# Male Collegiate Student-Athlete's Perception of Social Support during Athletic Injury

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# Dedication

This dissertation is dedicated to my loving parents, Dr. George and Mrs. Veronica Williams, who emphasized the importance of education from a very young age. They have always led by example and encouraged me to pursue both my academic and athletic dreams. With their love and sacrifices, I was able to play division I basketball and earn a doctorate degree. Mom/Dad, I cannot thank you enough, but I will never stop trying. I love you both very much.

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Abstract of Dissertation

Male Collegiate Student-Athlete's
Perception of Social Support during Athletic Injury

The purpose of the qualitative study was to gain a better understanding of the perceptions, expectations, and communication styles injured student-athletes have for their teammates, coaches, and athletic trainers. One-on-one interviews were utilized to gather data from 20 student-athletes representing two separate institutions, who competed in six different sports and ranged in classification from freshman to graduate students. Data analysis was guided by the Social Support Model developed by Richman, Rosenfeld, and Hardy (1993).

Five major findings were identified from the study that helped provide insight on the three research questions. The findings revealed that there was tremendous stress placed on athletes throughout the injury process, including feelings of loneliness while their teams continued to compete, as well as, anxiety surrounding returning to competition, financial assistance, and medical treatment. Many of these stressors were perceived as individual-specific, requiring different forms of support based on the injured student-athlete's connection to support providers both inside and outside of the athletics arena. In most instances, injured student-athletes wanted the attention to remain on the healthy players and overall team success, thus they viewed their injuries as their own personal responsibilities and limited certain communication with teammates, coaches, and athletic trainers. However, the vast majority of participants noted relying heavily on the support of teammates, who they viewed as brothers, throughout the injury process.

Observations from the study led to four primary recommendations for practitioners. These recommendations focused on providing injured student-athletes with the encouragement, knowledge, and resources to manage the challenging emotions associated with athletic injury. Implications for practice included: (a) Increased awareness surrounding the topic of athletic injury, (b) Better integration of student-athletes into the larger university community, (c) Greater emphasis on teambuilding opportunities, and (d) Early engagement of professional support providers such as counselors and sports psychologist. Results of the study provided insight on a unique and hard to reach population of division I, male, collegiate student-athletes. Furthermore, the study provided additional information on their perceptions surrounding athletic injury and how best to support injured student-athletes.

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# Chapter I: Introduction

It is estimated that more than seven million athletic injuries occur annually in the United States (Conn, Annest, & Gilchrist, 2003). These sports injuries occur at differing competition levels (i.e., recreational, high school, collegiate, professional) and vary from the common sprained ankle, to more serious anterior cruciate ligament (ACL) problems that can sideline athletes for weeks or months (Hootman, Dick, & Agel, 2007). Many of these injuries take place on college campuses, where student-athletes are participating in competitive sports. Based on data collected from 1988-2004 by the National Collegiate Athletic Association (NCAA), an average of 14.5 injuries occur per 1,000 athlete exposures (Hootman et al., 2007). In other words, every time a collegiate athlete laces up his or her shoes and steps onto the playing surface, there is a 1.5% chance that he or she could be injured (Hootman et al., 2007).

Although a 1.5% chance of injury may seem small, it grows exponentially when factoring in the number of times per week that college athletes are exposed to athletic practice and competition. Many sports require student-athletes to practice twice a day, lift weights, and attend individual workout sessions, in addition to their normal competition schedule (Kissinger & Miller, 2009). Some student-athletes, particularly football players, have been found to spend as much as 44.8 hours a week in practice and training activities (Kissinger & Miller, 2009). When considering the number of student-athletes at a given institution and the amount of athletic exposure during practice and games, the potential for injury becomes a serious concern for athletes, teammates, administrators, coaches, parents, and other university stakeholders.

Collegiate student-athletes are a unique population who have experiences that are vastly different from their non-athlete counterparts (Adler & Adler, 1989; Thamel, 2009). For a student-athlete who contributes significantly to the team (i.e., starting role), they are often viewed and treated like celebrities (Adler & Adler, 1989). During his college days at the University of Florida, star quarterback Tim Tebow was asked about attention from fans and stated, "It really hinders you from going places. People will do a lot of things to get you to try and look like you're not doing something right" (Thamel, 2009, para. 8). Former University of Texas quarterback Colt McCoy referenced similar instances, stating he had been video recorded at restaurants and walking to class (Thamel, 2009). These examples describe a culture where student-athletes are viewed as stars, with tremendous popularity.

A second area that distinguishes student-athletes from non-athletes is the aspect of recruitment to the institution. In addition to selecting a school for educational reasons, such as fields of study or academic support, student-athletes also must weigh factors including coaching staffs, playing style, athletic scholarship funding, television exposure, and the college or university's commitment to athletics (Klenosky, Templin, & Troutman, 2001). Student-athletes are then persuaded and catered to by current players, coaches, alumni, and other staff interested in wooing the player to attend a particular institution. For example, prospective student-athletes are provided with funding to visit potential institutions, where they are often met by future teammates and chaperoned throughout campus (Cross, 1973). Studies indicate that the recruitment visit and other environmental factors can play a significant role in the decision of the student-athlete to attend a particular institution (Cross, 1973). Furthermore, unlike non-athlete students,

once the student-athlete selects a college he or she will sign a letter of intent, which then prohibits other rival colleges from further recruitment activities regarding the student-athlete (Cross, 1973).

Athletic funding is another benefit many student-athletes receive that non-athletes do not. Recruited student-athletes could be provided with scholarships to offset or completely cover typical college expenses, including tuition and fees, housing, food, and books (NCAA, 2012). Similar to university employees, student-athletes receive compensation, but their "award" is in "recognition of athletics participation or performance" (NCAA, 2012, p. 223). Additionally, recent legislation has drawn further distinctions between student-athletes and non-athletes by granting college football players at Northwestern the right to unionize and negotiate terms with the institution (Strauss & Eder, 2014). Because athletes are rewarded for their athletic accomplishments, they often experience anxiety related to their on-the-field play (Wilson & Pritchard, 2005).

The factors that separate student-athletes from non-athletes can often lead to added pressure and increased stress (Wilson & Pritchard, 2005). For example, student-athletes live their lives in the public eye, with the media and fans scrutinizing their every move. Furthermore, student-athletes experience unique stressors including extensive time demands (e.g., inside and outside of the classroom), fluctuations in playing time, and the possibility of athletic injury (Wilson & Pritchard, 2005). The feelings and emotions associated with being a student-athlete are areas that non-athletes are not forced to deal with and make student-athletes noteworthy for further examination. This inquiry is

particularly important surrounding the topic of athletic injury, which has the potential to affect the student-athlete both on and off the playing surface.

Injury can be an athlete's worst nightmare and have drastic effects on his or her entire collegiate experience (Wiese-bjornstal, Smith, Shaffer, & Morrey, 1998). Injured athletes typically receive medical treatment from a variety of health care professionals, who assist them throughout the physical recovery process (Powell & Dompier, 2004; Russell, 2007). However, while many medical professionals focus on healing physical scars, less attention is devoted to helping athletes manage the psychological issues related to injury (Biviano, 2010; Halbert, 2007; Powell & Dompier, 2004; Robbins & Rosenfeld, 2001). Studies show injured athletes may experience feelings such as boredom, frustration, jealousy, regret, depression, and fear while attempting to cope with their injuries (Johnston & Carroll, 2007; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). Additionally, other investigators revealed that during times of injury, athletes might express a variety of emotional and psychological responses including self-doubt, an inability to concentrate, or lowered self-esteem (Herring et al., 2006). These psychological issues might be related to the fact that some injured athletes associated their personal worth, value, and identity with winning and athletic accomplishment (Adler & Adler, 1989; Lockhart, 2010). Therefore, when a student-athlete sustains an athletic injury, it affects more than just their sport; it can affect their entire collegiate experience.

A players' athletic identity, which can be defined as "the degree to which an individual identifies with the athletic role," helps shape who they are and how they choose to make decisions regarding more than just sports (Adler & Adler, 1989; Brewer,

Van Raalte, & Linder, 1993). Athletic identity can influence a players' friendship circles, academic choices, career preferences, or how he or she might respond to adversities such as injury (Adler & Adler, 1989; Lally & Kerr, 2005). Several studies indicate student-athletes associate positive experiences with their athletic identity and once they are no longer competing, student-athletes claimed they missed "being a player" and missed "their playing time" (Chen, Snyder, & Magner, 2010, p. 186). Similarly, during times of athletic injury, athletes are unable to participate in competition and may suffer a "perceived loss of identity" (Lockhart, 2010, p. 30). Since athletic identity plays such a pivotal role in the student-athlete's experience, including academic success, athletic accomplishment, career choice, and social interactions, it is important student-athletes receive the necessary support to assist them with the challenges associated with athletic injury.

