perception of their own abilities as they related to sport-related skills. Questions included, "how well can you make a field goal or block a shot?"

Appraisal Inventory 2 (State Self-Efficacy): five questions designed to provide the researchers with data related to the state sport skills of the student-athletes, i.e., their perceived skills related to the specific situation involved in the question. Questions included "how well can you make critical decisions or perform well under pressure?"

Appraisal Inventory 3 (Trait Self-Efficacy): five questions designed to provide the researchers with data related to the trait sport skills of the student-athletes, i.e., their perceived skills related to their inherent abilities as a collegiate student-athlete. Questions included "how well can you execute basic skills or achieve competitive goals during a game?"

Admittedly, three different constructs were used in creating the survey instrument for the present study. An exploratory factor analysis using the principal component analysis was selected to examine the individual items assessing trait self-efficacy, state-self-efficacy, and general self-efficacy. First, Bartlett's test of sphericity was used to examine correlations within the population. A statistically significant test reveals adequate correlations and suggests that a factor analysis can be completed (Field, 2005).

The results indicated statistical significance with (X^2 = 955.653, df = 105, p = .000). Additionally, the Kaiser-Meyer-Olkin value was .907, which exceeded the .90 threshold (Kaiser, 1970), and also suggests that a factor analysis can be conducted.

The factor analysis yielded the following results. State self-efficacy communalities ranged from a low of .560 to a high of .795. Trait self-efficacy communalities ranged from a low of .539 to a high of .807. General self-efficacy communalities ranged from a low of .565 to a high of .753. The high communalities suggest a strong relationship between the items and the underlying dimensions. The factor analysis revealed two components with eigenvalues of 9.022 and 1.191, respectively, and they explained 60.148% and 7.938% of the variance, respectively. Using the EV > 1 test (Field, 2005), two factors should be retained, and they combined to explain 68.086% of the variance.

Below is the rotated component matrix. All of the state self-efficacy items loaded onto the first component, while all of the general self-efficacy items loaded onto the second component. As for the trait self-efficacy items, two items loaded on component one, and three items had high communalities for both components one and two. The findings suggest that general self-efficacy represents a single construct, while overlap may exist between the state and trait constructs. This could be due to the interrelatedness of the two constructs, both in the present study and in previous research (Martin & Gill, 1991). This overlap might also be due to like-item questions on the survey instrument itself.

Table 1

Rotated Component Matrix

	Component	
	1	2
State SE (Think_Respond)	.836	
State SE (Critical_Decisions)	.826	
Trait SE (Concentrate)	.806	
State SE (Adapt)	.783	
State SE (Today_lastmonth)	.726	
State SE (Perform_well)	.711	
Trait SE (Achieve_Goals)	.702	.526
Trait SE (Consistent)	.689	.576
Trait SE (Be_Successful)	.622	
Gen SE (Succ_sport)	.594	.555
Gen SE (Better_team)		.845
Gen SE (Better_opp)		.793
Gen SE (Integral_part)		.733
Gen SE (Exec_skills)	.550	.589
Trait SE (Bounce_Back)	.513	.556

Gender and Playing Experience

Seven questions were used to establish connections between factors such as gender, age, years playing their respective sport, number of practice hours, and position.

As previously mentioned, few studies have focused primarily on gender as independent variable in relation to self-efficacy or sport confidence. Chie-der at al. (2003) examined sources of confidence in male and female high school basketball players. The researchers incorporated a modified version of Vealey's (1998) Sources of Sport Confidence Questionnaire, which was used in part for the present study. This questionnaire was one of four sent to the 174 high school basketball players. Dissimilarly to the present study, Chie-der et al. (2003) set out to determine the sources of sport confidence instead of the sport confidence levels. However, the sport confidence foundations from Vealey's (1998) model aligned with the present study. Rattanakoses et al.'s (2009) study used a self-confidence questionnaire designed to measure an athlete's use of self-confidence and their sports experiences. Their study compared responses between males and females to test for significant differences in self-confidence (Rattanakoses et al., 2009). Both studies incorporating gender variable with self-efficacy were very relevant to the present study and helped to shape its own methodology.

Similar to gender, very few studies have examined athletes' playing experience as one of their primary variables. However, Abdolalizadeh, Torbati, Sohrabi, Mohammadi, and Tavakolian, (2010) did incorporate playing experience into their study on young and elite Iranian wrestlers. They based their foundation from Vealey's (1998) Sport Confidence model, similar to the present study. The questionnaire itself was also broken into subscales to determine specific sport confidence levels (Abdolalizadeh et al., 2010). Another study incorporating athletes' playing experience with self-efficacy was Hays at al. (2009) study involving sport confidence in world-class athletes. The researchers used primarily an integrated reproduction of Vealey's (1998) Sport Confidence model.

Though the methodological format in the Hays et al. (2009) study was interviews instead of a survey instrument, the questions asked were derived from very similar foundations, i.e., specifically addressing the athletes' sport confidence and the factors directly relating to this concept (Hays et al., 2009).

The present study also relied heavily on Vealey's (1986) sport confidence and Bandura's (1977) self-efficacy concepts and models in the examination of these variables in conjunction with gender and playing experience.

Data Analysis

Once the survey questionnaires were collected and ready for analysis, a specific coding process was implemented to all 22 questions in order to interpret the data using SPSS version 20.0. A combination of both *t*-test and analysis of variance (ANOVA) was utilized for quantitative analysis. These methods were chosen in order to answer the original research questions of this study, which are as follows:

RQ1. What level of sport-related self-efficacy do male and female college student-athletes possess? This question was analyzed through descriptive statistics (means, medians, modes, standard deviations, etc.), providing basic descriptive information from the independent variable (student-athletes) and dependent variable (levels of self-efficacy).

RQ2. How does sport-related self-efficacy differ between male and female college student-athletes? This question was analyzed through an independent *t*-test of the independent variable (gender) and dependent variable (level of self-efficacy). The *t*-test compared two groups to determine whether a statistically significant difference existed between male and female college student-athletes.

RQ3. How does the level of playing experience impact the level of sport-related self-efficacy in male and female student-athletes at collegiate level? This question was analyzed through an ANOVA, examining the relationship between the independent variables (level of playing experience and gender) on the dependent variable (levels of self-efficacy). An ANOVA was utilized to ascertain potential differences between more than the two groups, i.e., when analyzing the gender and experience differences related to self-efficacy.

Study Synopsis

The purpose of this study was to understand Bandura's (1977) self-efficacy and Vealey's (1986) sport confidence implications on intercollegiate athletics and to explore gender and experience level differences related to self-efficacy in intercollegiate athletes. For the purpose of this study, the research questions were as follows:

RQ1. What level of sport-related self-efficacy do male and female college student-athletes possess?

RQ2. How does sport-related self-efficacy differ between male and female college student-athletes?

RQ3. How does the level of playing experience impact the level of sport-related self-efficacy in male and female student-athletes at collegiate level?

Previous self-efficacy research related to sport performance has concentrated on a small number of sports, e.g., track and field (Hepler & Chase, 2008) and baseball/softball (Martin & Gill, 1991), but not broadly on multiple sports and participants. Additionally, there are no research studies testing the relationship of gender or playing experience on self-efficacy and the resulting sport performance. This research expanded upon previous

research studies, thereby increasing the generalizability and external validity of the existing self-efficacy theories. Finally, this study assisted in providing valuable insight to athletes and their performance. The study helped to identify possible barriers to success and methods of sport performance while also determining possible differences in self-efficacy related to gender.

Previous research has shown that a positive relationship between athletes and self-efficacy (Singh, Bhardwaj, & Bhardwaj, 2009). Further, studies have found some significant differences in gender when related to self-efficacy in that males tend to have higher levels than females (Schunk & Lilly, 1984; Rattanokes et al., 2009; Moritz et al., 2000). Based on these findings, there were three hypotheses for the present study:

H1. The student-athletes will have will have generally high levels of self-efficacy (in comparison to the standard bell curve wherein "high" relates to the fourth quartile on the Likert scale of 1-10) .

H2. The male student-athletes will have higher levels than females.

H3. Student-athletes with more playing experience will show higher levels of self-efficacy than that of their less experienced teammates.

RESULTS

The purpose of this study was to understand Bandura's (1977) self-efficacy and Vealey's (1986) sport confidence implications on intercollegiate athletics and to explore gender and experience level differences related to self-efficacy in intercollegiate athletes. Data were collected from student-athletes from the University of Louisville in the following sports: men's and women's cross-country, men's and women's soccer, women's field hockey, and women's volleyball. Four types of self-efficacy were examined: general, state, trait, and overall efficacy. In addition to each type of self-efficacy, respondents were assessed in terms of their personal experience playing their respective sports. Several types of analyses were performed to properly examine all research questions and the included variable relationships:

RQ1. What level of sport-related self-efficacy do male and female college student-athletes possess?

This question was analyzed by providing descriptive statistics (means, medians, modes, standard deviations) and basic information from the independent variable (student-athletes) and dependent variable (levels of self-efficacy {4}: general, state, trait, and overall). Additionally, a correlation analysis was performed to identify relationships between the six independent variables (gender, age, years of experience, Hours of Practice In Season, Hours of Practice Out of Season, and year in school), and the four levels of self-efficacy.

RQ2. How does sport-related self-efficacy differ between male and female college student-athletes?

This question was analyzed through two tests: one-way ANOVA and an independent *t*-test of the independent variable (gender) and dependent variable (types of self-efficacy {4}: general, state, trait, and overall), where separate ANOVAs and *t*-tests were used to test the four self-efficacy types.

RQ3. How does the level of playing experience impact the level of sport-related self-efficacy in male and female student-athletes at collegiate level?

This question was analyzed through several one-way ANOVA tests, examining the relationship between the independent variable, level of playing experience, on the dependent variable (types of self-efficacy {4}: general, state, trait, and overall).

Descriptive Statistics

Data were collected during the fall 2012 semester at the University of Louisville. All student-athletes were given the study and IRB information prior to the administration of the survey instrument and immediately before a regular practice session for their respective sport. All but one of the fall sports teams agreed to participate in the survey; the football team did not participate. Of the 86 surveys distributed, a total of 78 were returned, all of which were complete and useable, for a response rate of 91 percent. This response rate exceeded the researcher's goal of 90 percent and exceeds the minimum suggested rate for related studies (Bandura, 1977; Vealey, 1998).

All 78 participants were student-athletes at the University of Louisville, and ranged in age from 17 years old to over 22 years old. For the gender distribution, 55% of the participants (n = 43) were female and 45% were male (n = 35). These results are

similar to the overall male to female ratio at the University of Louisville. According to the United States Department of Education (2013), males count for 51 percent of all unduplicated student-athletes and females total 49 percent. This supports and very closely reflects the gender profile for the university as a whole: 52 percent female and 48 percent male (University of Louisville, 2012). Most participants were under 21 years old (66.7%; $n = 52$), and most of the student-athletes had over eight years of playing experience (66.7%; $n = 52$). Hours of practice per week, both in and out of season, were highest during the season (15 or more hours; $n = 62$) and dropped slightly out of season (6-10 hours and 11-15 hours tied for the most common; $n = 26$). The most common year in school was third (28.2%; $n = 22$). Finally, and fittingly, the participant numbers decreased as the years in school increased (fifth year, $n = 5$). Complete frequency distributions are presented in Table 2.

Table 2

Frequency Distributions for Demographic Variables

Variable	*n*	Percentage
Gender		
Male	35	44.9
Female	43	55.1
Age		
17-18	26	33.3
19-20	26	33.3
21-22	21	26.9
22+	5	6.4
Year of Experience		
Less than 3 years	2	2.6
3-5 years	7	9.0
6-8 years	17	21.8
8+ years	52	66.7
Hours of Practice per week in Season		
6-10 hours	3	3.8
11-15 hours	13	16.7
15+ hours	62	79.5
Hours of Practice per week out of Season		
5 or less hours	4	5.1
6-10 hours	26	33.3
11-15 hours	26	33.3
15+ hours	22	28.2
Year in School		
First	18	23.1
Second	14	17.9
Third	22	28.2
Fourth	19	24.4
Fifth	5	6.4

In order to further examine relationships between the variables, two correlational analyses were performed. First, the dependent variables (General Self-Efficacy, State Self-Efficacy, Trait Self-Efficacy, and Overall Self-Efficacy) were examined. The results indicated statistically significant relationships between all four dependent variables, and the correlational values were statistically significant at $p < 0.01$. This correlational analysis is depicted in Table 3 below.

Table 3

Correlations Between Dependent Variables (SE = self-efficacy)

	General SE	State SE	Trait SE	Overall SE
General SE	_____	_____	_____	_____
State SE	.707**	_____	_____	_____
Trait SE	.756**	.807**	_____	_____
Overall SE	.891**	.915**	.939**	_____

Note. $^{**}p < 0.01$ level

The results could demonstrate relatedness between the types of self-efficacy involved. According to Vealey (1986), State and Trait Self-Efficacy can be interrelated depending on the athlete, sport, etc. In other words, if the athlete shows high levels of State Self-Efficacy, they could also show high levels of Trait Self-Efficacy, despite their conceptual differences, i.e., state is related to the situation and trait refers to perception of internal skills unrelated to situations. Additionally, as previously mentioned, Martin and Gill (1991) as well as Hepler and Chase (2008) examined self-efficacy as it relates to both the situation and the innate abilities of the athletes, i.e., the state and trait types of self-efficacy, respectively. Both studies examined high school and collegiate athletes in their respective sport settings: track and field, baseball, and softball. The researchers found high levels of both state and trait types of self-efficacy in the participants. Thus, these studies provide support for the two types of self-efficacy to be interrelated. However, the results of the present study could also signify some level of overlap between trait and State Self-Efficacy amongst the questions related to each concept.