When a student-athlete is injured, there are various support methods and personnel in place to address the myriad of issues related to the emotional and psychological responses associated with athletic injury. In fact, athletic trainers often receive training and instruction to help athletes cope with psychological issues related to athletic injury (Mann, Grana, Indelicato, O'Neill, & George, 2007; Moulton, 1997). Furthermore, athletes may experience emotional support from teammates, family, friends, and coaches (Robbins & Rosenfeld, 2001). The combination of physical support and emotional support are interconnected and critical in helping athletes return to competition sooner, rather than later (Hamson-Utley, Martin, & Walters, 2008; Powell & Dompier, 2004; Robbins & Rosenfeld, 2001; Russell, 2007). Research indicates, when an injured athlete receives adequate amounts of social support, he or she is more likely to participate

in rehabilitation exercises and more motivated to return to athletic competition (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001; Russell, 2007). However, in order for social support to be effective, the injured athlete must acknowledge, recognize, understand, and perceive the attention given by others as support (Richman, Rosenfeld, & Hardy, 1993; Robbins & Rosenfeld, 2001).

Prior to athletic injury, support is often provided primarily from coaches and teammates (Grossman, Jamieson, & Hume, 1990; Halbert, 2007; Robbins & Rosenfeld, 2001). However, once sustaining an injury, the support role may transition to other outlets including athletic trainers, family, and friends (Barefield & McCallister, 1997; Mann et al., 2007; Nixon, 1994). This shift in support providers may leave athletes feeling unsupported, isolated, and frustrated, which can decrease recovery times and lead to animosity between the player and the coaches (Nixon, 1994; Robbins & Rosenfeld, 2001).

Although other studies have utilized a quantitative methodology while examining student-athlete's perceptions during athletic injury, this study sought to answer the "why" questions and shed additional light on the social support topic. The goal of the research was to use a qualitative approach while exploring the perceptions, communication styles, and expectations injured, division I, male student-athletes had regarding the social support received from their teammates, coaches, and athletic trainers.

## Problem of Practice

As time spent participating in sporting activity continues to increase and more coaches implement year-round workout routines, athletic injuries have become more prevalent than ever (Conn et al., 2003; Hootman et al., 2007). When an athlete is injured

during athletic competition, he or she receives the necessary treatment to mend broken bones or heal physical scars. However, the psychological rehabilitation to assist athletes in coping with associated feelings of depression, anger, frustration, self-doubt, and other negative thoughts may get overlooked (Biviano, 2010; Halbert, 2007; Powell & Dompier, 2004; Robbins & Rosenfeld, 2001). Studies indicate that with the proper support, athletes are more motivated and frequently recovery faster (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001; Russell, 2007). In a 2007 study, each participant reported some form of psychological distress related to their athletic injury (Russell, 2007). The most commonly reported stressors were the emotions surrounding "recovering slower than expected" with 73.9% of participants reporting that they experienced this "sometimes" or "often" (Russell, 2007, p. 38). A 2008 study indicated psychological training can be utilized during sport injury rehabilitation to motivate athletes to adhere to rehabilitation, increase speed of recovery, control anxiety levels, and enhance self-confidence (Hamson-Utley et al., 2008). Herring et al. (2006) suggested that trained professionals such as counselors, athletic trainers, and medical staffs might use psychological strategies such as goal setting, positive self-statements, cognitive restructuring, and imagery/visualization to help injured athletes recover faster. In addition to the medical staff, assistance and support could also be provided by friends, teammates, and coaches in order to accelerate the athlete's recovery (Bianco, 2001; Robbins & Rosenfeld, 2001). A study conducted by Bianco (2001), detailed the positive influence teammates and coaches had with injured athletes. Bianco (2001) found, injured athletes appreciated positive encouragement and a listening ear from teammates and

coaches. In general, social support assists athletes to reduce their uncertainty by providing them with a sense of control over their situation (Robbins & Rosenfeld, 2001).

Prior to an athletic injury, athletes spend limited amounts of time interacting with athletic trainers and other medical staff (Mann et al., 2007). Coaches and teammates serve as a support system for the athlete and help to reinforce his or her athletic identity (Grossman, Jamieson, & Hume, 1990; Halbert, 2007; Robbins & Rosenfeld, 2001). However, immediately following many athletic injuries, athletes are unable to participate in competition for an indefinite period of time. Thus, the student-athlete's interaction with both coaches and teammates decreases, leaving the athletic trainer to fill the void in support (Grossman et al., 1990; Halbert, 2007; Robbins & Rosenfeld, 2001). According to research conducted by Robbins & Rosenfeld (2001), athletic trainers provide more support to injured athletes than either the head coach or assistant coaches. Robbins and Rosenfeld claimed assistant coaches often viewed themselves as technical advisors and head coaches might relinquish their support responsibilities to focus greater attention on healthy players (Robbins & Rosenfeld, 2001). While athletic trainers can temporarily perform responsibilities that typically fall to others, it was still the preference of the injured athlete to receive support from their coaches and teammates (Powell & Dompier, 2004; Robbins & Rosenfeld, 2001).

Many of these studies paint a picture where student-athletes are not receiving the support they need in order to avoid negative psychological consequences (Grossman et al., 1990; Halbert, 2007). In other examples, student-athletes are receiving some support from athletic trainers, but yearn for additional support from coaches and teammates (Robbins & Rosenfeld, 2001). The problem exist within the disconnection between the

support provider's (i.e., teammates, coaches, and athletic trainers) actions and the student-athletes' desires for additional support. Ultimately this disconnection leaves student-athletes feeling unsupported, isolated, and frustrated (Nixon, 1994; Robbins & Rosenfeld, 2001). This study provided an in-depth account of the expectations and perceptions of injured division I, male student-athletes regarding the social support received from teammates, coaches, and athletic trainers. The goal of this study was to equip support providers with the knowledge necessary to better assist injured athletes and help them recover from athletic injury. Furthermore, by assisting student-athletes cope with athletic injury, negative emotions can be avoided and their overall student experience can be improved.

## Problem of Research

Many of the previous studies on athletic injury were quantitative in nature and focused on the number or amount of injuries, as well as the type of injury and the length of time spent in recovery (Conn et al., 2003; Mainwaring et al., 2004; Powell & Dompier, 2004). Recent research trends have expanded the literature by investigating questions regarding how athletes become injured, the psychological consequences of injury, as well as the support injured athletes receive (Corbillon, Crossman, & Jamieson, 2008; Clement & Shannon, 2011). Despite the recent efforts to document the student-athletes' experience in association to athletic injury, few studies utilize a qualitative methodology or thoroughly explore the interactions between the injured player and their support structures. Additionally, the inconsistencies within such studies included using both male and female student-athletes, as well as comparing different athletic divisions and levels of competition; leaving room for further inquiry.

The majority of studies in the existing literature were focused on athletic injury from a quantitative perspective. These studies revealed many of the psychological reactions athletes might experience during athletic injury. For example, Chan and Grossman (1988) studied 60 runners ranging in age from 15 to 60 and found that during injury, these athletes experienced feelings of depression, anxiety, confusion, and lowered self-esteem. Similarly, Dawes and Roach (1997) studied 52 injured athletes of varying age and experience and discovered their emotional responses to injury included frustration, inconvenience, and denial. Another quantitative study conducted by Kolt and Kirkby (1994) discovered a correlation between higher levels of anxiety and the potential for athletic injury. Taking a quantitative perspective, these studies assisted in identifying the potential emotions athletes might experience during periods of athletic injury.

From a qualitative viewpoint, there were a few studies that further confirmed the affects athletic injury has on the athlete's experience. For example, Johnston and Carroll (1998) interviewed 16 athletes ranging in age from 18 to 60 and found these participants had a similar emotional response to previous studies, with experiences of frustration, depression, and anger. Additionally, participants in this study felt a sense of shock, disbelief, regret, and jealousy (Johnston & Carroll, 1998). Rose and Jevne (1993) interviewed seven competitive athletes between the ages of 19-34 and devised a four phase model for how athletes experience injury. Additionally, their study revealed the importance of supporters such as coaches, physicians, therapist, and trainers (Rose & Jevne (1993). Although these studies detailed the emotional affects athletes might experience as a result of injury and the need for social support, they failed to discuss the role social support played within the injury process (Chan & Grossman, 1988; Dawes &

Roach, 1997; Johnston & Carroll, 1998; Kolt & Kirkby, 1994; Rose & Jevne, 1993). Furthermore, these studies did not adequately depict the relationship between injured athlete and their support providers.

During a review of the literature, three studies were found that focused on the injured athlete's perceptions of support provided by teammates, coaches, and athletic trainers. Robbins and Rosenfeld (2001) assessed a sample of 35 injured collegiate athletes from a single institution regarding their satisfaction with and the contribution to their well-being of six different types of social support being provided by head coaches, assistant coaches, and athletic trainers. The study's results indicated injured athletes were more satisfied with the support provided by athletic trainers, rather than head coaches or assistant coaches (Robbins & Rosenfeld, 2001).