Second, all dependent and independent variables were examined for correlational relationships. The data indicated several statistically significant results at the $p < 0.01$ and $p < 0.05$ levels. Most notably, Gender and Age had the most statistically significant

relationships with other variables. Gender shared the most statistically significant relationships, including with Age and Hours in Season at the .05 level and with Years Experience, Overall Self-Efficacy, Trait Self-Efficacy, State Self-Efficacy, and General Self-Efficacy at the .01 level. Similarly, Age shared statistically significant relationships with Gender, Years Experience, and Overall Self-Efficacy at the .05 level, and Years in School and State Self-Efficacy at the .01 level. The results demonstrate that the levels of self-efficacy were statistically significantly impacted by both the age of the participants and their gender. The second correlational analysis is depicted in Table 4 below.

Table 4

Correlations Between Independent and Dependent Variables (SE = self-efficacy)

	Gender	Age	Years Exp	Hours in Season	Hours out Season	Year In School
Gender	_____					
Age	-.272*	_____				
Years Exp	-.324**	.225*	_____			
Hours in Season	.226*	-.075	-.099	_____		
Hours out Season	.076	.043	.081	.367**	_____	
Year In School	-.071	.755**	.136	.079	.241*	_____
Overall SE	-.401**	.244*	.152	-.040	-.097	.004
Trait SE	-.317**	.132	.105	-.018	-.058	-.062
State SE	-.357**	.335**	.133	-.034	-.065	.087
General SE	-.434**	.217	.183	-.061	-.146	-.002

Note. $^{**}p < 0.01$ level, $^{*}p < 0.05$ level

Reliability Analysis

According to DeVellis (2003), internal consistency reliability refers to the extent to which scale items representing a unique construct are homogenous. Research shows that items sharing a similar conceptual meaning should be scored in a similar manner (Nunnally, 1978; DeVellis, 2003). Thus, the acceptable threshold for internal consistency reliability testing (Chronbach's alpha, CA) is .700 (Nunnally, 1978). Internal

consistency reliability estimates were calculated for each of the four dependent variables in the present study. All variables surpassed this threshold. Overall Self-Efficacy tested at .950, General Self-Efficacy tested at .868, State Self-Efficacy tested at .897, and Trait Self-Efficacy tested at .912. Therefore, the results indicated a high level of internal consistency reliability for the instrument in all four constructs.

Additionally, unit and item non-response concerns were addressed in the present study. First, unit non-response was not an issue as the response rate was 91 percent, which exceeded the original goal of 90 percent. Second, item non-response was also not an issue as no items were left blank or illegible. The high response rate and zero item non-response issues could be attributed to the ease of the survey instrument, the directions given prior to the administration of the survey, the coaches pressuring the student-athletes to do it, or the brief nature of the survey instrument itself. Nevertheless, neither unit nor item non-response were of great concern for the preset study.

Self-Efficacy Levels

RQ1. What level of sport-related self-efficacy do male and female college student-athletes possess?

Descriptive statistics were used to analyze the levels of male and female student-athlete self-efficacy levels. Mean scores and standard deviations for all four self-efficacy dependent variables were as follows: General Self-Efficacy (M = 8.47, SD = 1.15), State Self-Efficacy (M = 8.52, SD = 1.20), Trait Self-Efficacy (M = 8.22, SD = 1.32), and Overall Self-Efficacy (M = 8.40, SD = 1.13). The first hypothesis for the present study stated that student-athletes will have generally high levels of self-efficacy (in comparison to the standard bell curve wherein “high” relates to the fourth quartile on the Likert scale

of 1-10) (in comparison to the standard bell curve wherein "high" relates to the fourth quartile on the Likert scale of 1-10). Based on the mean scores and standard deviations, the first hypothesis was supported. Upon further analysis the means of all four types of self-efficacy exceeded 8 out of a possible 10 points, whereby the data is skewed toward higher levels of self-efficacy. The histograms below, Figures 5-8, depict this data and illustrate the level of skewedness in comparison to the normal bell curve.

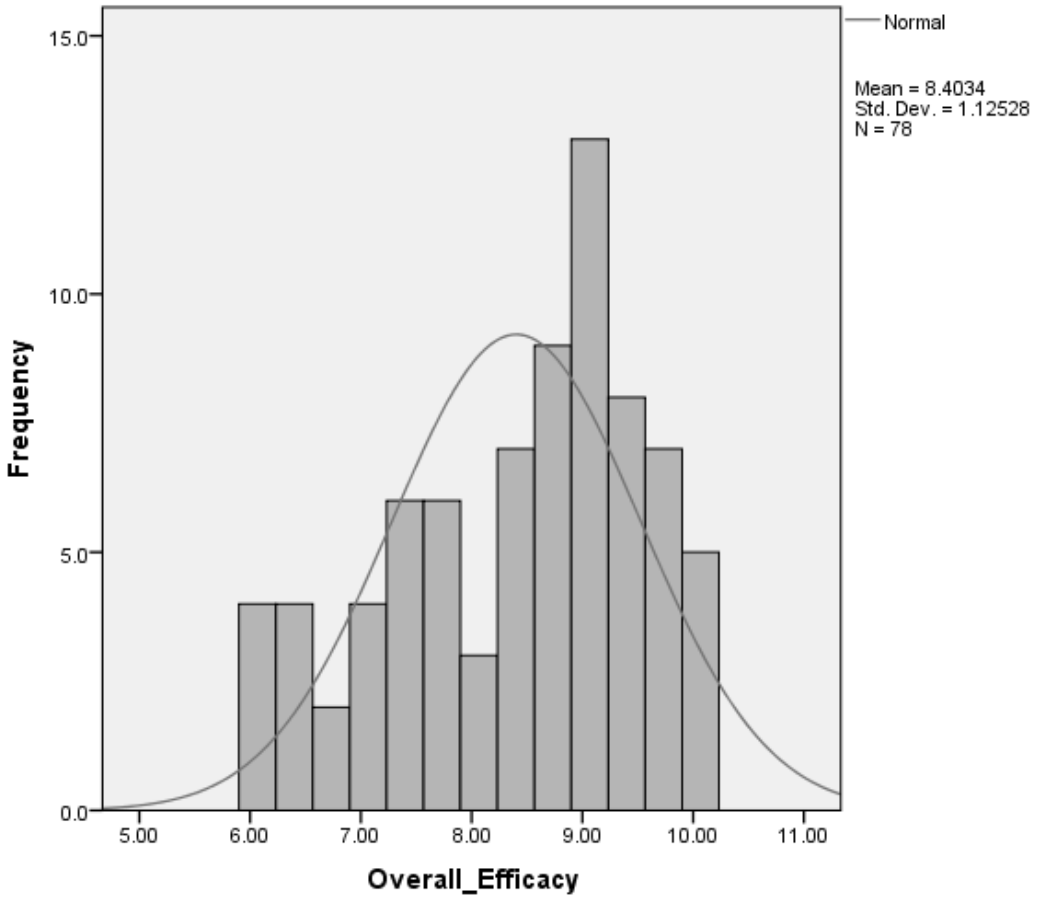

Figure 5. Overall self-efficacy in male and female University of Louisville student-athletes.

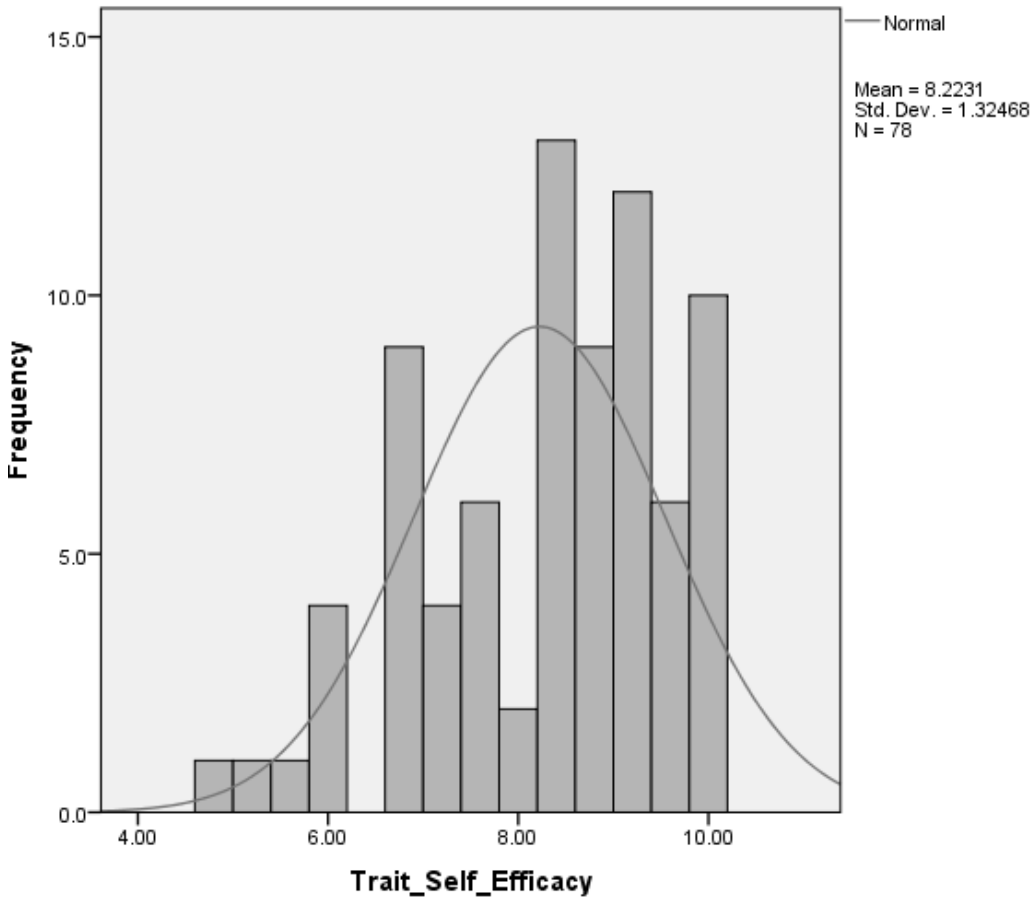

Figure 6. Trait Self-Efficacy in male and female University of Louisville student-athletes.

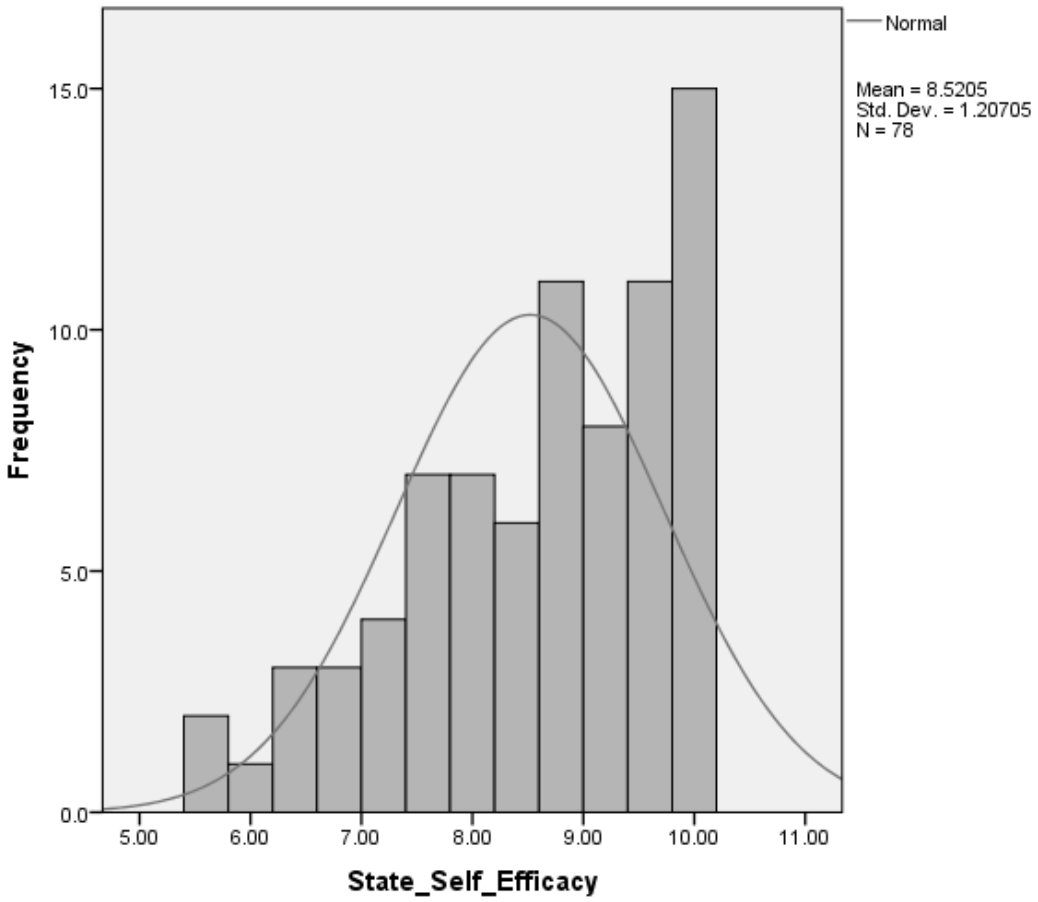

Figure 7. State Self-Efficacy in male and female University of Louisville student-athletes.

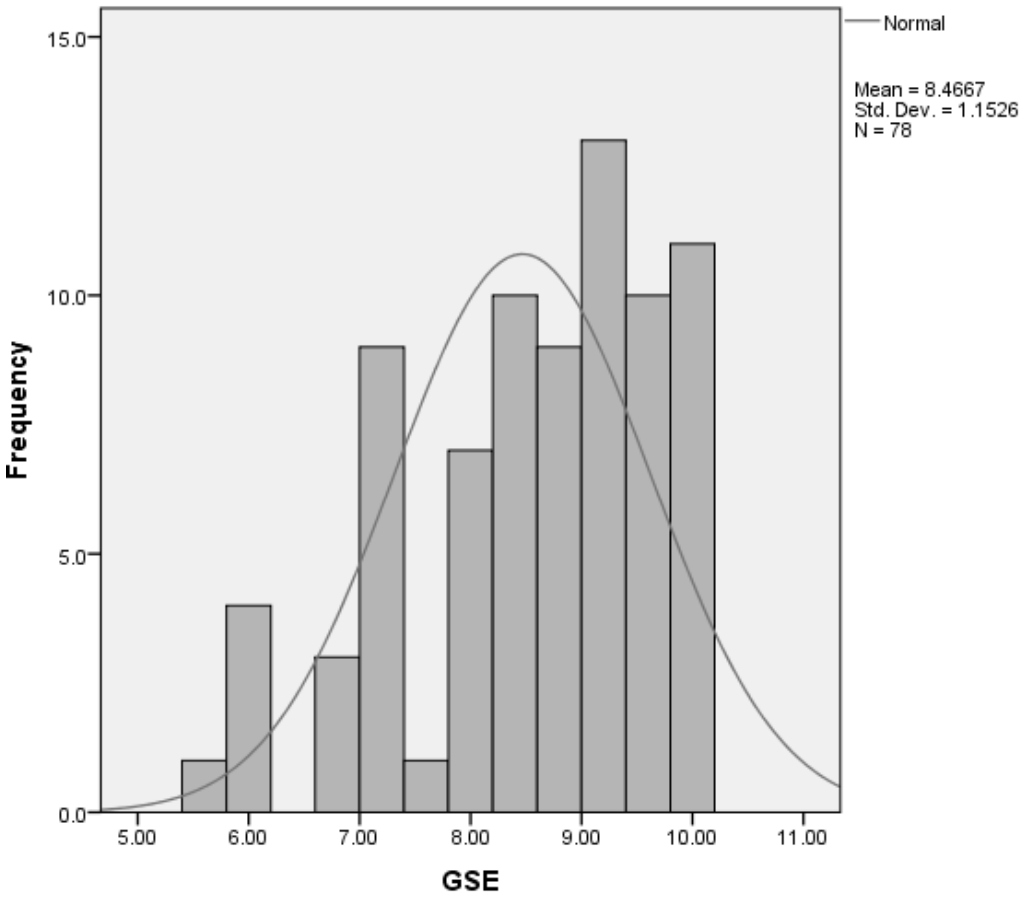

Figure 8. General Self-Efficacy in male and female University of Louisville student-athletes.

Gender Differences in Self-Efficacy

RQ2. How does sport-related self-efficacy differ between male and female college student-athletes?

A one-way ANOVA was used to analyze the effect of gender (independent variable) on the four self-efficacy constructs (dependent variables). Statistically significant differences were found for all four types of self-efficacy. First, there was a significant effect of Gender on General Self-Efficacy at the $p < .05$ level for the three conditions $F(1, 76) = 11.11$, $p = 0.001$. Second, there was a significant effect of Gender on State Self-Efficacy at the $p < .05$ level for the three conditions $F(1, 76) = 17.62$, $p =$

0.000. Third, there was a significant effect of Gender on Trait Self-Efficacy at the $p < .05$ level for the three conditions $F(1, 76) = 8.498$, $p = 0.005$. Finally, there was a significant effect of Gender on Overall Self-Efficacy at the $p < .05$ level for the three conditions $F(1, 76) = 14.60$, $p = 0.000$. These findings indicate that all four types of self-efficacy were statistically significant between the two groups, female and male student-athletes. Table 5 below examines the specific differences between the two groups for all four types of self-efficacy.

Table 5

ANOVA Descriptives: Gender on Self-Efficacy

	n	Mean	SD
Gen SE Male	35	8.92	.92
Female	43	8.10	1.20
Total	78	8.47	1.15
State SE Male	35	9.10	.80
Female	43	8.05	1.28
Total	78	8.52	1.20
Trait SE Male	35	8.69	1.16
Female	43	7.85	1.34
Total	78	8.22	1.32
Ovrl SE Male	35	8.90	.83
Female	43	7.99	1.18
Total	78	8.40	1.13

Table 5 clearly portrays a difference in both the means and standard deviations between the male and female student-athletes and their levels of self-efficacy. As previously mentioned, in each of the four types of self-efficacy, males had significantly higher levels. Moreover, the standard deviations in all four types of self-efficacy were notably lower for males than their female counterparts. Thus, it can be deduced that in addition to overall higher levels, male student-athletes had consistently higher levels of self-efficacy than females in all four types.

The results from the ANOVA test related to gender and self-efficacy provide a satisfactory answer for the second research question of the present study. Moreover, the results from this analysis indicate support for the second hypothesis, that male student-athletes would show higher levels of self-efficacy than females. As such, the first two hypotheses of the present study were supported.

Playing Experience Differences in Self-Efficacy

RQ3. How does the level of playing experience impact the level of sport-related self-efficacy in male and female student-athletes at collegiate level?

A one-way ANOVA was performed to analyze the effect of playing experience (independent variable) on the four self-efficacy constructs (dependent variables). The results indicated no statistically significant differences. First, there was not a significant effect of Playing Experience on General Self-Efficacy at the $p < .05$ level for the three conditions $F(3, 74) = 2.09$, $p = 0.109$. Second, there was not a significant effect of Playing Experience on State Self-Efficacy at the $p < .05$ level for the three conditions $F(3, 74) = 1.72$, $p = 0.171$. Third, there were no significant effects of Playing Experience on Trait Self-Efficacy at the $p < .05$ level for the three conditions $F(3, 74) = 2.37$, $p = 0.077$ Finally, there was not a significant effect of Playing Experience on Overall Self-Efficacy at the $p < .05$ level for the three conditions $F(3, 74) = 2.21$, $p = 0.094$. These findings indicate that all four types of self-efficacy showed no statistically significant difference between the groups and years of playing experience.

In order to further analyze the effect of playing experience on self-efficacy levels in student-athletes, ANOVA tests were run on two other demographic variables: Hours of Practice In Season (per week) and Hours of Practice Out of Season (per week). After

performing the one-way ANOVAs to analyze the effect of experience--hours of practice in and out of season (independent variable) on the four self-efficacy constructs (dependent variables)--no statistically significant differences were found. The first one-way ANOVA was run for Hours of Practice In Season and self-efficacy. There was not a significant effect of Hours of Practice in Season on General Self-Efficacy at the $p < .05$ level for the three conditions $F(2, 75) = .052$, $p = 0.949$. Second, there was not a significant effect of Hours of Practice in Season on State Self-Efficacy at the $p < .05$ level for the three conditions $F(2, 75) = .325$, $p = 0.723$. Third, there was not a significant effect of Hours of Practice in Season on Trait Self-Efficacy at the $p < .05$ level for the three conditions $F(2, 75) = .536$, $p = 0.587$ Finally, there was not a significant effect of Hours of Practice in Season on Overall Self-Efficacy at the $p < .05$ level for the three conditions $F(2, 75) = .088$, $p = 0.916$. These findings indicate that all four types of self-efficacy showed no statistically significant difference between the groups and Hours of Practice In Season.

The second one-way ANOVA was run for Hours of Practice Out of Season and self-efficacy. There was not a significant effect of Hours of Practice Out of Season on General Self-Efficacy at the $p < .05$ level for the three conditions $F(3, 74) = .360$, $p = 0.782$. Second, there was not a significant effect of Hours of Practice Out of Season on State Self-Efficacy at the $p < .05$ level for the three conditions $F(3, 74) = .946$, $p = 0.423$. Third, there were no significant effects of Hours of Practice Out of Season on Trait Self-Efficacy at the $p < .05$ level for the three conditions $F(3, 74) = .089$, $p = 0.966$ Finally, there was a significant effect of Hours of Practice Out of Season on Overall Self-Efficacy at the $p < .05$ level for the three conditions $F(3, 74) = .313$, $p = 0.816$. These findings

indicate that all four types of self-efficacy showed no statistically significant difference between the groups, Hours of practice in and out of season. The lack of statistically significant differences could be due to the fact that, regardless of the experience level, the student-athletes believe they are highly skilled and capable, that they have high levels of self-efficacy. Additional research for further analysis could include sample groups of more varying ages such as high school student-athletes in order to further emphasize differences in experience level.

Summary

This study used a combination of descriptive statistics, *t*-tests, and ANOVAs to examine the self-efficacy levels in University of Louisville student-athletes. More specifically, the tests examined the effects of gender and playing experience on four types of self-efficacy: general, state, trait, and overall self-efficacy. The three original hypotheses for the present study were:

1. Student-athletes will have generally high levels of self-efficacy (in comparison to the standard bell curve wherein "high" relates to the fourth quartile on the Likert scale of 1-10);
2. Males will have higher levels than females;
3. And more experienced athletes will have higher levels of self-efficacy levels.

Results indicated high levels of self-efficacy levels amongst the participants. Moreover, statistically significant differences were noted in gender on all four types of self-efficacy. However, no statistically significant differences were found in playing experience or even in the related sub-variables of hours of practice in and Hours of

Practice Out of Season. The first two of the original three hypotheses were supported by the results.

DISCUSSION

The purpose of this study was to understand Bandura's (1977) self-efficacy and Vealey's (1986) sport confidence implications on intercollegiate athletics and to explore gender and experience level differences related to self-efficacy in intercollegiate athletes. Self-efficacy is defined as the belief in one's own ability to perform a specific task successfully (Bandura, 1977). Previous self-efficacy research related to sport performance concentrated on a small number of sports, e.g., track and field (Hepler & Chase, 2008) and baseball/softball (Martin & Gill, 1991), but not broadly on multiple sports and participants. Additionally, no research studies tested the relationship of gender or playing experience on self-efficacy and the resulting sport performance. This study expanded upon previous research studies, increasing the generalizability and external validity of the existing self-efficacy theories. Finally, this study assisted in providing valuable insight to athletes and their performance. It also helped to identify possible barriers to success and methods of sport performance while also documenting possible differences in self-efficacy related to gender.

For the purpose of this study, the research questions were as follows:

RQ1. What level of sport-related self-efficacy do male and female college student-athletes possess?

RQ2. How does sport-related self-efficacy differ between male and female college student-athletes?

RQ3. How does the level of playing experience impact the level of sport-related self-efficacy in male and female student-athletes at the collegiate level?

Summary of Results

As previously mentioned, this study used a combination of descriptive statistics, *t*-tests, and ANOVAs to examine the self-efficacy levels in University of Louisville student-athletes. More specifically, the tests examined the effects of gender and playing experience on four types of self-efficacy: general, state, trait, and overall self-efficacy. The details of the measured questions, i.e., the definitions of each type of self-efficacy, were as follows: General Self-Efficacy - five questions related to the student-athletes' perception of their own abilities when it comes to sport-related skills; State Self-Efficacy - five questions related to the *state* sport skills of the student-athletes, i.e., their perceived skills related to the specific situation involved in the question; Trait Self-Efficacy - five questions related to the *trait* sport skills of the student-athletes, i.e., their perceived skills related to their inherent abilities as a collegiate student-athlete; Overall Self-Efficacy - this final type of self-efficacy was an average over the three abovementioned types, as recommended by Vealey (1986), to measure a combined summation of self-efficacy. Finally, the three original hypotheses for the present study were:

1. Student-athletes will have generally high levels of self-efficacy (in comparison to the standard bell curve wherein "high" relates to the fourth quartile on the Likert scale of 1-10);
2. Males will have higher levels than females;
3. More experienced athletes will have higher levels of self-efficacy levels.

Results indicated high levels of self-efficacy levels amongst the participants. Male student-athletes, compared to females, consistently showed higher levels of self-efficacy in all four types, i.e., General, Trait, State, and Overall Self-Efficacy. Moreover, statistically significant differences were noted in gender on all four types of self-efficacy. However, no statistically significant differences were found in playing experience or even in the related variables of Hours of Practice In Season and Hours of Practice Out of Season. The first two of the original three hypotheses were supported by the results.

Theoretical Implications

RQ1. What level of sport-related self-efficacy do male and female college student-athletes possess?

The first major result from the present study was that the participants were found to possess generally high levels of self-efficacy (in comparison to the standard bell curve wherein "high" relates to the fourth quartile on the Likert scale of 1-10). This was in support of the first hypothesis. These results mean that the student-athletes, as expected, are generally efficacious individuals. In other words, they have a high level of belief in their own abilities to accomplish various sport-related tasks in order to be successful. Previous research has shown similar findings. Lee and Bobko (1994), in their study on introductory management courses, found self-efficacy to be the most positive and significant measurement of task performance.

Providing support for the theoretical framework for the present study, both Martin and Gill (1991) and Hepler and Chase (2008) examined self-efficacy as it relates to both the situation and the innate abilities of the athletes, or the state and trait types of self-efficacy, respectively. Both studies examined high school and collegiate athletes in their

respective sport settings of track and field, baseball, and softball. They set out to investigate the relationships of trait sport confidence and competitive orientation to state measures of sport confidence, self-efficacy, and the relationships of these measures to performance. They found higher levels of both state and trait types of self-efficacy produced higher levels of performance in athletes. Heazlewood and Burke (2011) quantitatively investigated self-efficacy measurement in athletes participating in a competitive ultra-endurance triathlon setting. The researchers attempted to establish relationships between self-efficacy and selected sport psychological constructs in the prediction of performance in these Ironman triathlons. They posited that the task specific self-efficacy scales, both outcome and performance orientation, were significantly related to performance, (Heazlewood & Burke, 2011). The current study findings coincide with the previous related research. With the student-athletes showing generally high levels of self-efficacy, the results are similar to those of previous studies. This demonstrates generalizability of both the previous studies and the current study. Moreover, these results are important because they illustrate that student-athletes are, on average, highly efficacious individuals. This could mean the aforementioned barriers to high self-efficacy, e.g., not believing in one's self, are already reduced or even eliminated, creating a more efficient and effective path to higher self-efficacy.