The second study, conducted by Corbillon, Crossman, and Jamieson (2008) used 72 injured Canadian collegiate athletes to assess the satisfaction, availability, and contribution of the eight different types of social support provided by teammates and coaches. The results of this study revealed injured athletes were more satisfied with the task challenge support of their teammates, but the same task challenge support contributed more significantly to their well-being when provided by their coaches. In other words, a task oriented statement, such as "Keep doing your exercises and you will be back playing soon," was more appreciated coming from teammates, but has a greater effect on the injured athlete when mentioned from coaches. Furthermore when surveyed about the availability of support, injured athletes reported teammates being more available with emotional support than coaches (Corbillon et al., 2008).

The third study was conducted by Clement and Shannon (2011) and resembled the Corbillion et al. (2008) research, but expanded the literature by examining 49 U.S. division II and division III injured student-athletes. The purpose of this study was to examine injured athletes' perceptions regarding the satisfaction, availability, and contribution to the well-being for each of the eight types of social support as provided by teammates and coaches, as well as athletic trainers (Clement & Shannon, 2011). The results of this study revealed injured student-athletes were significantly more satisfied with the social support provided by athletic trainers than that provided by coaches and teammates (Clement & Shannon, 2011). Additionally, injured athletes reported that the social support provided by athletic trainers contributed more to their overall well-being than the support offered from teammates and coaches.

These three studies, that focused on injured athlete's perceptions of social support as provided by their teammates, coaches, and athletic trainers, established a foundation, but further research was still necessary (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins & Rosenfeld, 2001). First, all three studies utilized a quantitative approach to examine the injured student-athlete population. In each of the studies, the authors acknowledged the benefit of future inquires using a qualitative approach in order to gather a different, more in-depth understanding of social support in athletics. One way that a qualitative study expanded the literature was through using different instrumentation. For example, a survey was often used as the instrument to collect information from research participants (Corbillon et al., 2008; Robbins & Rosenfeld, 2001). However, the self-reported nature of the survey or the person administering the survey could affect the comfort-level of the participants and the honesty of their

responses. The current study aimed to use semi-structured interviews in order to build rapport with student-athletes, ask more thorough questions, and probe within the areas that needed more clarification and detail.

Secondly, with the exception of Clement and Shannon (2011), many of the previous studies were single institution samples or they compared athletes competing at various competition levels (Corbillon et al., 2008; Robbins & Rosenfeld, 2001). For example, Chan and Grossman (1988), as well as Dawes and Roach (1997), examined athletes ranging in competition level and age (i.e., recreational athletes to professional athletes). These are important distinctions, because athletic injury is likely to mean something different for current collegiate athletes, as opposed to older, more mature recreational athletes. Additionally, there are different levels of support provided to collegiate athletes that may not be available to the leisure athlete. The current study took these factors into account and examined two different universities at the same competition level. As a result, the resources and expectations of injured student-athletes were similar. For example, athletes from both institutions used for this study had aspirations of winning their conference tournament and competing for a national championship. Whereas recreational athletes might aspire to lose weight or improve their fitness.

Another critical distinction between the previous studies and the current research project was several of the studies failed to differentiate between male student-athletes and their female counterparts. In other words, previous research compared results provided by both genders and grouped this information together, despite evidence suggesting that male and female experiences differ regarding social support (Johnson, 1997). When considering athletic-injury, previous research indicated women were more anxious, tense,

and used different coping methods than their male counterparts (Johnson, 1997). Since male and female student-athletes utilize different forms of coping to address injury, gender should be taken into account when studying the social support desired amongst athletes. The current study focused on male student-athletes in order to distinguish between the genders and add further clarity to the literature.

Finally, the focus of the previous studies was aimed at identifying the levels of satisfaction, availability, and the overall effect of that social support had on the experience of injured athletes. Whereas, the current research project discussed expectations of injured athletes, as well as the methods injured athletes used to express their need for social support. Social support is a dynamic concept with many layers attached to understanding and successfully implementing it within the college student-athlete population. Although previous research was able to provide broad aspects of social support, this research study aimed to address these limitations through a qualitative approach and fill the gaps within the literature by providing a baseline of expectations as well as broadening the understanding of how division I, male, student-athletes perceive social support from their teammates, coaches, and athletic trainers.

## Purpose and Research Questions

The purpose of this qualitative research project was to describe how injured, division I, male, collegiate student-athletes experience social support from their teammates, coaches, and athletic trainers. The research questions that guided this inquiry were:

1. How do injured, division I, male, collegiate student-athletes perceive the contribution of social support provided by their teammates, coaches, and athletic trainers?

2. How do injured, division I, male, collegiate student-athletes express the need for social support from teammates, coaches, and athletic trainers?
3. What expectations for social support do division I, male collegiate student-athletes have of their teammates, coaches, and athletic trainers during periods of athletic-injury?

By conducting this study and through further exploration of these research questions, the literature on social support for student-athlete was expanded. Additionally, support providers can place increased emphasis on ensuring players receive the necessary attention to manage any negative emotions, adhere to their rehabilitation schedules, and ultimately return to athletic competition.

## Statement of Potential Significance

College athletes are often the most popular and visible students on-campus (Adler & Adler, 1989; Delaney, 1997). At many division I institutions, student-athletes can be viewed as celebrities and inherit the pros and cons of that distinction (Adler & Adler, 1989). Despite the positives and negatives of the student-athlete's celebrity status, their feelings might change once they experience an injury that affects their overall college experience. Studies indicate injured student-athletes feel isolated and disconnected from support providers, such as teammates and coaches, just when they are needed the most (Corbillon et al., 2008). Therefore, the objectives for this study were to establish expectations for support providers, establish how student-athletes communicate their needs for support, and expand the knowledge of how injured student-athletes perceive the social support they receive.

Injuries are a part of sports and prevalent in college athletics (Hootman et al., 2007). When a college athlete is injured, he or she might undergo treatment, rehabilitation, or surgery to heal the physical scars and pain, but attention and support are beneficial in overcoming the psychological aspects associated with athletic injury (Powell & Dompier, 2004; Robbins & Rosenfeld, 2001). Although most of the initial research efforts focused on the physical components of the athletes' injury, including the number of injuries or the length of time spent in recovery, recent trends have detailed the psychological aspects (Conn et al., 2003; Mainwaring et al., 2004; Powell & Dompier, 2004; Russell, 2007). These studies revealed that in addition to physical treatment, athletes may also require psychological interventions of social support that can to assist them by increasing the speed of recovery, controlling anxiety levels, and enhancing self-confidence (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001). As previous studies have shown, adequate social support can assist injured student-athletes in coping with feelings of boredom, frustration, jealousy, regret, depression, anger, fear, as well as loss of identity (Johnston & Carroll, 2007; Lockhart, 2010; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). However, social support can only benefit the student-athlete if he or she perceives the gestures or actions as being supportive (Richman et al., 1993; Robbins & Rosenfeld, 2001). Therefore, the student-athlete's perception and communication regarding social support is significant in determining how best to care for injured athletes and assist them in returning to athletic competition.

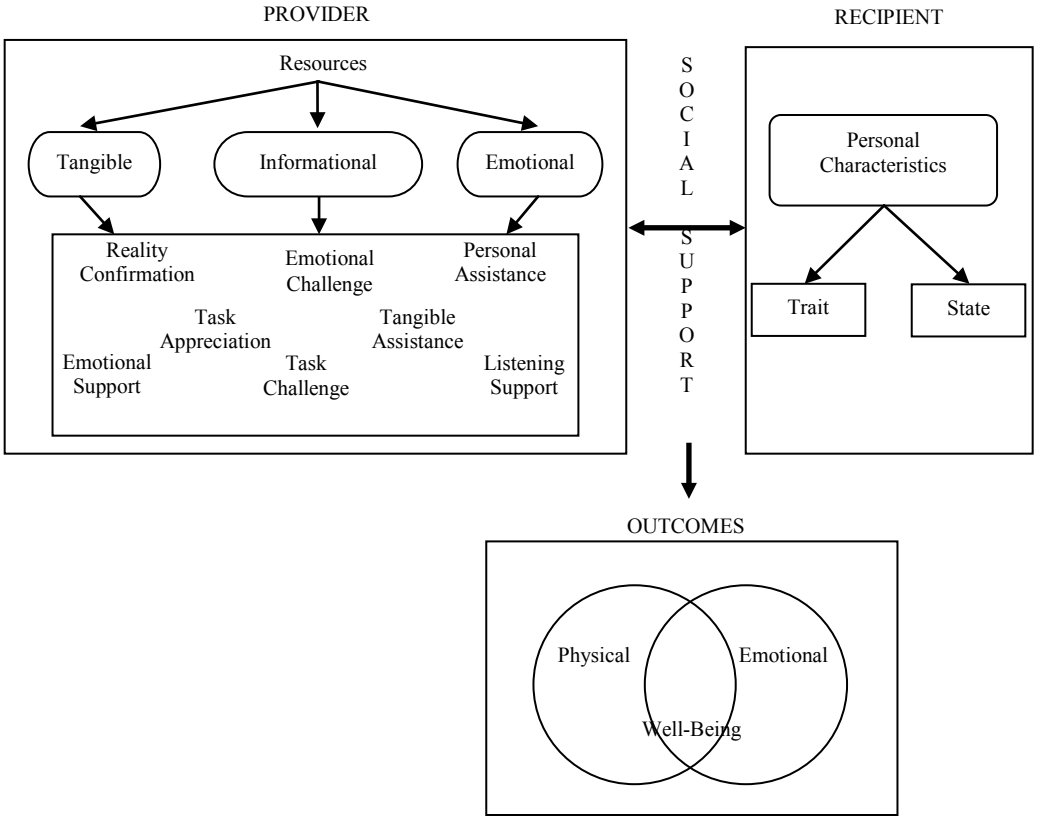
In summary, this study was critical to the expansion of literature detailing the injured student-athlete's experience for several reasons. First, there are practical implications that might equip support providers with the knowledge to better assist