RQ2. How does sport-related self-efficacy differ between male and female college student-athletes?

The second major result from the present study was that male participants were found to possess higher levels of self-efficacy than females in all four types surveyed: General, Trait, State, and Overall. Finding male student-athletes to have consistently

higher levels of self-efficacy than females was in support of the second hypothesis of the present study. The male student-athletes were significantly more confident in their skills and abilities than the females. Though there could be a variety of explanations for this difference, the male student-athletes should, based on the results and the previous research, be more successful due to higher levels of self-efficacy leading to higher levels of successful sport performance. This is substantiated by previous research. Bandura (1977), for example, found that the stronger the efficacy expectations, the higher the likelihood of a person to perform successfully a given task. Furthermore, Martin and Gill (1991) claimed that self-confidence, i.e., self-efficacy, enhances performance. Specifically, the researchers found that the athlete participants who were highly sport-confident and had higher self-efficacy feelings ran faster in their races than did those athlete participants who were less self-efficacious and less sport-confident. Finally, Hepler and Chase (2008), in their study on softball players, found statistically significant and positive correlations between self-efficacy levels and physical and decision-making performance.

Overall, much self-efficacy research has concluded that male athletes have higher levels than females (Moritz et al., 2000). Chie-der et al. (2003) concurred with this finding in their study involving high school basketball players. Their results showed male participants to record higher levels of sport-related confidence than the female student-athletes. Additionally, according to Woodman and Hardy's (2003) meta-analysis of sport confidence in sport studies, women typically reported lower self-confidence levels than men; the self-confidence effect sizes for men were significantly larger than those for women. Vealey et al. (1998, as cited in Machida, 2008) also found important

differences between male and female individual sport collegiate athletes when related to sources of sport confidence. The results of their study demonstrated that female athletes determined the sources of social support (e.g., positive feedback from teammates, encouragement from significant others, etc.) and physical self-presentation (feeling good about one's weight or looks) to be more important. These gender differences existed in high school team sport athletes as well. More recently, Singh et al. (2009), in their study on male and female School National Level athletes, discovered male athletes to have significantly higher levels of self-efficacy and confidence in physical activity than their female counterparts. Finally, Rattanakoses et al. (2009) found males' self-efficacy levels to be higher than that of females, particularly in endurance and aerobic exercises.

The results of the present study were similar to the previous research. With the male student-athletes showing generally higher levels of self-efficacy than females, this finding demonstrates positive generalizability of both the previous research and the current study. Despite having some basic differences compared to previous research studies, e.g., a variety of sports, specific institution of student-athletes, etc., the similar results of the current study help to demonstrate this generalizability across these different variables. Finally, this correlation between the previous studies' results and the present study tells us that these male student-athletes could, at least in theory, be more successful than their female counterparts, given the higher levels of self-efficacy.

RQ3. How does the level of playing experience impact the level of sport-related self-efficacy in male and female student-athletes at the collegiate level?

The third major result from the study was that the level of playing experience showed no statistically significant difference in levels of self-efficacy amongst the

participants. Finding the playing experience of the participants in the present study to have no effect or impact on sport-related self-efficacy was not in support of the third and final hypothesis of the present study. These results mean that regardless of the amount of experience each student-athlete possessed, their levels of self-efficacy were not significantly different. More specifically, the results illustrate that a first-year student-athlete could, in all likelihood, demonstrate very similar levels to a fifth-year senior student-athlete.

Very few research articles have holistically addressed various athlete experience levels and their effect on self-efficacy. A number of studies have been conducted to understand on what individual athletes at different skill level (as opposed to multiple skill levels) base their confidence (Chase, 1998; Vealey et al., 1998). The following studies portray differences in the vital sources of confidence depending on the experience levels, i.e., how many years exposure to the sport and their level of expertise. Chase (1998), in her study examining children's sources of self-efficacy in the specific context of physical education and sport, found subjective successful performance, significant others' praise and encouragement (social support), and practicing hard (physical preparation) to be the most important sources of self-efficacy. Vealey et al. (1998) conjectured high school athletes value mastery, social support, physical and mental preparation, coaches' leadership, and demonstration of ability as the most important sources of sport confidence. Vealey et al. (1998) also found college-aged athletes from individual sports to demonstrate the most important sources of sport confidence to be physical and mental preparation, social support, mastery, demonstration of ability, and physical self-presentation. Wilson et al. (2004) found physical and mental preparation and mastery to

be the most important sources of sport confidence for master athletes. Finally, Hays et al. (2007) showed that world-class athletes identified preparation and performance accomplishments as the most important sources of self-confidence.

Only one study specifically analyzed the athletes' playing experience and its relation to levels of self-efficacy or sport confidence, while one other utilized playing experience as a secondary variable. Perry and Williams (1998) conducted a study related to confidence levels in tennis players with varying skill levels with novice, intermediate, and advanced athletes. They found that advanced athletes had significantly higher levels of confidence versus intermediate or novice athletes (Perry & Williams, 1998). Similarly, Rattanakoses et al. (2009), in their study on imagery and self-confidence in male and female athletes, discovered experience level to demonstrate significant differences. The study concluded that the more self-confidence the athlete has, the more successful they are in their sport. Specifically, the results of the study indicated a significant positive correlation for both male and females, although higher for males, directly related to experience level. The research indicated the level of self-confidence depended on the amount of experience the athlete had because the athletes with more experience tended to have higher levels of self-confidence (Rattanakoses et al., 2009).

Finally, Bandura's (1978, as cited in Machida, 2008) first--and admittedly most important--aspect of self-efficacy is successful performance. Bandura argued that past successful experiences provide the most significant evidence of capabilities to succeed at a given task. If individuals have been successful in the past, they will likely believe they can be successful again, leading them to higher levels of self-efficacy and higher levels of sport success (Bandura, 1978, as cited in Machida, 2008).

The results of the present study as they relate to playing experience are not similar to the previous research. The level of playing experience in the student-athletes did not showing statistically significant differences based on self-efficacy levels, and the results do not align with the aforementioned studies which did show significant differences in self-efficacy levels based on levels of playing experience. What this could mean is that playing experience truly does not make a difference in student-athletes' self-efficacy and sport confidence levels. Instead, other variables play a larger role. However, the differences in the results of the present study could be an anomaly based on a variety of reasons, e.g., survey design, participants, and other outside factors. For example, the survey instrument of the current study varied from those incorporated with previous research (Rattanakoses et al., 2009; Moritz et al., 2000; Vealey, 1986). Additionally, perhaps the student-athletes in the current study had different life experiences, which caused them to show consistent self-efficacy levels regardless of their playing experience. Nonetheless, these results are important because it illustrates that first-year student-athletes could very well be ready to perform as successfully as more matured and seasoned student-athletes.

The present study's results indicate strong support for previous research demonstrating that athletes show high levels of sport confidence and that male athletes display higher levels than females (Moritz et al., 2000). Furthermore, many studies have found that higher levels of self-efficacy lead to better sport performance (Martin & Gill, 1991; Feltz & Lirgg, 2001; Rattanakoses et al., 2009). Therefore, it can be theorized that the student-athletes could be successful based on their results from the present study and survey. Given the generally high levels of self-efficacy found in student-athletes in this

study, combined with previously mentioned research findings linking high levels of self-efficacy with successful sport performance, these highly efficacious student-athletes could see successful individual and team performances. Figure 9 below illustrates this notion.

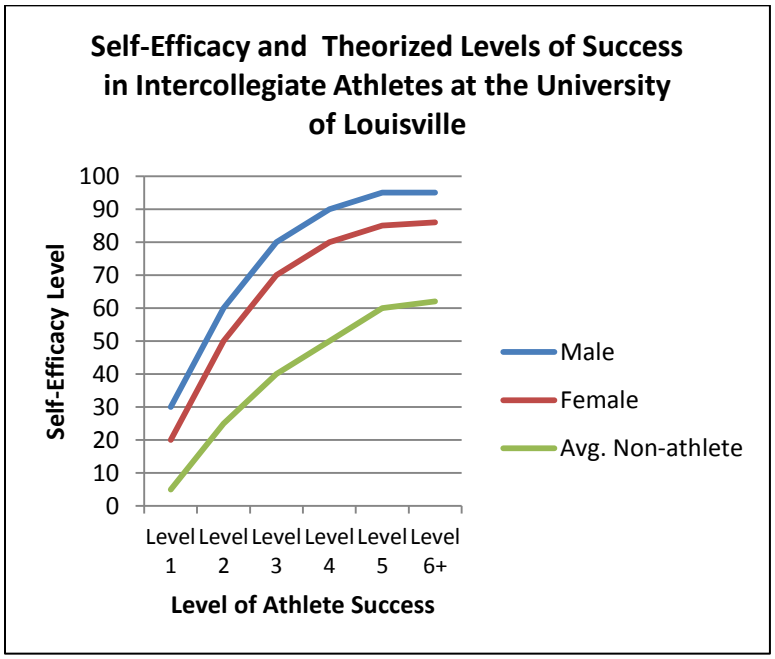

Figure 9. Theorized of Student-Athlete Success Levels. Comparing representative results from the present study referencing gender, self-efficacy levels, and theorized levels of athlete success in University of Louisville student-athletes.

Practical Implications

A gold medalist at the 1998 Nagano, Japan Olympics reported that his greatest source of efficacy derived from knowing he was the strongest and fittest person at any given event. However, this was not the case at the Olympics with the increased talent pool. Thus, he intentionally worked on his mental skills, in addition to the obvious physical skills needed for success, to provide him with the level of efficacy he needed to win (Gould et al., 1999, as cited in Feltz & Lirgg, 2001). From athletes and coaches, to

administrators in general, a growing awareness of sport psychology has led coaches and athletes to acknowledge that psychological factors play a critical role in performance (Bandura, 1997).

There are many practical implications of the results from the present study. First, the present study found highly elevated levels of all four types of self-efficacy in the participants. Due to athletes' high levels of self-efficacy, one can assume athletes are, in general, more confident with their skills and abilities than their non-athlete counterparts. To a certain degree, this can be viewed as a necessary and important quality of a successful athlete – the belief in their ability to succeed. According to Hays et al. (2009), confidence has consistently been associated with positive feelings about one's skills and abilities, whereas a lack of confidence has been associated with anxiety, depression, and dissatisfaction. Furthermore, Hays and her colleagues posited that athletes who have a strong belief in their abilities have shown to peak under pressure in sport contexts. As such, coaches could treat athletes differently than if they were to coach non-athletes. Training regimens and modules can be tailored much differently simply due to the fact that athletes already believe they are good. Thus, for example, Coach Charlie Strong, the current head football coach for the University of Louisville, could adjust his coaching style, operating under the assumption that his players already believe they are good. He could arguably go as far as to not spend time "building up" his players, as someone would need to do who is not working with student-athletes who already possess high levels of self-efficacy. Conversely, these persons, t-ball coaches or physical education teachers for example, would need to spend more time building up their participants.

Second, given the finding of male athletes having higher levels of general and total self-efficacy, it is presumed that males, in general, believe in their own skills and abilities more than their female counterparts. Rattanakoses et al. (2009), in one of their studies, found male athletes to possess significantly higher levels of both imagery use and self-confidence. Thus, it is possible that male athletes simply envision their success more often, leading to higher self-efficacy. Conversely, however, it is possible that in the present study, and even in previous research, that males might claim to possess higher levels of self-efficacy due to the idea of masculine ideology. According to Wade (2008), masculinity restricts men from exhibiting signs of behavior or thought attributed to the female role. In other words, the male student-athletes might view a lack of self-efficacy as a more female role or description, thus influencing their desires to be more "manly" and exhibit more efficacious tendencies.

This these ideas in mind, coaches could treat their male athletes differently, providing a tailored type of coaching, given the males already generally believe they are highly skilled. Specifically, the head basketball coaches at any given university for both the men's and women's team could presumably coach slightly different. The men's coach may not need to spend as much time addressing issues with levels of confidence as their players, the males, might already possess high levels of self-efficacy, or self-confidence. Conversely, the women's coach might need to spend more time considering this concept in their coaching style.

Another example of this practical implication is a high school or collegiate track and field coach. Many sports programs at both the high school and collegiate levels operate under a joint-team system, wherein one head coach will oversee both the men's

and woman's programs. In this case, based on the results of this study and that of previous research, e.g., Rattanakoses et al. (2009), the coach may need to be intentional with their coaching styles between the men and women, realizing the potential differences in self-efficacy between the genders.

Third, finding no difference in playing experience related to sport self-efficacy implies that even beginner athletes can, but not necessarily will, have similar levels of self-efficacy. Therefore, coaches likely cannot treat these less experienced athletes any different simply because they have not played their respective sport as long. Thus, for example, Coach Pitino, the current head men's basketball coach for the University of Louisville, should not assume his freshman players are any less confident or efficacious than his fourth- or fifth-year seniors. Based on the results from the current study, he could assume all of his players possess generally high and similar levels of self-efficacy. This is not to say that players with different playing experience all possess the same talents, skills, and abilities; rather, their self-efficacy levels are simply similar. Thus, assuming the results of this study are generalizable to men's basketball players at the University of Louisville, Pitino's coaching style for both groups can be kept similar because there were no significant differences in levels of self-efficacy levels, meaning players with all levels of playing experience believe themselves to be as successful as any others.

Fourth, the results of the present study support the conjecture from Feltz (1982), that self-efficacy is a an important cognitive variable when measuring sport performance and should be further researched in order to better understand and predict future sport performance. Practitioners can greatly benefit from this area of research, learning how

collegiate athletes think about their own skill and performance. For example, sport psychologists at any given university could utilize this information, working intentionally with their student-athletes to bolster self-efficacy levels, e.g., practicing methods of bolstering self-efficacy levels such as visualization and vicarious experiences, in hopes of inspiring more efficacious athletes, and thus, more successful collegiate teams.

Fifth, the results from the present study can be extrapolated to other real-world scenarios. Moritz et al., (2000) and her colleagues, in their meta-analysis of self-efficacy in sport studies, found a statistically significant and positive correlation between self-efficacy and successful performance. Interestingly, the non-sport-related research corroborated these findings. For example, Multon et al. (1991 as cited in Moritz et al., 2000) reported significant aggregate correlations between self-efficacy and academic performance and between self-efficacy and academic persistence. Furthermore, Stajkovic and Luthans (1998, as cited in Moritz et al., 2000) reported a correlation significant correlation in their meta-analysis of self-efficacy and work-related performance. Thus, these significant correlations and the results of the present study related to self-efficacy can be extrapolated into the non-sports world, portraying the importance of self-efficacy even in the fields of business and academia. High levels of self-efficacy, achieved via the aforementioned techniques, e.g., verbal persuasion, positive self-talk, imagery training, etc., can lead to or signify potential successes in the classroom and at various real-world jobs outside of sport.

Another interesting example of this possible transference outside the sport context is Bandura and Wood's (1989) study related to efficacy in business settings. In their study, participants acted as managers trying to fulfill weekly tasks. Initial analyses

indicated that self-efficacy was a positive predictor of performance. Moreover, participants with high self-efficacy set higher organizational goals and used more efficient analytical strategies than those of the participants with low self-efficacy (Bandura & Wood, 1989). Thus, the statistically significant results of the present study support the previous research related to sport-specific self-efficacy—and, based on previous research (Busch, 1995), can potentially could be applied to non-sport-related self-efficacy. Administrators involved in academia and the business world can utilize the results to shape their future curriculum, protocol, and procedures in effort to increase effectiveness and efficiencies.

Finally, the results of the present study, specifically the differences between male and female student-athletes and their self-identified levels of self-efficacy bring forth gender equity questions. For example, do the results, i.e., male student-athletes claiming to have higher levels of self-efficacy, indicate a gender disparity amongst intercollegiate athletics? To be sure, the student-athletes could quite easily have embellished their levels of self-efficacy for the purpose of appearing more efficacious. However, assuming the results of the present study are valid, one must question the apparent disparity. If nothing else, the present study brings these questions to the forefront. According to Women (2008), the recent Brighton Declaration on Women and Sport called for several important topics related to women in sport to be addressed. The three most important related to the present study were equality in society and sport; education, training, and development that address gender equality in sport; and information and research on women and sport. Hopefully, through continued similar research, these gender equity concerns and

questions will continue to be addressed and improvements continue to be made to reduce or eliminate the existing gap between men and women in sport.

Wade (2008) conceptualized male identity in terms of 'male reference group identity dependence,' defined as "the extent to which males are dependent on a reference group for their gender role self-concept" (p. 6). The male reference group is conceptualized as the source of masculine culture, underlying differences in men's self-definitions of masculinity. Wade also explained that male reference group identity dependence theory attempts to explain this variation among men, i.e., ways in which men differ in their gender-related attitudes, traits, and behaviors. Based on Wade's (1998) theory, a man's masculinity ideology is the result of his male reference group identity. Consequently, the male student-athletes in the present study could have tailored their answers (even going as far as lying) on the self-efficacy survey instrument based on their inherent masculinity and biological difference in gender-related attitudes and behaviors.

Limitations and Future Research

The study had several limitations. First, in large part due to convenience sampling, only University of Louisville student-athletes were selected as participants. Though, as stated in chapter three of the present study, there were specific and intentional reasons to justify this sampling method: accessibility and proximity to the current researchers. However, the sole use of a very segmented sample could certainly limit the generalizability of the results. Selecting student-athletes from other universities may have generated different results. Second, due to timing of the present study in conjunction with the researcher's academic schedule, only fall sport student-athletes were administered the survey. Expanding the study to include student-athletes in other sports

may have generated different results. Third, administering the survey solely to college-aged student-athletes was a limitation. Although the primary reason for this was, again, convenience sampling, the inclusion of a variety of ages in student-athletes would have potentially provided different results for the present study. To be sure, including a wider variety of participants' ages would affect the experience level of the student-athletes, which was one of the premises of the present study. Fourth, the method of self-reporting answers could have affected the internal validity of the study. According to Moritz et al. (2000), performance measures on self-efficacy questionnaires can be classified into three groups: subjective, objective, and self-report. Self-report measurements, similar to those used in the present study, have been found to be less accurate than the other two as there is no guarantee of accurate information gathering. Thus, a different reporting method could have provided different results for the present study. Fifth, the present study did not ask the specific sport on the survey instrument in order to ensure student-athletes' anonymity. This could have affected the possible data analysis in terms of comparing self-efficacy levels by sport. Finally, the results of the present study, specifically with the 35 male student-athlete participants (out of 78), could be skewed by the idea of masculine ideology or identity.

Future research can address each of these limitations. For example, researchers can expand the sample to include other colleges and universities. This would broaden the results to be more inclusive of a variety of male and female student-athletes. Second, the small sample size and sport-demographic makes it difficult to generalize the findings. According to Lenney (1997, as cited in Rattanakoses et al., 2009), depending on the specific sport situation, self-confidence, i.e., self-efficacy, may increase or decrease. For

the future, it is important that research be done to replicate the study with a larger sample size and to include a variety of sports in order to generalize the findings. Third, it would be an interesting inquiry and comparison to add a component to future research to administer the survey to a different age-bracket, such as collecting data from high school student-athletes. This additional data potentially would address the discrepancy in the results of the present and the conflicting research related to playing experience (Rattanakoses et al., 2009), that is, playing experience showed no statistically significant differences in the present study. Finally, future similar research could include asking participants which sport they play. This would allow for both sport by sport analysis and for a comparison of individual and team sports.

There are other areas for possible future research areas to expand the results of the present study. First, despite the results of the present study, further research should again analyze the possible effect playing experience has on self-efficacy levels in athletes, simply because of the previous researching suggesting possible significant implications. As previously stated, an earlier study indicated the level of self-confidence depended on the amount of experience the athlete had because the athletes with more experience tended to have higher levels of self-confidence (Rattanakoses et al., 2009). Other research studies have supported this finding (Vealey et al., 1998; Chase, 1998; Hays et al., 2007; and Wilson et al., 2004), and further research is necessary to properly investigate this discrepancy.

Second, in order to more deeply analyze the components of self-efficacy, additional variables could be introduced. It would be beneficial to investigate other personality and social factors that influence different types of confidence and sources of

confidence. For example, socioeconomic status, academic major, and extracurricular involvement would be beneficial variables to examine for possible statistically significant findings. Furthermore, collective efficacy, involving teams as opposed to individuals, could be an interesting inquiry for future research. According to Feltz and Lirgg (2001), only a few studies had been conducted related to collective efficacy. Combining several of these additional components of self-efficacy could bring to light different results. Additionally, two interesting variables to introduce to a related study in future research are athlete anxiety and competitive orientation. According to Martin and Gill (1991), future sport self-efficacy research should study the interactions of competitive orientations, sport-confidence, self-efficacy, anxiety, and performance. Finally, in order to introduce a qualitative element to future similar research, face-to-face interviews could be conducted with the student-athletes. Specifically, this could address the concern of males potentially lying on the survey instrument simply to seem more masculine. The mixture of qualitative and quantitative research would also likely increase the validity of the results through interview questions more deeply addressing some of the basic self-efficacy questions on the quantitative survey instrument. Cleary there are several areas of future research with self-efficacy in intercollegiate athletics.

Summary of Study

As previously mentioned, self-efficacy describes the belief one has in being able to execute a specific task in order to obtain a specific outcome (Bandura, 1997). It is not necessarily concerned with the skills of an individual, but rather what one can accomplish with a certain set of skills. Most of the sport-related self-efficacy studies reviewed by Mortiz et al. (2000) showed statistically significant and at least moderate relationships

between self-efficacy and performance. Research has shown that higher levels of self-efficacy can lead to better performances, both on and off the field. Feltz (1994, as cited in Feltz & Lirgg, 2001) noted, "research has demonstrated consistent evidence people's perceptions of their performance capability significantly affect their motivation and performance" (p. 7). It is for these important reasons that the present study addressed self-efficacy in college student-athletes.

The purpose of this study was to understand Bandura's (1977) self-efficacy and Vealey's (1986) sport confidence implications on intercollegiate athletics and to explore gender and experience level differences related to self-efficacy in intercollegiate athletes. Data were collected from student-athletes at the University of Louisville. Four types of self-efficacy were examined: general, state, trait, and overall efficacy. In addition to each type of self-efficacy, respondents were assessed in terms of their personal experience playing their respective sports. Several types of analyses were performed to properly examine all research questions and the included variable relationships.

The first research question asked what level of sport-related self-efficacy do male and female college student-athletes possess? This question was analyzed through descriptive statistics and a correlation analysis. The first hypothesis for the present study was: Student-athletes will have generally high levels of self-efficacy (in comparison to the standard bell curve wherein "high" relates to the fourth quartile on the Likert scale of 1-10). The results indicated that athletes did, in fact, possess substantially high levels of self-efficacy; all means were above the eighty percent threshold. The first hypothesis was supported in that athletes would have high levels of self-efficacy overall. These results provide implications for coaches and other athletic administrators, giving them direction

in terms of how to treat or address athletes who already believe they possess the abilities to perform successfully. Finally, these results indicate support for previous research showing that high levels of self-efficacy lead to more successful performance. Given that all but one fall sport at the University of Louisville made it to post-season tournament play, this notion is further supported.

The second research question asked how does sport-related self-efficacy differ between male and female college student-athletes? This question was analyzed through a one-way ANOVA and an independent *t*-test. The second hypothesis was: Male student-athletes will have higher levels of self-efficacy than females. Results indicated that all four types of self-efficacy were statistically significant between the two groups, female and male student-athletes. These results revealed that the male student-athletes showed significantly higher levels of self-efficacy than did their female counterparts. Previous research showed similar results between male and female student-athletes and self-efficacy levels. Again, these results indicate implications for athletic administrators and coaches like. Specifically for coaches who oversee both males and females, e.g., the cross-country and track and field coaches at the University of Louisville, they could, according to the results of the current study, coach their male student-athletes different from their females. These coaches could assume the males already believe they possess a higher level of ability to perform successfully and will therefore need less "building up" whereas the females may need more attention in this area.

The third and final research question asked how does the level of playing experience impact the level of sport-related self-efficacy in male and female student-athletes at the collegiate level? This question was analyzed through several one-way

ANOVA tests, examining the relationship between the independent variable, level of playing experience, on the dependent variable, types of self-efficacy. The third and final hypothesis was: More experienced athletes will have higher levels of self-efficacy levels than less experienced athletes. Results indicated that all four types of self-efficacy showed no statistically significant difference between the groups (years of playing experience), thereby not supporting the present study's third and final hypothesis. Even if a given student-athlete has been playing their respective sport much longer than the next student-athlete, this does not necessarily mean they will possess significantly higher levels of self-efficacy. Therefore, in interacting with these student-athletes, one must understand and appreciate their belief in their own ability to perform successfully based not on experience level, but on other factors such as past experiences and gender.

This study has illustrated the importance of self-efficacy and sport confidence research. To be sure, the topic's implications are far-reaching for sport administrators at all levels. First, from a theoretical implication standpoint, the foundational research of Hays et al. (2009) and Martin and Gill (1991) was supported in that athletes were found to have generally high levels of self-efficacy. Moreover, the present study supported their research with the correlation between state and trait levels of self-efficacy. Second, previous research (Rattanakoses et al., 2009; Chie-der, et al., 2003; Treasure et al., 1996) suggests male athletes tend to have higher levels of self-efficacy than females. The present study supported this with statistically significant differences between genders. The third and final theoretical implication was related to playing experience. Rattanakoses et al., in their 2009 study, showed strong results in favor of playing experience having a statistically significant difference on self-efficacy levels. The

present study did not support this research. However, the current findings did support and are similar to much of the previous research. Furthermore, they are important because they broaden the previous research both in terms of multiple sports and they bring the results to the present day.

The practical implications were also many. For example, the present study found highly elevated levels of all four types of self-efficacy in the participants. Due to athletes' high levels of self-efficacy, one can assume athletes are, in general, more confident with their skills and abilities than their non-athlete counterparts. To a certain degree, this can be viewed as a necessary and important quality of a successful athlete – the belief in their ability to succeed. A second practical implication relates to gender differences. Given the finding of male athletes having higher levels of general and total self-efficacy, it is presumed that males, in general, believe in their own skills and abilities more than females. As such, assuming the results of the present study are valid, coaches could treat their male and female athletes differently, providing a tailored type of coaching.

Vealey et al. (1998) put it best, claiming "By examining…athletes' confidence, a better understanding of the dynamic influences of sociocultural context, organizational culture, and individual differences in athletes on how confidence is developed may be achieved" (p. 76). Further examination of the self-efficacy and sport confidence concepts will hopefully hel*p* sport administrators to better understand athletes, potentially enhancing confidence and ultimately, athlete and team success.