injured student-athletes. Secondly, this study focused on division I, male collegiate student-athletes, who are a population that has been challenging to reach for a variety of reasons, including gatekeepers, and a "play through pain" athletic stigma (Nixon, 1992). Despite these significant challenges, the researcher was able to break down barriers and capture a rare glimpse into the student-athlete's world. Lastly, the researchers utilized qualitative methodologies to investigate the injured student-athlete's experience, whereas previous studies often relied on numerical statistics to gather information. This change in research approach allowed the investigator to collect and analyze information differently and added to the existing literature on athletic injury.

## Overview of Conceptual Framework

The conceptual framework adopted for this research study was Richman, Rosenfeld, and Hardy's (1993), model of social support. The model was originally designed for use within the field of social work, but has been recently expanded to examine social support experiences of injured student-athletes because it was viewed as an effective tool for assessing perceptions of social support from a number of individuals such as teammates, coaches, and athletic trainers (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins & Rosenfeld, 2001).

Figure 1. Model of the Social Support Process




Richman et al.'s (1993) model has been viewed as beneficial for past research projects, as well as the current study because it captured the four elements that are essential for examining social support: (a) the recipient, (b) the provider, (c) the interactional exchange process between recipient and provider, and (d) the outcomes of the exchange process. A variety of social support models attempt to assess and measure various aspects of an individual's experience, but few captured the psychometric properties and nature of the support with the proven, documented effectiveness of Richman et al.'s (1993) social support model. The model was appropriate for this study because it assists with defining and explaining the interactions between support provider and the recipient (Richman et al., 1993).

When investigating the social support of injured student-athletes, Richman et al. (1993), model was implemented using a clinical survey that was broken down into three major areas: satisfaction of social support, (2) availability of social support, and (3) contribution of social support. These three focus areas are measured across the eight types of social support and using quantitative methods, rated on a 5-point Likert scale, ranging from very dissatisfied to very satisfied, very difficult to very easy, or very unimportant to very important. It should be noted that past research investigating collegiate athletes has excluded two of the eight forms of social support (i.e., tangible support and personal support) because some providers are prohibited from offering these types of assistance due to NCAA regulations (Robbins & Rosenfeld, 2001).
Lastly, the three major survey areas (i.e., satisfaction, availability, and contribution) were then measured for each support provider (i.e., teammates, coaches, and athletic trainers). Unlike the previous research that took a quantitative approach, this study used qualitative methodologies to construct knowledge about what are injured student-athlete's expectations and perceptions regarding social support, as well as the methods injured athletes use to communicate their support needs to teammates, coaches, and athletic trainers. In summary, the model captured the totality of the interaction between recipient and provider, including situational factors and was instrumental in continuing the conversation surrounding social support.

## Overview of Research Methodology

Richman, Rosenfeld, and Hardy's (1993) model of social support served as the conceptual framework for this study and assisted in developing research questions to determine what expectations, perceptions, and communication methods injured, division

I, male student-athletes have with their teammates, coaches, and athletic trainers in regards to social support. A qualitative research design, interviewing 20 previously injured collegiate student-athletes was used to examine their perceptions related to social support and athletic injury. In-depth, semi-structured interviews were utilized to provide detailed descriptions of the injured student-athlete's individual experiences (Bell, 2005; Creswell, 2009; Maxwell, 2005; Merriam, 1998; Miles & Hubermah, 1994). The research was informed by a constructivist worldview that allowed the researcher to explore the unique environment of college sports, while constructing meaning of the injured collegiate student-athlete's experience. The constructivist viewpoint assumes that individuals seek understanding of the world in which they live and work (Creswell, 2009; Crotty, 1998). Crotty wrote, "In the constructionist view, as the word suggest, meaning is not discovered but constructed" (1998, p. 42). The goal of this type of research is to rely as much as possible on the participants' views of the situation being studied (Creswell, 2009).

The selection criteria for participation in the study were that all participants were currently enrolled full-time students, competing at the men's division I athletics level, and sustained a moderate or severe injury that sidelined them for eight days or more. The participants were selected from two east coast universities that compete at the division I level in the same athletic conference. The athletic community is relatively small and has the potential to be high-profile., thus the specific location of each the school was not revealed in order to protect the participants' identities. Interview protocols were established to ensure that each participant had the opportunity to respond to the same basic questions, in a similar interview setting. Furthermore, all participants were asked to

read the "Research Consent Form" then verbally acknowledge they were aware of the potential benefits and risk associated with the study. Each interview lasted approximately 45-60 minutes. Interviews were then transcribed and coded in order to organize the information into an easily readable format. The data was then analyzed based on six major steps outlined by Creswell (2009): (a) organize and prepare the data; (b) thoroughly read the transcripts, (c) create a detailed coding process, (d) develop substantive codes, (e) determine the presentation of the results, and (f) interpret the meaning of the data.

Trustworthiness of data was fulfilled through a comprehensive literature review, field notes, in-depth interviewing, and detailed memos (Creswell, 2009). Additionally, the researcher used qualitative database software (i.e., Atlas Ti) for easy-retrieval of information and assistance with identifying emerging themes. The results of the study provided a clear depiction of how these injured collegiate student-athletes perceived the social support provided by teammates, coaches, and athletic trainers. A more detailed description of the research methodology was presented in chapter three, with the study results presented in chapter four.

## Delimitations

According to Creswell (2007), delimitations are the decisions that a researcher makes in order to narrow the scope of the study. The researcher was interested in examining a specific population within college athletics, thus the following delimitations were identified for the research study. First, the researcher chose to focus on athletes participating at the division I athletic level, because these student-athletes were often recruited with both an academic and athletic focus. Similar to all college student-

athletes, there is an academic expectation and players must maintain a certain GPA and continue to progress academically. However, unlike division II and division III, elite athletes at the division I level have increased pressure to perform in the athletics arena (Griffith & Johnson, 2002; NCAA, 2007). Much of the added pressure for division I athletes can be attributed to the increased level of media attention and the financial gains that are associated with winning programs (Adler & 1989; Griffith & Johnson, 2002; NCAA, 2007). Furthermore, division I schools offer full scholarships, which for some athletes means their ability to pay for school and remain at the institution is tied to their athletic accomplishments (NCAA, 2007). These financial motives and additional pressures play a critical role in the athlete's success and must be taken into consideration during periods of injury. For example, a division I athlete on full athletic scholarship, who is looking to play at the professional level, is likely to respond and receive different levels of social support than a division II athlete, who aspires to work an office position after their playing career has concluded. This study focused on division I student-athletes, who have experienced the pressure to perform both on and off the playing surface. Consequently, it was believed that division I athletes depended heavily on social support to overcome the increased challenges and demands.

Secondly, the researcher elected to focus on male student-athletes because prior studies have established vast differences in the male and female student-athlete experience with respect to support. For example, a recent study revealed female student-athletes experienced increased levels of stress due, oftentimes, to professors not taking them seriously or their involvement in a greater number of extracurricular activities (Rothberg, 2011). Furthermore, when considering athletic-injury, previous research indicated women were more anxious, tense, and used different coping methods than their

male counterparts (U. Johnson, 1997). Finally, obtaining support from peer groups was often more difficult for female athletes than their male counterparts because athletics was frequently viewed as a masculine activity (Rothberg, 2011). For these reasons, the researcher determined that each gender should be investigated separately and it was outside the feasibility of this study to examine both genders. By focusing solely on male student-athletes, the researcher was able to explore and delve deeper into this specific population, rather than capturing more surface information about the broad range of student-athletes.