REFERENCES

Abdolalizadeh, J., Torbati, H., Sohrabi, M., Mohammadi, J., & Tavakolian, A. (2010). The relationship between sources of sport confidence and athletic performance in young Iranian elite wrestlers. *Iranian Journal of Health and Physical Activity, 1*(1), 8-14.

Bandura, A. (n. d.). *Guide for constructing self-efficacy scales*. Retrieved from http://web.me.com/lester1/Techedge_Karen/Welcome_files/File%20sent%20from%20Dr.%20Bandura%20-%20Guide%20for%20Self-Efficacy%20Scales.pdf

Bandura, A. (1977). Self-Efficacy: Toward a unifying theory of behavioral change. *Psychology Review, 84,* 191-215.

Bandura, A. (1978). The self-system in reciprocal determinism. *American Psychologist*, 33, 344-358.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1997). *Self-efficacy. The exercise of control.* New York, NY. W.H. Freeman and Company.

Bandura, A., Jeffery, R. W., & Gajdos, E. (1975). Generalizing change through participant modeling with self-directed mastery. *Behavior and Research Therapy, 13,* 141-152.

Burton, D. (1988). Do anxious swimmers swim slower? Re-examining the elusive anxiety-performance. *Journal of Sport Psychology*, 10, 45-61.

Busch, T. (1995). Gender differences in self-efficacy and academic performance among students of business administration. *Scandinavian Journal of Educational Research, 39,* 311-318.

Chie-der, D., Chen, S., Hung-yu, C., & Li-Hang, C. (2003). Gender differential in the goal setting, motivation, perceived ability, and confidence sources of basketball players. *The Sport Journal, 6*(3), 36-40.

Chiu, L.K., (2009). University students' attitude, self-efficacy, and motivation regarding leisure time physical participation. *Jurnal Pendidik dan Pendidikan*, 24, 1-15.

DeVellis, R. F. (2003). *Scale Development: Theory and Applications*. (2nd ed.). New York: SAGE.

Ede, A., Hwang, S., & Feltz, D. (2011). Current directions in self-efficacy research in sport. *Magazine of Latin American Psychology of Exercise and Sport, 6*(2), 181-201.

Feltz, D. (1982). Path analysis of the causal elements in Bandura's theory of self-efficacy and an anxiety-based model of avoidance behavior. *Journal of Personality and Social Psychology, 42*(4), 764-781.

Feltz, D., Short, S., & Sullivan, P. (2008). *Self-efficacy in sport.* Champaign, IL: Human Kinetics.

Field, A. (2005). *Discovering statistics: Using SPSS for Windows.* (2nd ed.). Thousand Oaks, CA: Sage.

Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology,* 14, 172-204.

Hanton, S., & Jones, G. (1999). The effects of a multimodal intervention program on performers: Training the butterflies to fly in formation. The Sport Psychologist, 13, 22-41.

Hays, K., Maynard, I., Thomas, O., & Bawden, M. (2007). Sources and types of confidence identified by world class sport performers. *Journal of Applied Sport Psychology,* 19, 434-456.

Hays, K., Thomas, O., Maynard, I., & Bawden, M. (2009). The role of confidence in world-class sport performance. *Journal of Sports Sciences, 27*(11), 1185-1199.

Hepler, T., Feltz, D. (2012). Take the first heuristic, self-efficacy, and decision-making in sport. *Journal of Experimental Psychology: Applied,18*(2), 154-161.

Heazlewood, I., & Burke, S. (2011). Self-efficacy and its relationship to selected sport psychological constructs in the prediction of performance in ironman triathlon. *Journal of Human Sport and Exercise, 2*(6), 78-111.

Hepler, T. J., & Chase, M. A. (2008). Relationship between decision-making self-efficacy, task self-efficacy, and the performance of a sport skill. *Journal of Sport Sciences, 26*(6), 603-610.

Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika, 35,* 401-415.

Lee, C., & Bobko, P. (1994). Self-efficacy beliefs: Comparison of five measures. *Journal of Applied Psychology, 79*(3), 364-369.

Machida, M. (2008). An examination of sources and multidimensionality of self-confidence in collegiate athletes: A Thesis Submitted to the Faculty of Miami University in partial fulfillment of the requirements for the degree of Master of Science Department of Kinesiology and Health.

Maddux, J. E., & Lewis, J. (1995). Self-efficacy and adjustment. In J.E. Maddux (Ed.), Self-efficacy, adaptation, and adjustment (pp. 37-68). New York: Plenum.

Making Performance Matter. (2012). Retrieved from http://www.makingperformancematter.com/page1.php?category=1&post=9

Manzo, L., Silva, J., & Mink, R. (2001). The Carolina sport confidence inventory. *Journal of Applied Sport Psychology*, 13, 260-274.

Martin, J.J., & Gill, D.L. (1991). The relationships among competitive orientation, sport confidence, self-efficacy, anxiety and performance. *Journal of Sport and Exercise Psychology*, *13*(4), 149-159.

Moritz, S. E., Feltz, D. L., Fahrbach, K.R., & Mack, D. E. (2000). The relation of self-efficacy measures to sport performance: A meta-analysis review. *Review Quarterly for Exercise and Sport, 71*(11), 280-294.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

Rattanakoses, R., Omar-Fauzee, M.S., Geok, S., Abdullah, M., Choosakul, C., Nazruddin, M., & Nordin, H. (2009). Evaluating the relationshi*p* of imagery and self-confidence in female and male athletes. *European Journal of Social Sciences, 10*(1), 129-142.

Schunk, D. H. (1995). Self-efficacy, motivation, and performance. *Journal of Applied Sport Psychology, 7*(2), 112-137.

Schunk, D., & Lilly, M. (1984). Sex differences in self-efficacy and attributions: Influence of performance feedback. *Journal of Early Adolescence, 4,* 203-213.

Singer, R. N., Hausenblas, H.A., & Janelle, C. (2001). Self-efficacy beliefs of athletes, teams, and coaches. *Handbook of Sport Psychology, 2,* 240-361. New York: John Wiley and Sons.

Singh, T., Bhardwaj, G., & Bhardwaj, V. (2009). Effect of self-efficacy on the performance of athletes. *Journal of Exercise Science and Physiotherapy, 5*(2), 110-114.

United States Department of Education. (2013). *Institution Data*. Retrieved from: http://ope.ed.gov/athletics

University of Louisville. (2012). *A brief history of UofL*. Retrieved from http://louisville.edu/about/history.html

Vealey, R. (1986). Conceptualization of sport confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport Psychology,* 8, 221-246.

Vealey, R. S., & Chase, M. A. (2008). Self-confidence in sport: Conceptual and research advances. In T. S. Horn (Ed.), Advances in Sport Psychology (3rd ed.). Champaign, IL: Human Kinetics.

Vealey, R. S., & Knight, B. J. (2002). Multidimensional sport-confidence: A conceptual and psychometric extension. Paper presented at the Association for the Advancement of Applied Sport Psychology Conference, Tucson, AZ.

Vealey, R. S., Hayashi, S. W., Garner-Holman, M., & Giacobbi, P. (1998). Sources of sport confidence: Conceptualization and instrument development. *Journal of Sport & Exercise Psychology,* 20, 54-80.

Wade, J. (2008). Masculinity ideology, male reference group identity dependence, and African American men's health-related attitudes and behaviors. *Psychology of Men and Masculinity*, *9*(1), 5-16.

Wilson, R., Sullivan, P., Myers, N., & Feltz, D. (2004). Sources of sport confidence of master athletes. *Journal of Sport and Exercise Psychology*, 26, 369-384.

Women, gender equality, and sport: Women 2007 and beyond. (2008). *Division for the Advancement of Women, (2),* 1-44.

Woodman, T., & Hardy, L. (2003). The relative impact of cognitive anxiety and self-confidence upon sport performance: A meta-analysis. *Journal of Sports Sciences*, 21, 443-457.

APPENDICES

RESEARCH QUESTIONNAIRE

This questionnaire is designed to hel*p* gain a better understanding of collegiate student-athletes and what makes them successful. Your answers will be kept strictly confidential and will not be identified by name, position, or any other identifiable mark.

PRACTICE RATING QUESTION

To familiarize yourself with the rating system below, please complete the following practice item first.

PRACTICE: If you were asked to lift objects of different weights right now, how certain are you that you can lift each of the weights described below?

Rate your degree of confidence by recording a number from 0 to 100 using the scale given below.

0	10	20	30	40	50	60	70	80	90	100
Cannot					Moderately					Highly
do at all					certain can do					certain can do

Physical Strength	*Confidence* (0 - 100)
Lift a 10 pound object	_____
Lift a 20 pound object	_____
Lift a 30 pound object	_____
Lift a 40 pound object	_____
Lift a 50 pound object	_____
Lift a 70 pound object	_____

Questionnaire continued on the next page

The questions below are related to your role as a student-athlete. <u>In the Confidence column, rate how confident you are that you can do the tasks as of now</u>. Rate your degree of confidence by recording a number from 0 to 100 using the scale below:

0	10	20	30	40	50	60	70	80	90	100
Cannot do at all					Moderately certain can do					Highly certain can do

	Confidence (0 to 100)
Appraisal Inventory related to general collegiate athletics	
1. Perform successfully in my sport	_____
2. Perform better than my teammates	_____
3. Perform better than my opponent(s)	_____
4. Execute the skills necessary to be successful at my sport	_____
5. Be an integral part of my team in winning any given game/match	_____
Appraisal Inventory related to <u>state</u> sport skills	
6. Think and respond successfully during competition	_____
7. Make critical decisions during competition	_____
8. Perform well under pressure	_____
9. Performing better in competition today compared to last month	_____
10. Adapt to different game situations	_____
Appraisal Inventory related <u>trait</u> sport skills	
11. Concentrate well enough to be successful	_____
12. Be successful even when the odds are against me	_____
13. Bounce back from performing poorly and be successful	_____
14. Achieve my competitive goals during competition	_____
15. Consistently be successful during competition	_____

16. Gender:
    Male _____ Female _____
17. Age _____
18. How many years have you been playing your <u>organized</u> sport?
    Less than 3 years _____ 3-5 years _____ 6-8 years _____ More than 8 years _____
19. How many hours per week do you spend participating in your sport-related activities IN season (practice, travel, meetings, exercise, games, etc.)?
    Less than 5 hours _____ 6-10 hours _____ 11-15 hours _____ More than 15 hours _____

20. How many hours per week do you spend participating in your sport-related activities NOT in season?

    Less than 5 hours _____ 6-10 hours _____ 11-15 hours _____ More than 15 hours _____

21. What is your year in school?

    First _____ Second _____ Third _____ Fourth _____ Fifth _____ Sixth _____

CURRICULUM VITAE

BRYAN L. SHELANGOSKI

Work Address:
University of Louisville
2108 Unity Place – West Hall
Louisville, KY 40208
bryan.shelangoski@louisville.edu

Philosophy on Student Affairs

Student Affairs practitioners should work to provide, maintain and encourage a dynamic community which benefits the overall activity of the college or university, serving as a foundation and opportunity for the continued growth of its students. The initiatives of the division should look to connect the unique intimacy of the setting to cultivate both a supportive and challenging environment, one that looks to engage the whole student, identifying opportunities beyond the walls of the classroom, within the day-to-day lives of the students.

EDUCATIONAL BACKGROUND

2013 **M.A.** ***Higher Education*** University of Louisville
Louisville, KY

- Self-Finance 100 percent of my education
- Cumulative G.P.A. 4.00/4.00

2007 **M.B.A.** ***Business Administration*** St. Thomas University
Miami, FL

- Cumulative G.P.A. 3.96/4.00
- Kappa Gamma Pi Catholic Graduate Honor Society (G.P.A. 3.80+ every semester)
- Self-Financed 100 percent of my education

2006 **B.S.** ***Health and Human Performance*** Iowa State University
Ames, IA

- Cumulative G.P.A. 3.74/4.00
- Dean's List (G.P.A. 3.50+ every semester)
- Phi Kappa Phi Honor Society
- Self-Financed 100 percent of my education

PROFESSIONAL EXPERIENCE

01/13 – Present ***Associate Director/Community Manager***
EdR/University of Louisville Louisville, KY

Housing and Residence Life – University of Louisville Properties
Primary responsibilities:

- Serve as a member of the core leadership team for the University of Louisville Housing and Residence Life (HRL) Staff, including representing HRL at University Key events and in coordination the other members of the core leadership team, creates the mission, vision, and goals for HRL.
- Serve at the Associate Director level within the division of Student Affairs; attending meetings, retreats and other professional activities as a representative of HRL for the division.
- Establish and move forward the ULP mission, vision, goals and strategic plan.
- Sustainability: oversee and facilitate departmental sustainability initiatives, e.g., Green Room certification, Earth Day, Recyclemania, Earn-A-Bike, Campus Conservation Nationals, Lighten Your Load, student committees, etc.
- Supervision: direct supervision, mentorship, development and evaluation of two Assistant Directors and one Maintenance Manager; indirect supervision of 14 full-time staff and 31

paraprofessional staff; Supervise the day to day accounting/administrative functions such as balancing student accounts, updating applicant and license information, handling payments and credits, making balanced daily deposits through e-Site, producing and balancing month end reports, etc.

- Budget: develop the annual operating budget of approximately $10 million, with the input and assistance of the Regional Director and approved by the University of Louisville Foundation.
- Summer Conferences: maintain oversight of the summer conference program for the University of Louisville, Office of Housing and Residence Life and the day to day operation of the summer conference program for the University of Louisville Properties.
- Assessment: work collaboratively with Assessment Coordinator to oversee consistent review process for ULP, i.e., 360-degree evaluation and review process; member of the Council for the Advancement of Standards Review Team for annual self-reviews and formal division-wide reviews.
- Service contract management: supervise the RFP and bidding processes for all major and minor contracts within department, e.g., cable television, pest control, linens, custodial services, etc.
- Professional Development: founder and chair of the Internal Professional Development Committee (ProDevo) for Housing and Residence Life, intentionally addressing the developmental needs of each level of staff within the entire department, via webinars, lectures, guest speakers, etc.; regularly offer topical webinars and written articles to departmental staff throughout academic year.
- Facility renovation and deferred maintenance: oversee the annual and ongoing renovation and deferred maintenance of all ULP residential facilities.

<u>Secondary responsibilities:</u>

- Maintain oversight of and serve on the professional staff emergency on call system.
- Serve as a Hearing Board member for Dean of Student's Office Student Rights and Responsibilities student conduct hearings.
- Act as Search Committee Chair for multiple Housing and Residence Life and Student Affairs job searches, e.g., Associate Directors, Coordinators, etc.
- Maintain and execute the marketing and business plan for the ULP halls (foundation owned) in order to achieve full market occupancy or 100% occupancy.

- Coordinate marketing efforts, assignments and billing operations with HRL to present a seamless operation between the foundation halls and those managed by HRL.
- Maintain a highly interactive approach with residents and handles problem resolutions in ensure customer satisfaction.
- Conduct monthly walk inspections of Fixed Assets/Capital Improvements with University of Louisville Foundation representatives.
- Monitor monthly operating financial statements to assure compliance with budget.
- Manage contracts with current vendors and seeks new ones through a bid process.
- Adhere to the U of L Student Code of Conduct and works closely with the Dean of Students office and the Assistant Director of Residence Life to manage student conduct and crisis.
- Collaborate with the off campus private affiliate managers, as an on campus partner.
- Indirect supervision of HRL staff and Leadership of task groups and committees with representatives of EdR, HRL and UL Student Affairs staff.

01/12 – 01/13 ***Associate Director for Facilities and Operations***

University of Louisville Louisville, KY

Housing and Residence Life

Primary responsibilities:

- Serve on the campus housing leadership team, playing a key role on the leadership team of the housing program in development and obtainment of the university, student affairs and housing visions and goals.
- Directly responsible for management of all facility issues of the university owned and operated residential buildings, the partnership with the foundation facilities located on campus, and the connection between university housing and the affiliation communities located near and off campus.
- Service contract management: supervise the RFP and bidding processes for all major and minor contracts within department, e.g., cable television, pest control, linens, custodial services, etc.
- Facility renovation and deferred maintenance: oversee the annual and ongoing renovation and deferred maintenance of all university owned and managed residential facilities, budgeted at approximately $2 million.
- Budget: oversee an overall annual Facilities and Operations budget of approximately $2.9 million, about 55 percent of total departmental operating budget.

- New construction: Oversee and advise on new residential construction on campus; work collaboratively with other offices (Architects, Planning and Design, etc.) throughout the various phases of new construction.
- Inventory control: track and monitor all residential inventory across campus including furniture, programmatic materials, etc.
- Facility crisis response: oversee the crisis response protocol and procedures, including the Building Emergency Action Plan (BEAP); serve as the Building Emergency Coordinator (BEC) for Housing; ensure staff, both professional and paraprofessional, are properly trained for potential facility-related crises, e.g., major mold outbreak in residence hall leading to closure.
- Sustainability: oversee and facilitate departmental sustainability initiatives, e.g., Earth Day, Recyclemania, Earn-A-Bike, Campus Conservation Nationals, Lighten Your Load, etc.
- Fire and Life safety: work collaboratively with the university Fire Marshal to ensure all codes and regulations are being met and/or surpassed; ensure the paraprofessional and professional staff were well-trained and capable of diffusing potential Fire and Life Safety situations.
- Supervision: direct supervision, mentorship, development and evaluation of all Facilities professional staff and indirect supervision of Facilities paraprofessional staff; co-supervise Residence Life Coordinators (3), Graduate Assistants (4) and other office staff, both professional and paraprofessional.
- Assessment: oversee assessment process for all Housing facilities-related initiatives, e.g., Maintenance, Safety and Security, etc., through surveys, focus groups, informal discussions, and programmatic assessment opportunities.

<u>Secondary responsibilities:</u>

- Represent the university and the housing program through publications, presentations, and serving on committees in order to establish further professional competency and to better the campus community through inter-departmental engagement and collaboration.
- Co-chair the Internal Professional Development Committee (ProDevo) for Housing and Residence Life, intentionally addressing the developmental needs of each level of staff within the entire department, via webinars, lectures, guest speakers, etc.
- Serve on an emergency leadership on-call rotation throughout the calendar year.

- Assist with recruitment and selection of all paraprofessional, Graduate Assistants, and professional staff within department; chair selection committees intermittently.
- Develop and foster working relationship with privatized and affiliated housing properties on and near campus.

05/11 – 01/12 ***Associate Dean of Students*** Sullivan University
Louisville, KY

Primary responsibilities:

- Responsible for the leadership and supervision over Housing and Residence Life, Student Life, Public Safety, Health Services, and Transportation professional and paraprofessional staff.
- Provided vision, leadership, and strategic direction and ensure the delivery of effective and quality service to students.
- Oversaw budget planning and fiscal operations of division.
- Served as International Liaison for international student housing including housing program development.
- Created, developed, and implemented multiple strategic assessment initiatives for students and staff.
- Ensured security needs are met during the day and evening operations, while assessing the effectiveness of policy enforcement.
- Responsible for all campus New Student Orientation events.
- Facilitated all graduation ceremonies and related events.
- Developed inaugural parents website and programming model.
- Created, implemented, and facilitated a university-wide New Staff Mentor/Mentee Program.

Secondary responsibilities:

- Coordinated and oversaw life and fire safety procedures and techniques.
- Developed electronic maintenance and custodial work order systems for all campus areas.
- Assisted in planning for future deferred maintenance and renovation projects.
- Restructured staffing hierarchy in order to better meet the needs of the students and staff.
- Negotiated contract security agreement worth approximately $400,000.
- Redesigned parking lot system in order to alleviate potential liability.
- Responsible for all Department of Education compliance and reporting: Clery and Minger Reports, Drug and Alcohol Assessments, etc.

- Initiated campus-wide tracking system for all Information Technology equipment.

05/10 – 05/11 ***Director of Housing and Residence Life*** Sullivan University
Louisville, KY

Primary responsibilities:

- Served as the University's Chief Housing Officer, overseeing housing operations and residence life programs for all campus residents.
- Provided supervision, mentorship, training, and leadership to an Associate Director, four Resident Directors (RDs), 10 Resident Advisors (RAs), Administrative Assistant, front desk support staff (clerks), and approximately 15 Maintenance/Custodial staff persons.
- Provided the leadership and management of the Housing and Residence Life program, including administrative decision-making, leadership, and strategic planning.
- Acted as the senior judicial officer for all housing policy violations and coordinates all judicial appeals.
- Facilitated the oversight of new building construction for a 108-bed "wing" extension to current residence hall, amounting to $2.5 million.
- Assisted with the oversight of a $4 million+ renovation to 412-bed state-of-the-art residence hall.
- Responsible for areas that include fiscal oversight, program development and assessment, student development and learning outcomes, administration of the housing contract and departmental policies, adjudication of judicial cases, oversight of publications, and the development of a living and learning community.
- Responsible for the implementation of housing registration and orientation events.

Secondary responsibilities:

- Created, developed, and implemented multiple strategic assessment initiatives for housing students and staff.
- Coordinated housing selection process for all campus residents.
- Created web content and design for first-ever University Housing and Residence Life website.
- Established a Housing and Residence Life manual, including complete Emergency Protocol Standards, for all campus students.
- Created and implemented inaugural Family Weekend events for university.
- Developed an electronic maintenance work order system for all campus areas.

- Implemented positive institutional policy changes (e.g. removing a 50-mile radius policy, approving "local" students to be eligible for Housing) in order to bring the Housing and Residence Life department to current trends within the field.
- Worked cooperatively with other departments to provide overall operational efficiency, planning and facilities management for the housing program.

12/07 – 05/10 ***Assistant Director of Housing & Residential Life***

Kenyon College Gambier, OH

Primary responsibilities:

- Supervised two staffs of 16 Community Advisors on a daily basis.
- Oversaw 75 percent of the student body (approximately 1,100 students) and 85 percent of the residential facilities (eight traditional residence halls, six apartment complexes, and several programmatic houses).
- Created, developed, and implemented *all* Housing and Residential Life processes.
- Co-supervised professional office staff members on day-to-day office tasks and projects.
- Served as a judicial hearing officer for low to mid-level student conduct infractions.
- Co-managed budget for entire department, approximately $100,000.
- Acted as the departmental liaison between Housing and Residential Life and Buildings and Grounds; attend weekly Maintenance meetings on department's behalf.
- Served on an emergency on-call rotation throughout academic year.
- *Interdepartmental Collateral:* Student Activities Office
    - Leadership/Entrepreneurship Workshop – Burton D. Morgan Grant Funded
        - Co-facilitated weekend workshop for student leaders
    - Budget and Finance Committee
        - Advised student group in allocating over $450,000 in student organization funds
    - Greek Liaison
        - Co-advised Greek Judiciary Committee encompassing all incident reviews involving Rush and Pledge violations
        - Co-facilitated rush/pledge scheduling and review for all 14 fraternities, sororities, and societies

Secondary responsibilities:

- Assessment Coordinator: Quality of Life Survey for entire campus community, Focus Groups, Surveys of Staff each semester, Performance Evaluations, etc.
- Duty Coordinator: coordinated duty schedule and rotation for both professional and paraprofessional staff members.
- Tracked each resident in electronic logging system (reviewing Campus Safety logs, entering in interactions, etc.), following up on almost all incidents.
- Reviewed Student Handbook for annual departmental revisions.
- Facilitated the Ohio Housing Officer (OHO) Fall 2008 Conference, bringing many institutions to our campus.
- Performed Greek residential checks to ensure safety during major weeks of service.
- Co-coordinated Housing Selection – Division (Greek), Theme/Accommodation, Lottery information sessions and tables, communication plan, working day of Lottery, following up, summer housing.
- Co-supervised summer and year-long interns with office projects, etc.
- Acted as sole Theme Housing liaison (work alongside theme housing CA to coordinate budget purchases, programming, etc.)
- Coordinated CA Selection (coordinated all documents, interviews, etc., facilitated hiring for all CA staffs).
- Break Housing Coordinator/Break Inspection Coordinator (including hiring/training of CA on Duty over break).
- Coordinated housing over the summer for students remaining on campus.
- Campus-wide, Educational Programming: Alcohol Awareness Week, Diversity Awareness Week, Safety Awareness Week, South Quad movie/bonfire, KAC Pool Movie night, Life Off the Hill series, Harry Potter Day, etc.

4/07 – 12/07 ***Associate Director of Programs – Hospitality and Tourism***
St. Thomas University Miami, FL

- Produced instructional materials using various multimedia formats.
- Developed and implemented summer programs for more than 200 participants.
- Monitored budgetary needs for two key summer programs.
- Tabulated research data from numerous participant surveys.

8/06 – 12/07 ***Graduate Assistant – Sports Administration***
St. Thomas University Miami, FL

- Extensive academic advising for all School of Business students.
- Oversaw interview and admissions process for entire graduate department.
- Assisted in department and university problem solving, planning, and coordinating.
- Comprehensive computer application and website maintenance tasks for School of Business.

8/06 – 7/07 ***Research Analyst,*** Department of Psychology
St. Thomas University Miami, FL

- Assisted in successful grant writing implementation for several children's surveys.
- Audited survey records from previous years' research.
- Computed statistical averages for several psychological research surveys.
- Formulated combined documents with meta-analysis approach.

5/06 – 4/07 ***Graduate Hall Director,*** Residence Life
St. Thomas University Miami, FL

- Assisted with housing and residential life operations for traditional residence halls and one apartment-complex.
- Supervised 10 resident assistants in variety of residence life duties.
- Developed and implemented multiple campus-wide activities.
- Maintained a rigorous academic atmosphere utilizing various academic programs.

12/03 – 12/05 ***Resident Assistant,*** Residence Life
Iowa State University Ames, IA

- Facilitated relationships between administrative staff and 75 students.
- Advisor to the Larch Hall Executive Board and Council
- Direct experience with various learning communities.
- Maintained ongoing communications with university officials and administrators.

TEACHING ASSIGNMENTS

Summer 2006 Upward Bound Teacher
Ames, IA

- *Preparing for your first year of college!*

Summer 2007 Miami Dade County Public Schools Miami, FL

- *Health and Wellness*

- *College Experience*

SELECTED PUBLICATIONS/PRESENTATIONS

Moore, J., Shelangoski, B. (2009). Tech-tiquette. *TRENDS – The News Magazine of the Great Lakes Association of College and University Housing Officers, May*. Pgs 4-5.

Moore, J., Shelangoski, B. (2009). *Tech-tiquette.* Great Lakes Association of College and University Housing Officers. Ft. Wayne, Indiana.

Shelangoski, B., Ulmer, L. (2012). *QPR: How to Save a Life.* Summer Academy. Louisville, KY

Shelangoski, B. (2011). *You Want Me To Do Whaaaat?.* Southern Association for College Student Affairs. Atlanta, GA.

Shelangoski, B. (2010). Livin' It Up - The Graduate Student (Res) Life - Supervising, Advising, and Balance. *SEAHO Report*. (Fall 2010), Pgs. 25-28.