Third, injury severity was a key aspect of this study. The researcher chose to interview only participants suffering moderate or severe injuries (i.e., injury lasting eight or more days). In contrast, minor injuries may not require the athlete to seek outside support because he or she is able to return to athletic competition sooner than more severe injuries (Hootman et al., 2007). This injury timeframe is consistent with similar research projects that focused more on moderate and severe injuries that provided student-athletes the opportunity to receive support as well as reflect on the injury experience (Clement & Shannon, 2011; Corbillon et al., 2008; Johnson, 1997).

Another delimitation of this study was the retrospective data collection. In other words, participants who were selected had already sustained an injury and had the opportunity to reflect on their experiences. These athletes were enrolled as full-time students between 2009 and 2013, allowing the participants to provide vivid details of their recent experience. Student-athletes are a protected population, where it is often difficult to gain access (Adler & Adler, 1989). A review of the literature revealed

collecting data retrospectively was a common occurrence for studies examining student-athlete's accounts of social support (Kolt & Kirkby, 1994; Rose & Jevne, 1993.

Finally, previous studies revealed a tendency to exclude both tangible support and personal support from examinations. Based on NCAA regulations, athletic trainers and coaches are prohibited from providing tangible support and several forms of personal support (Robbins & Rosenfeld, 2001). These rules are in place to ensure athletes are maintaining their amateur status, focusing on academics, and drawing separation from professional players who are paid for athletic performance (NCAA, 2012). Although many division I student-athletes receive scholarships and financial support to attend school, NCAA (2012) regulations indicate, "An institution shall not award financial aid to a student-athlete that exceeds the cost of attendance that is normally incurred by students enrolled in a comparable program at that institution (p. 200)".

During preliminary interviews, Robbins and Rosenfeld (2001) found that personal support was considered irrelevant; however, they only examined support issued by coaches and athletic trainers, who were prohibited from providing this form of assistance. The current qualitative study includes teammates who were allowed to offer forms of personal support, such as providing transportation to injured athletes. Given the level of scrutiny placed on athletes receiving money, gifts, or special benefits, this study does not focus on these tangible forms of support. However, in order to capture a full picture of the support offered by teammates, situations involving personal support were addressed in this investigation.

Narrowing the scope of the research project is common in academic writing and especially when investigating a population as protected as collegiate student-athletes

(Adler & Adler, 1989). The delimitations presented in this study helped the researcher to focus on a specific athletic population and build a relationship with those student-athletes, in order to gathering rich, detailed information.

## Limitations

Limitations suggest the weaknesses that may be inherent in a research study based on the design, methodology, data collection, and analysis (Creswell, 2009). First, the qualitative nature of the study relies heavily on the subjective accounts and perceptions of student-athletes. Thus it is possible that some participants provided inaccurate responses based on personal bias, anxiety, or a simple lack of awareness (Patton, 2002). Qualitative studies by design are focused on the individual's perception and experiences, therefore the results of the study are limited to the participants and population being examined.

Secondly, this study focused on two division I institutions out of 346 potential division I schools with over 91,000 male student-athletes (NCAA, 2011). Although, the schools used in this study compete in the same athletic conference and have similarities within the student-athlete population, the sample is too small to draw broad conclusions across all student-athletes. In other words, making broad generalizations based on the findings of this research might be unwise, but future research can address populations and issues that were beyond the scope of this project.

A third limitation is the narrow sample population. This study sought information from the injured student-athlete's perspective; therefore, coaches and athletic trainers were not interviewed for this project. Similarly, parents, friends, professors, and other community members were not interviewed during for this research project. This approach remained consistent with previous seminal works such as Robbins and

Rosenfeld (2001), Corbillon et al. (2008), and Clement and Shannon (2011). In each of these important studies, student-athletes were examined, but coaches and athletic trainers were not investigated. It is the belief of the researcher that substantive information can be obtained from interviewing solely student-athletes and attempting to examine multiple support providers might influence the participant's responses. Thus further exploration into support providers remains a topic for future research.

Another limitation occurred while trying to reach an appropriate amount of interviews and data saturation. In order to achieve these goals, the researcher utilized a purposive, snowball sampling approach that allowed current participants to identify other students who might fit the selection criterion. These selection methods could result in a sample where participants know one another and have discussed each other's injuries, thus providing a bias response. Although the researcher asked specific questions and requested specific examples, it is difficult to fully account for this limitation.

Lastly, the researcher's subjectivity needed to be considered throughout the project to ensure the participant viewpoints were accurately portrayed. Given the researcher's background as a former division I student-athlete, there was oftentimes some pre-existing knowledge or understanding of the athletics environment and student-athlete's experience. The researcher acknowledged these potential biases and utilized strategies to increase the trustworthiness of the study.

## Assumptions

There were several assumptions for this study. One assumption of the study was that division I, male student-athletes would be honest and forthright with describing their injury experience to the researcher. A second assumption was that student-athletes were not faking injuries and that all injuries as described by the participants were real. A third assumption was that participants met the selection criteria for the study and were qualified to discuss the topic of social support during periods of athletic injury. This assumption was based on previous studies that established athletes have an awareness and general idea of social support as a concept (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins and Rosenfeld, 2001). A fourth assumption was that application of social support was generally a good thing and a positive experience for injured student-athletes. However, increased levels of support might lead to distractions and a potential loss of control for athletic administrators (e.g., coaches). Lastly, it was assumed that participants willingly volunteered to take part in the study without coercion.

## Definition of Key Terms

1. **Athletic exposure** refers to the opportunity for injury through a coach directed session that involves physical competition (Powell & Dompier, 2004).
2. **Athletic identity** was defined as the degree to which an individual identifies with their athlete role (Brewer, Van Raalte, & Linder, 1993)
3. **Athletic injury** was defined as an event that requires medical attention by a team certified athletic trainer or physician and results in restriction of the student-athlete's participation or performance for one or more days (Hootman et al., 2007).

a. Minor Injury: Athletes miss one to seven days of competition.
b. Moderate Injury: Athletes miss 8-21 days of competition.
c. Severe Injury: Athletes miss 22 or more days of competition.

4. **Athletic trainers** are responsible for the prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities (National Athletic Trainers' Association, 2012).
5. **Coaches** teach, motivate, and guide their players and teams. At the collegiate level, coaches have a responsibility for the student-athlete's academic and athletic success. Assistant Coaches support Head coaches in accomplishing these tasks in a variety of ways including, practices, games, one-on-one sessions, and study hall (Turman, 2006; Robbins & Rosenfeld, 2001).
6. Richman et al. (1993) eight distinguishable **forms of social support**
   a. Listening Support: The perception that another individual is listening without giving advice or being judgmental.
   b. Emotional Support: The perception that an individual is providing comfort, care and indicating that he or she is on the support recipient's side.
   c. Emotional Challenge: The perception that another person is challenging the support recipient to evaluate his or her attitudes, values, and feelings.
   d. Reality Confirmation: The perception that a person, who is similar to and who sees things the same way the support recipient does, is helping to confirm the support recipient's perspective of the world.

e. Task Appreciation: The perception from another person who is acknowledging the support recipient's effort and is expressing appreciation for the work he or she does.

f. Task Challenge: The perception that an individual is challenging the support recipient's way of thinking about a task or an activity in order to stretch, motivate, and lead the support recipient to greater creativity, excitement, and involvement.

g. Tangible Support: The perception that an individual is providing the support recipient with financial assistance, products, and/or gifts.

h. Personal Support: The perception that an individual is providing services or help, such as running an errand or driving the support recipient somewhere.

7. **Graduation Success Rate (GSR)** measures over a six-year period, how many student-athletes complete their education, while accounting for student-athletes who transfer into an institution. GSR also considers student-athletes who separate from the institution and would have been academically eligible to compete had they returned (NCAA, 2012).

8. **Mid-Major Athletics** refers schools with high performing athletics programs outside the six major athletic conferences (i.e., Atlantic Coast Conference, Southeastern Conference, Big East, Big 10, Big 12, and Pacific 12). Financially, schools competing in major athletic conferences spend an average of $61.55 million on athletics, compared to mid-major schools spending an average of $21.73 million (Fusfeld, 2011).

9. **National Collegiate Athletic Association** (NCAA) is the governing body for Division I, II, and III athletics programs. Each sub division under the NCAA umbrella is responsible for establishing rules to manage personnel, amateurism, recruiting, eligibility, benefits, financial aid, and playing and practice seasons, consistent with the overall guiding principles of the Association (NCAA, 2012).
10. **Social Support** can be defined as an "exchange of resources between at least two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient" (Barefield & McCallister, 1997, p. 333)
11. **Teammate** is a person who competes on the same team as another person ("Teammate", 2012, para. 1).