Shelangoski, B. (2007). Connecting the Past to the Future. *News and Views Quarterly, International Society of Travel and Tourism Educators. 23* (4), Pg. 5.

Shelangoski, B. (June 2007). The Value of Interning. *Experience Career Services and More – St. Thomas University. 15*. Pg. 1.

COLLEGIATE ACTIVITIES

2/13 – Present 21st Century Initiative (Technology, Demographics, and Engagement) Member

As charged and appointed by the Provost and President, the Technology, Demographics, and Engagement Committee is charged with examining four critical questions and issues facing the University:

1. What is the appropriate role and use of technology and on-line learning at the University of Louisville over the next 10 years?
2. What is the appropriate size and composition of student enrollment (including professional, undergraduate and graduate) at the University of Louisville over the next 10 years, paying special attention to a changing, more diverse demographic?
3. What is the appropriate size, composition and role of international programs and initiatives at the University of Louisville over the next 10 years?

4. What is the role of "engagement" as it pertains to the teaching/learning environment at UofL?

2/12 – Present **Donald D. Gehring Academy Host Committee**
Member, Participant

- Assist in planning and implementation of the Summer Campus Judicial Affairs Training Institute
- Serve as the Transportation Chair as part of the Host Committee
- Serve as a "track buddy" for two specific educational tracks for both mid-level managers and senior conduct officers in student affairs

2/12 – Present **Fire Prevention Week Committee**
Co-Chair

- Formed committee comprised of several campus delegates and constituencies with goals of initiating campus-wide programming (e.g., smoke tent, mock-fire in residence hall, fire extinguisher training, etc.) in October related to fire safety week
- Successfully solicited partnerships with multiple student groups (RSA, SGA, SAB, etc.) in addition to multiple departmental partnerships, e.g., Campus Police, DEHS, etc.

1/12 – Present **Sustainability Operations Committee**
Member

- Serve on campus-wide committee related to major sustainability initiatives
- Focus on sustainability business functionality efforts and interdepartmental collaborations
- Ensure effective and efficient marketing and promotions of Housing-related sustainability efforts

7/11 – 1/12 **Wellness Connection Committee**
Co-Chair

- Formed committee comprised of several campus delegates and constituencies with goals of revamping holistic Health and Wellness program for all Sullivan students
- Initiated several in-depth physical, emotional, and academic health-related initiatives
- Began organization and facilitation of new health-related academic majors (Dietetics and Nutrition) never before seen at university

2/11 – 1/12 **Diversity Awareness Committee**
Member

- Meet regularly with departmental constituents to organize, plan, and implement diversity initiatives on campus
- Serve as the point of contact between the administration and the residential students in implementing the diversity initiatives

9/10 – 1/12 **Academic Affairs Leadership Cabinet**
Member

- Meet regularly with Academic Deans and Department Chairs in order to represent Student Services in the planning and coordination of the student curriculum
- Serve as the Student Services liaison between academic and non-academic administration

7/10 – 1/12 **Alumni Reunion Committee**
Member

- Assist Director of Alumni Events with planning and implementation of alumni reunion weekend
- Meet regularly to discuss logistics of several parts of the two-day event held on campus

1/08 – 05/10 **Student Affairs Search Committee**
Co-Chairperson

- Assist various departments with searches for positions, i.e. Student Activities, etc.
- Meet regularly to discuss candidate qualifications and position requirements

8/08 – 05/10 **Professional Development Committee**
Member

- Facilitate creative professional development opportunities for all faculty and staff
- Assist with professional development assessment throughout the year

1/08 – 05/10 **Awards Committee**
Member

- Met with other College administrators and staff to deliberate College awards
- Assisted with the planning and recognition process for annual College awards

1/08 – 05/10 **"Sendoff" Safety Committee**
Member

- Assisted in planning the safety logistics of community-wide event
- Helped to lower the number of student injuries to zero

1/08 – 9/09 **New Construction Committee**
Member

- Represented Housing and Residential Life between departments
- Assisted in the planning stages of two major residence hall construction projects

1/08 – 9/09 **Orientation Committee**
Member

- Assisted in the planning and implementation of Orientation events

- Assisted with the assessment of past and current Orientation process

1/08 – 9/09 **Team 9 Committee**
Chairperson

- Facilitated educational High School visit day to campus
- Oversaw complete logistics of day-long activities, host matching, etc

2008 **Community Advisor Appreciation Week Committee**
Co-Chairperson

- Organized complete logistics of CA Appreciation week
- Facilitated various active and passive programs throughout week

2008 **Senior Awards Committee**
Member

- Assisted in selecting academic and involvement awards for senior class
- Prepared logistical paperwork and awards for entire committee

ADVISING EXPERIENCE

02/12 – Present **Safety and Security Committee**
Advisor

- Advise Graduate Assistant on the development and implementation of Safety and Security student-run committee
- Work collaboratively with Campus Police in planning campus-wide programming
- Solicit student feedback from various Registered Student Organizations (RSOs) related to safety and security on and around campus

09/10 – 06/11 **Director's Advisory Council (DAC)**
Chair/Advisor

- Advised group of student leaders on communication and general residence life issues
- Acted as a liaison between student committee and professional staff in various departments
- Facilitated transition of DAC into traditional Residence Hall Association (RHA)

8/08 – 05/10 **Conditional Enrollment Program**
Advisor

- Assisted in academic advising for students struggling with their academics
- Conducted periodic meetings with students and faculty

8/08 – 9/09 **Building and Grounds Committee**
Advisor

- Advised group of student leaders in building and grounds related issues
- Acted as a liaison between student committee and professional staff

8/08 – 9/09 **Sophomore Class Council**
Advisor

- Advised group of student leaders in sophomore class initiatives
- Acted as a liaison between student committee and professional staff

2008 **Good Life Committee**
Advisor

- Oversaw week-long event planning and implementation conducted by student staff
- Facilitated complete logistical duties of various active and passive events throughout the week

EXTERNAL ACTIVITIES

04/12 – Present **SEAHO 2014 Host and Local Arrangements Committee**
Co-Chair

- Manage and organize local arrangements for the regional Housing conference
- Ensure logistics of conference are established and organized prior to and during conference
- Work collaboratively with regional Conference Committee to ensure holistic success of conference for all attendees and participants

2/12 – Present **ACUHO-I Facilities and Services Committee**
Chair - Communications

- Attend the ACUHO-I and APPA Housing Facilities Conference, and any other meetings, as necessary and directed by the chair
- Work with the central office and the Education and Resources Chair to keep the Housing Facilities and Services web page, "Housing Facilities Management" Forum and "Housing Facilities & Services" Group on www.acuho-i.net up to date with current information and resources
- Coordinate with the central office to market the annual Housing Facilities Conference; including APPA review, development, and distribution of marketing materials in support of the annual Conference.
- Through the central office, issue the annual call for program topics though the APPA and ACUHO-I and Facilities list serve sites, as well as through main web page advertisement

2/12 – 2/13 **Diversity Research Team** (Academic)
Member

- Meet regularly and collaborate with group of faculty and staff members across the institution to discuss diversity-related research projects and potential publications
- Serve as project coordinator, focusing on student loan literature and how it relates to demographic and institutional diversity
- Assist lead faculty member in publication process of peer-reviewed journal articles and papers

06/10 – 2/13 **Graduate Issues and Involvement Committee**
Member

- Serve on regional committee as part of SEAHO organization
- Facilitate educational resources for professional staff members around the region
- Provide opportunities for graduate students in the region to grow and mature as new professionals in the field

11/11 – 11/12 **SACSA's Newest Committee**
Co-Chair/Member

- Serve on regional committee as part of SACSA organization
- Co-Chair marketing and technology efforts, initiating new Marketing ideas and innovations
- Provide opportunities for graduate students in the region to grow and mature as new professionals in the field

06/10 – Present **SEAHO Awards Committee**
Member

- Serve on regional committee as part of SEAHO organization
- Coordinate awards selection for nine regional awards, presented at annual conference

12/10 – 1/12 **Habitat 4 Humanity – Family Selection Committee**
Member/Secretary

- Coordinate selection formulas in order to determine family eligibility
- Serve as the Secretary, tracking trends and taking notes for committee members

11/08 – 11/09 **Technology Resources and Education Committee**
Member

- Serve on regional committee as part of GLACUHO organization
- Facilitate educational resources for professional staff members around the country

RELEVANT INTERNSHIPS

12/06 – 12/07 ***Operations Intern*** Minor League Baseball
Orlando, FL

- Act as a liaison between professional baseball teams and position representatives.
- Conduct entire operations process for Baseball Winter Meetings Job Fair.
- Produce interview schedules for over 475 open positions via job fair.
- Represent graduate school with assistance in student recruitment.

1/07 – 2/07 ***Marketing Intern*** ESPN Inc.
Miami Beach, FL

- Assisted in the overall production of ESPN radio Super Bowl broadcasts.
- Supported the live broadcast of podcasts via ESPN.com.
- Marketed ESPN products via promotional materials to audience members.
- Responded to any rising issues involving production or on-site guests.

1/06 – 5/06 ***Marketing Intern*** Comcast SportsNet
Bethesda, MD

- Assigned and monitored budget for entire television marketing department.
- Conducted extensive competitive analysis research identifying several marketing trends.
- Assisted Sales department in obtaining promotional sponsorships.
- Compiled data for promotional materials and events throughout department.

5/05 – 8/05 ***Operations Intern*** National Sports Center for the Disabled
Kansas City, MO

- Supervised and monitored comprehensive budget information.
- Represented organization in setting up a new office establishment.
- Implemented complete logistical duties for several youth sports camps.
- Acted as a liaison between professional baseball teams and position representatives.

PROFESSIONAL MEMBERSHIPS

05/10 – Present **Southern Association for College Student Affairs** (SACSA)
05/10 – Present **The Southeastern Association of Housing Officers** (SEAHO)
05/10 – Present **College Personnel Association of Kentucky** (CPAK)
05/10 – Present **Kentucky Association of Housing Officers** (KAHO)
8/08 – Present **North American Society for Sport Management** (NASSM)
1/08 – Present **Association of College and University Housing Officers - International** (ACUHO-I)
1/08 – Present **American College Personnel Association** (ACPA)
05/10 – 1/12 **Kentucky Association of Career Colleges and Schools** (KACCS)
1/08 – 05/10 **Great Lakes Association of College and University Housing Officers** (GLACUHO)
1/08 – 05/10 **Central Ohio Housing Officers** (COHO)

PROFESSIONAL DEVELOPMENT

2013 **SEAHO Regional Conference**
Atlanta, GA
Presenter, Volunteer
2012 **ACUHO-I/APPA Facilities Conference**
Albuquerque, NM
Volunteer
2012 **NASPA Mid-Manager's Institute**
Auburn, AL
2012 **SACUBO Annual Meeting**
Louisville, KY
Volunteer
2012 **ACPA Annual Convention**
Louisville, KY
Volunteer
2011, 2012 **SACSA Regional Conference**
Atlanta, GA, Memphis, TN
Presenter, Volunteer, Case Study Competition Judge
2011 **Kentucky Association of Career Colleges and Schools**
Louisville, KY
Host/Facilitator
2011 **Multi-Hazard Emergency Planning for Higher Education**
Louisville, KY
2011 **SEAHO Regional Conference**
Mobile, AL

Case Study Competition Judge, Pro/Am Mentor Program, CHO Mentor Program

2011 **CPAK Regional Conference**
Lexington, KY

2010 **KACCS Regional Conference**
Louisville, KY
Host, Volunteer

2010 **SACCS National Conference**
Louisville, KY
Host, Volunteer

2009 **ACUHO-I National Conference**
Baltimore, MD

2009 **Professional Development Institute**
Brookston, IN

2009 **Camp Tecumseh – Winter Committee Meeting**
Brookston, IN

2009 **Ohio Housing Officers Conference (3)**
Columbus, Gambier, Marietta (OH)

2009 **Creating/Assessing Campus Emergency Plans**
Gambier, OH

2008 – 2009 **GLACUHO Regional Conference (2)**
Cincinnati, OH, Ft. Wayne, IN

2008 **The Amethyst Initiative Debate**
Online Webinar

2008 (Summer) **Online courses – Student Development Theory**
Gambier, OH

2008 (Fall) **NCAA Diversity Education Seminar**
Gambier, OH

2006 – 2007 **Baseball Winter Meetings (2)**
Orlando, FL and Nashville, TN

HONORS AND AWARDS

2012 **Dr. Fred W. Rhodes Outstanding Service Award** (statewide service award)

2012 **FISH Award** (Campus Housing Staff Member of the Month)

2012 **Of The Month (OTM)** presented by the National Residence Hall Honorary (NRHH) Cardinal Chp.

2011 **SACSA Theme Award** (established the theme and motto for regional conference – Memphis 2012)

2009 **ACUHO-I Scholarship** (Sole recipient of a $1,000 national professional development scholarship)

2008 **Professional Development Institute Scholar** (One of 20 professionals selected from several states)

2007 **National Italian American Foundation Scholar** (One of 45 U.S. Citizens selected)

2007 **Kappa Gamma Pi Catholic Graduate Honor Society** (G.P.A. 3.80+ every semester)
2007 **International Society for Travel and Tourism Educators (ISTTE) Scholarship** (Applied and granted)
2006 **Phi Kappa Phi Honor Society** (G.P.A. 3.50+ every semester – given to top 7.5 percent of class)
2005 **Malaysia Olympic Academy Conference** (One of two U.S. Citizens selected to attend)
2004 **Gertrude Kable Scholarship** (Academic)
2003 **Blake Wilkinson Business Scholarship** (Academic)