## Conclusion

Student-athletes have the ability to play a pivotal role in the college experience. From the general student body perspective, student-athletes provide entertainment and notoriety for the institution. Additionally, some successful athletic programs are able to generate enormous amounts of revenue due to their athletic accomplishments. Because of these financial opportunities and the potential fame that coincides with participating in collegiate athletics, student-athletes can become synonymous with celebrities on college campuses.

However, the glamorous, high-profile student-athlete picture quickly changes during periods of athletic injury. Research suggests that during times of injury, athletes experience feelings of boredom, frustration, jealousy, regret, depression, anger, fear, as well as loss of identity (Johnston & Carroll, 2007; Lockhart, 2010; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). During the injury period an athlete might receive the

appropriate treatment to mend physical wounds, but equal attention should be paid to their emotional and psychological needs (Biviano, 2010; Halbert, 2007; Powell & Dompier, 2004; Robbins & Rosenfeld, 2001). This attention often comes in the form of social support provided by those closest to the athlete, including teammates, coaches, and athletic trainers (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins and Rosenfeld, 2001). Studies indicate with the adequate social support, athletes are more likely to adhere to their rehabilitation process and recover faster from injury (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001; Russell, 2007).

The Social Support Model presented by Richman et al.'s (1993) provided a quality outline for examining the social support phenomenon by defining eight types of support and accounting for the interactions between support providers (i.e., teammates, coaches, and athletic trainers) and the recipients (i.e., student-athletes). Additionally, the model has been utilized within the context of collegiate athletics (Clement & Shannon, 2011; Corbillon, Crossman, & Jamieson, 2008; Robbins & Rosenfeld, 2001). However, while many of the previous research projects took a quantitative approach, few studies utilized a qualitative methodology in order to examine athletic injury. By using qualitative interviews, the researcher was able to delve deeper into the subject of athletic injury, capturing thick, rich descriptions of the student-athlete's experience. Furthermore, the current research proposal aimed to investigate division I, male student-athletes, who have often been challenging to reach due to several layers of gatekeepers. Ultimately, the goal of this study was to examine the perceptions and communication styles of injured, division I, male, student-athletes regarding the social support received from their teammates, coaches, and athletic trainers. This information was critical to

ensuring student-athletes are provided with the proper support necessary to succeed through difficult times including athletic injury.

## Overview of Dissertation

Chapter I described the context of the problem, as well as the problems of practice and problem of research of the proposed study. Chapter I further detailed the theoretical foundation of the study, the methodology used, and the research questions. The chapter concluded with a discussion of the significance of the study as well as the stated delimitations and limitations.

Chapter II reviewed the seminal works of literature that informed the study. The researcher provided a brief overview on the history of collegiate athletics, as well as reviewed literature regarding athletic identity, psychological responses to athletic injury, and primary support providers for injured athletes. Furthermore, the researcher examined the three main studies that investigated the relationship between injured student-athletes and their teammates, coaches, and athletic trainers.

Chapter III presented the methodology for this study. The researcher utilized a qualitative semi-structured interview approach to investigate the perceptions, communication styles, and expectations of injured students-athletes. This chapter described how the constructivist paradigm informed the study, and detailed the research design. Additionally, chapter three presented the research questions and described the population and sample strategy. This chapter further detailed the procedures used to collect, prepare and analyze the data.

Chapter IV presented the data collected, and Chapter V presented the implications, conclusions, and recommendations future study.

# Chapter II: A Review of the Literature

Athletic injuries are a part of sports and can play a critical role in shaping the collegiate student-athlete's experience. According to the National Athletic Trainers' Association (2012), more than 12,500 college student-athletes are injured each year. Many of these injured student-athletes will experience a variety of emotions including boredom, frustration, jealousy, regret, depression, and fear while attempting to cope with the stress associated with athletic injury (Johnston & Carroll, 2007; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). Despite the negative emotions often felt by injured student-athletes, studies indicate with the appropriate support systems in place, injured student-athletes are more likely to persevere through the difficult times, adhere to rehabilitation routines, and avoid many of the negative emotions that are associated with athletic injury (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001; Russell, 2007). Therefore it is critical that research continue to investigate methods and strategies to better support injured student-athletes. The current study focused on how division I, male, injured student-athletes experienced social support provided by their teammates, coaches, and athletic trainers. More specifically, the researcher examined perceptions, expectations, and communication styles of injured student-athletes regarding the social support received from teammates, coaches, and athletic trainers.

The focus of this literature review was to provide the reader with a foundation on student-athletes, social support, and the significance of athletic injury. This chapter presented an historic overview on collegiate athletics as well as a brief synopsis on the specific characteristics of the student-athlete population. This chapter also described the social support model that served as the conceptual framework for this study. After

investigating and critiquing existing studies, the researcher discovered the emergence of three major themes, (a) the psychological effects of athletic injury, (b) the social support received by those who have been injured, and (c) the individuals most commonly associated with providing social support to injured collegiate student-athletes (i.e., teammates, coaches, and athletic trainers). This background information and context aided the researcher in the developing research questions and research design strategies.

## History of College Athletics

The first U.S. collegiate sporting event took place on August 3, 1852. The crew team of Harvard University defeated Yale College's crew team, following in a sports tradition that began at Oxford and Cambridge (Smith, 1990). This initial contest also marked the beginning of commercialization within college sports (Smith, 1990). As sponsorship opportunities and prizes increased, so did the desire to win (Smith, 1990). In 1864, following a series of defeats, the Yale crew team hired William Wood to coach and train their athletes to defeat Harvard in their upcoming race (Smith, 1990). After intense preparation, Yale defeated Harvard making William Wood the first professional trainer/coach for an American college team (Smith, 1990).

At the turn of the 20$^{th}$ century, collegiate sports saw tremendous growth in football, baseball, and track and field (Delany, 1997). With the rise in technology and increased exposure to radios, televisions, and airplanes, college athletics began reaching a broader audience, thus becoming more attractive to businesses looking to advertise their products and services. As competition on the playing fields of U.S. institutions increased, so did the competition for revenue produced by these winning sports programs, thus creating the need for regulation.

In 1906, 62 schools formed the Intercollegiate Athletic Association of the United States (IAAUS), which was later renamed the National Collegiate Athletic Association (NCAA) in 1910 (Shulman & Bowen, 2001). In order to further define collegiate athletics, the NCAA split member schools into three legislative and competitive divisions in 1973 (Crowley, 2006; NCAA, 2010). To this day the critical distinction between the divisions revolves around financial aid provided to student-athletes (NCAA, 2007). Division I member institutions are permitted to grant full athletic scholarships, compared to division II schools which offer partial financial support, and division III where student-athletes receive no financial assistance based on their athletic ability (NCAA, 2007). A greater emphasis is placed on an athlete's overall experience at division II and III levels. Thus division I programs typically serve the highly competitive and more elite athletes, while Division II and Division III schools focused on incorporating athletics as a part of the larger student experience (NCAA, 2007).

## Collegiate Student-Athletes

Student-athletes experience benefits and challenges related to both their academic and athletic pursuits (Adler & Adler, 1989; Parham, 1993). At the collegiate level, student-athletes are often elevated to a point of stardom that makes their experiences different from non-athletes (Adler & Adler, 1989). In order words, collegiate student-athletes are asked to perform or compete in front of peers, instructors, alumni, and family members, displaying both athletic successes and failures to the larger university community, in addition to navigating college life in and out of the classroom (Adler & Adler, 1989; Simons, Bosworth, Fujita, & Jensen, 2007). In some instances, student-athletes receive scholarship funding or other specialized treatment such as academic

support, specialized housing, athletics related travel, or early course registration, that separates them from the non-athlete population (Simons et al., 2007).

Student-athletes' advantages, hardships, and experiences that differ from non-athletes have been well-documented. Parham (1993), detailed six challenges that student-athletes frequently face, that non-athletes do not: (a) balancing academic and athletic pursuits; (b) adapting to isolation of social and more mainstream activities; (c) managing athletic success or failure; (d) paying close attention to their own physical health needs; (e) satisfying multiple relationships, including coaches, parents, teammates, friends, and the community; and (f) concluding their athletic careers and finding other activities to fulfill their needs. Conversely, a study conducted by Adler and Adler (1989), who spent five years researching elite basketball players at a major division I program, detailed some of the highlights of playing college sports. Adler and Adler (1989) described an environment where athletes were more like celebrities, who were often sought by strangers for autographs or people who just wanted to be in their presence. The researchers discovered the physical, social, and mental aspects of the athletic season took priority over all other commitments, thus their athletic persona became their most dominate characteristic, informing decisions throughout the student-athletes' collegiate career and ultimately shaping his or her identity (Adler & Adler, 1989). The research conducted by Adler and Adler (1989), as well as Parham (1993) described some of the benefits and challenges that student-athletes received. Although the researchers take different perspectives in viewing how athletic identity shapes the student experience, it is clear that their experience is vastly different than non-student-athletes. For example, while non-athlete students might focus on major selection, careers, and traditional job

employment, some student-athletes are considering continuing their athletic pursuits at the professional sports level (Lally & Kerr, 2005). Furthermore, students not participating in varsity sports have a greater ability to socialize and build larger circles of friends, whereas student-athletes have time restrictions based on practice schedules, study sessions, games, and team travel that can hamper their ability to interact outside of their athletic teams (Chen, Snyder, & Magner, 2010; Parham, 1990).

A large portion of the student-athlete's experience revolved around athletics and thus athletics served as a safety net for building relationships and supporting the student-athlete (Chen et al., 2010). However, when a student-athlete sustained an injury and athletic competition was taken away and his or her world was interrupted. Research has shown the support and positive emotions that once resulted from athletic competition dissipate, leaving the injured student-athlete with feelings ranging from confusion and anxiety to anger and frustration (Chan & Grossman, 1988; Johnston & Carroll, 2007; L. Johnston & Carroll, 1998; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). In order to cope with athletic injury, student-athletes depend on various levels and types of social support from teammates, coaches, and athletic trainers (Barefield & McCallister, 1997; Biviano, 2010; Halbert, 2007; Robbins & Rosenfeld, 2001).

Student-athletes are a unique population that is different from their non-student-athlete counterparts in several areas, including potential scholarship funding, academic distinctions, and social differences. Although, some areas of disparity within the student-athlete experience might be considered positives such as celebrity status, other areas are more challenging, such as increased time constraints. These key distinctions help set student-athletes apart and establish them as a population worthy of further inquiry.

## Social Support

Much has been written about social support in a variety of contexts, including pregnancy, hospitalizations, transitions to adulthood, recovery from illness, employment termination, and many other aspects of our society (Cobb, 1976; Cohen & McKay, 1984; Kaplan, Cassell, & Gore, 1977; Lakey & Cohen, 2000). In each of these circumstances, the general belief is that effective social support helped reduce the stress experienced by the affected person (Lakey & Cohen, 2000). In many cases, social support helped the recipient by allowing him or her to vent feelings, gain reassurance and companionship, as well as reduce uncertainties. Social support can be defined as "an exchange of resources between at least two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient" (Barefield & McCallister, 1997, p. 333).

Most college students deal with various forms of stress including transitioning from high school, adjusting to the collegiate academic workload, and preparing for a career after graduation (Watt & Moore, 2001; Wilson & Pritchard, 2005). Recent evidence suggests student-athletes experience greater levels of stress due to the dual demands of both academics and athletics (Wilson & Pritchard, 2005). This stress level is further increased during periods of athletic injury, where student-athletes may experience boredom, frustration, jealousy, regret, depression, and fear while attempting to cope with their injuries (Johnston & Carroll, 2007; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). Therefore, social support can play a pivotal role in helping the student-athletes not only return to competition, but also aid in improving their general well-being as students.

## Psychological Affects of Athletic Injury

Athletic injuries are inevitable in sports competition given the amount of time athletes dedicate towards preparation and competition (Conn et al., 2003; Hootman et al., 2007; Kissinger & Miller, 2009). Many high profile collegiate student-athletes are revered as celebrities while participating in college sports, but have contrasting negative feelings during times of injury (Brewer, 1993; Watt & Moore, 2001). Adjusting to life without sports can be challenging for many student-athletes, creating a variety of emotions and feelings related to adjusting and coping with their athletic injuries (Johnston & Carroll, 2007; Wiese-bjornstal et al., 1998). In order to better understand the need for social support, the following section will detail key studies related to the psychological effects of athletic injury on athletes and their experiences.

In a study focused on the psychological affect athletic injury had on 60 runners (30 injured, 30 non-injured) ranging in age from 15 to 50, Chan and Grossman (1988) utilized the Profile of Moods States (POMS) to find that injured runners displayed significantly greater symptoms of psychological distress. The POMS had 65 adjectives that described feelings and affective mood states over a period of time. The participant's responses were rated using a five-position scale ranging from "not at all" to "extremely" (Chan & Grossman, 1988, p. 878). In addition to assessing Total Mood Disturbance, the POMS measured six dimensions of mood: (a) Tension-Anxiety, (b) Depression-Dejection, (c) Anger-Hostility, (d) Vigor-Activity, (e) Fatigue-Inertia, (f) Confusion-Bewilderment (Chan & Grossman, 1988). During their study, Chan and Grossman (1988) discovered injured runners showed higher rates of depression, anxiety, confusion, and overall mood disturbance. Additionally, injured runners reported a greater

dissatisfaction with their body images as well as lowered self-esteem as a result of their inability to participant in sports (Chan & Grossman, 1988). The results of Chan and Grossman's (1988) study provided support for the negative affect athletic injury can have on an athlete's experience. In particular, athletes who were deprived of their ability to exercise, displayed symptoms of psychological distress and an inability to cope with their athletic-injury.

Johnson (1997) investigated the similarities and differences between men and women who had experienced an athletic injury. In his study, Johnson (1997) used the Mood Adjective Check-List (MACL) and General Coping Questionnaire (GCQ) to compare 81 highly competitive and elite athletes from various team and individual sports, who suffered long-term athletic injuries. When injured athletes were compared to non-injured athletes, the results mirrored previous studies by indicating higher levels of anxiety and an increased mood disturbance amongst those who suffered an injury (Johnson, 1997). Additionally, when evaluating gender differences, women were found to become more anxious, tense, and have a stronger inclination to use emotion-focused coping strategies, such as "wishful thinking" or "religion" (Johnson, 1997, p. 371). Johnson's (1997) study reiterated a common theme with regards to the emotions experienced by injured athletes (i.e., depression, anxiety, and tension), but also revealed a gender difference in the intensity of those emotions (Johnson, 1997).

The majority of the psychological studies found during this literature review that focused on athletic injury were quantitative in nature, and provided limited details regarding the cognitive process from the athlete's perspective. One of the few qualitative accounts was provided by Rose and Jevne (1993) while conducting semi-structured

interviews with seven moderately to severely injured athletes. Rose and Jevne (1993), discovered athletes experienced a variety of emotions as a result of athletic injury. Participants noted feeling angry, frustrated, disappointed, as well as feelings of longing and loss as a result of being unable to participant in their sport (Rose, 1991). Grant was a 19 year old Triathlon athlete, who described his injury experience as, "Pure frustration…I was in the best shape of my life…and then to come back and have to stop after a mile because your leg is hurting" (Rose, 1991, p. 116). Ashley, a 19 year old soccer player stated, "… you wish you could be out there, contributing, having fun…when you are sitting" (Rose, 1991, p. 117).

Johnston and Carroll (1998) discovered similar emotional responses when they interviewed 16 seriously injured, competitive, and recreational athletes. Results of this study indicated athletes felt shocked and were in disbelief immediately following their injury (Johnston & Carroll, 1998). Following the initial shock associated with injury, all of the participants reported feelings of anxiety surrounding their ability to return to competition (L. Johnston & Carroll, 1998). Based on how the injury progressed, athletes responded in two separate ways: (a) Optimistic appraisals resulting in feelings of relief, and reassurance; or (b) Negative beliefs resulting in feelings of anger, confusion, and increased anxiety (Johnston & Carroll, 1998). Johnston and Carroll (1998) concluded throughout the rehabilitation process, frustration and depression were the most prevalent emotional responses, although the reason for these feelings differed based on the athletes' progression and ultimately their return to competition.

In summary, a review of the literature provided several common emotions displayed by injured athletes such as feelings of boredom, frustration, anger, anxiety,

disappointment, isolation, and depression experienced during athletic injury (Chan & Grossman, 1988; Johnston & Carroll, 1998; Johnson, 1997; Rose & Jevne, 1993). Furthermore, the detailed description from the athletes' perspectives provided insight on how and why the injury affected them in a particular way. For example, some athletes attributed frustration to their inability to participate in sports or play alongside teammates, whereas other athletes associated frustration with the length of time for their recovery process (Johnston & Carroll, 1998; Rose & Jevne, 1993).

**Critique of Psychological Affects of Athletic Injury**

Although the studies presented in this literature review provided common evidence for the emotions injured athletes might experience, they did not specifically examine the division I collegiate student-athlete population. Chan and Grossman (1988), Rose and Jevne (1993), and Johnston and Carroll (1998) utilized a combination of recreational groups, amateur athletes, semi-professional players, and professional athletes to comprise their samples. For example, Rose and Jevne's (1993) study varied in terms of gender (four males and three females) as well as age (ranged between 19-34). Johnston and Carroll's (1998) study included a wide participant age range spanning from 18 to 60 years old, with only half of their 16 participants representing university student-athletes. Aside from lacking collegiate representation within these studies, the vast majority of participants were also international athletes who experienced different levels of pressure and stardom than American players as referenced in the literature (Johnston & Carroll, 1998; Rose & Jevne, 1993; Johnson, 1997).

The studies reviewed detailed many common emotions experienced by injured athletes' during periods of athletic injury; however, limited information was provided

regarding social support from teammates, coaches, and athletic trainers. For example, the specific actions that injured athletes perceived as supportive and which actions they valued the most were not thoroughly addressed. Additionally, the scope of research did not address solutions or ways for supporters to better assist injured athletes to cope with these emotions. Based on this evidence and the recommendations of previous researchers, there is a need for further examination of the individualized circumstances affecting athletic injury (Clement & Shannon, 2011). Specifically, further research was required to investigate not only the individual perceptions of injured athlete, but also the affect that support from teammates, coaches, and athletic trainers had on the athletic experience.

## Social Support in College Athletics

The experiences of student-athletes are filled with situations that might require additional support (Wilson & Pritchard, 2005). For example, student-athletes might need to be supported after losing a close game or during time periods where they feel disconnected from the general student body (Parham, 1993; Wilson & Pritchard, 2005). Another well-documented example of when student-athletes may require social support is during periods of athletic injury (Hamson-Utley, Martin, & Walters, 2008; Powell & Dompier, 2004; Robbins & Rosenfeld, 2001; Russell, 2007). As previously outlined, injured student-athletes often require the additional social support to assist them in coping with a variety of emotional challenges, including boredom, frustration, anger, anxiety, disappointment, isolation, and depression experienced during athletic injury (Chan & Grossman, 1988; Johnston & Carroll, 1998; Johnson, 1997; Rose & Jevne, 1993). This

section will provide background information on the importance of social support in athletics, as well as establish the primary support providers for college student-athletes.

Robbins and Rosenfeld (2001) provided the foundation for examining the relationship between injured athletes and their perceptions of social support. Their study examined 35 athletes with minor to severe injuries who were unable to participate in athletic competition for at least three days due to injury (Robbins & Rosenfeld, 2001). The division I athletes in the study played a variety of different sports and ranged in academic classification from freshmen to seniors (Robbins & Rosenfeld, 2001). Athletes who met the criterion for inclusion completed a modified version of the Social Support Survey (SSS), which detailed whether or not the head coach, assistant coach, and athletic trainer provided each of the six types of social support. The Social Support Survey was selected because it had proven to be a reliable tool that was useful for practitioners (Richman et al., 1993). Although, it was originally created for usage in the field of social work, several studies utilized it with student-athlete populations, because both groups experienced hardships during their experience that might require the support of another individual (Clement & Shannon, 2011; Corbillon, Crossman, & Jamieson, 2008; Robbins & Rosenfeld, 2001). Furthermore, the model accounted for interactions between providers and recipients regardless of whether it was a social worker or athletics personnel. However, a modification was made by some previous researchers to remove tangible support, because it violated NCAA rules and personal support because it was found to be irrelevant during preliminary interviews (Robbins & Rosenfeld, 2001).

Using data gathered from a modified version of the Social Support Survey, Robbins and Rosenfeld's (2001) study indicated few differences in the athletes'

perception of social support provided by coaches and trainers prior to injury. However, following the injury, athletes reported being more satisfied with the listening, task appreciation, task challenge, emotional, and reality confirmation support that they received from their athletic trainers, over perceived support from either their assistant or head coaches (Robbins & Rosenfeld, 2001). Additionally, the study found that athletic trainers provided a similar level of support both prior to injury as well as during rehabilitation (Robbins & Rosenfeld, 2001).

Corbillon, Crossman, and Jamieson (2008) expanded on the work of Robbins and Rosenfeld (2001) by investigating injured athlete's perception of social support provided by their coaches and teammates. This study utilized a modified version of Social Support Survey while examining 72 Canadian university student-athletes participating in a variety of sports and ranging in age from 18 to 29 (Corbillon et al., 2008). The results of this study found significant interaction between the types of support offered to injured athletes and the source of that support, either coaches or teammates (Corbillon et al., 2008). Specifically, coaches were the main providers of technical aspect support. Whereas teammates were reported as being significantly more available to provide emotional support and reality confirmation support (Corbillon et al., 2008). Corbillon et al. (2008) found these results similar to other studies where injured athletes shared less emotion with their coaches and more with their teammates.

Clement and Shannon (2011) extended the literature on injured athletes' perceptions of social support, by using two separate schools and examining 49 athletes who were injured at the time of the study. Using a version of the Social Support Survey, the researchers measured athletes' perceptions regarding satisfaction, availability, and

contribution for the eight types of social support from three sources, teammates, coaches, and athletic trainers (Clement & Shannon, 2011). The results of the investigation revealed, athletes were significantly more satisfied with the social support provided by their athletic trainers, the availability of that social support and the contribution to their overall well-being, than the social support received from coaches and teammates (Clement & Shannon, 2011). More specifically, according to Clement and Shannon (2011), "Of all the sources of social support investigated in the current study, athletes reported that support received from their athletic trainers was more satisfying, more available, and contributed more to their overall well-being" (p. 464). Additionally, injured athletes in their study reported athletic trainers not only cared for them, but were "on their side" (Clement & Shannon, 2011, p. 465).

Ultimately, the study conducted by Clement & Shannon (2011) further defined the distinction in roles played by the various support providers. The study did find that coaches are more likely to provide task challenge support and informational support, while teammates were available to offer emotional support (Clement & Shannon, 2011). Although these types of support are important, they must be delivered at the appropriate time to be effective (Clement & Shannon, 2011). Furthermore, the study reiterated the critical support role played by the athletic trainers throughout the injury process. In this example, injured student-athletes were more appreciative of the support provided by athletic trainers, than the support offered by teammates and coaches.

## Critique of Social Support in Athletics

Based on the literature reviewed during this inquiry, social support was critical to the success and overall well-being of the injured athlete. However, despite this trend

across several studies, there are opportunities for further research. For example, Robbins and Rosenfeld (2001) study examined both genders and incorporated a variety of different sports, but utilized a relatively small sample, especially given the quantitative nature of the research. Furthermore, the researchers noted an "inability to account for possible individual differences," which could be alleviated using qualitative methods (Robbins & Rosenfeld, 2001, p. 291). Although Robbins and Rosenfeld's (2001) study indicated athletes were more satisfied with the social support of their trainers following injury, the results failed to identify who served as the primary source of social support prior to injury. Finally, through "informal conversations" the researchers made several references to the athletes' perceptions of why coaches or trainers act in a particular manner, but failed to investigate those behaviors (Robbins & Rosenfeld, 2001, p. 288). For example, some respondents felt Assistant Coaches viewed their role as technical advisors, who attended practices, taught skills, and led drills. Therefore, if an injured athlete is not physically participating in practice or games, support from his or her coaches might become limited (Robbins & Rosenfeld, 2001).

Corbillon et al.'s (2008) study helped further define the multidimensional relationship between injured college athletes and the perceived social support from both teammates and coaches. However, several aspects of the study displayed a clear need for additional research. For example, all of the participants were from the same small Canadian university. Canadian college sports do not come with the same level of pressure for players, coaches, or athletic trainers, as many American sports, thus the athlete's injury perceptions are likely different (Popps, Hums, & Greenwell, 2009). Most Canadian college sports do not receive the media attention that surround popular U.S.

college sports such as basketball, football, or baseball (Popps et al., 2009). The researchers also failed to record important demographic information related to type of sports played, time elapsed since the injury, or type of injury (Corbillon et al., 2008). By neglecting to document the descriptive information, future research is unable to draw conclusions regarding injury severity, differences between sports, or other individual nuances. Finally, the quantitative nature of the study allowed the researchers to make broad conclusions surrounding injured athletes' perceptions of social support (Corbillon et al., 2008). As a result, Corbillon et al. (2008), neglected to provide evidence of "how" individual injured athletes felt regarding expectations, communication styles, and perceptions of support provided by teammates, coaches, and athletic trainers.

The studies by Robbins and Rosenfeld (2011) and Corbillon et al. (2008) focused solely on one institution and used retrospective data. Whereas, Clement and Shannon (2011) examined currently injured athletes at two separate schools competing at the division II or division III level. While the study provided further evidence of the critical role support providers and specifically athletic trainers played, there were some limitations within the research. First, given the quantitative nature of the research, the study used a relatively small sample size of 49 student-athletes. Next, the study failed to account for the distinction in division II athletics versus division III athletics. Based on NCAA regulations, there are separate rules governing the different divisions that may affect the attitudes and behaviors of athletes, teammates, coaches, and athletic trainers, including scholarship funding (Clement & Shannon, 2011). Finally, the researchers did not delineate between injury severity or where the athlete was in the recovery process. These important personal characteristics should be considered when discussing social

support, because an athlete close to returning to competition is likely to respond differently than a recently injured athlete.

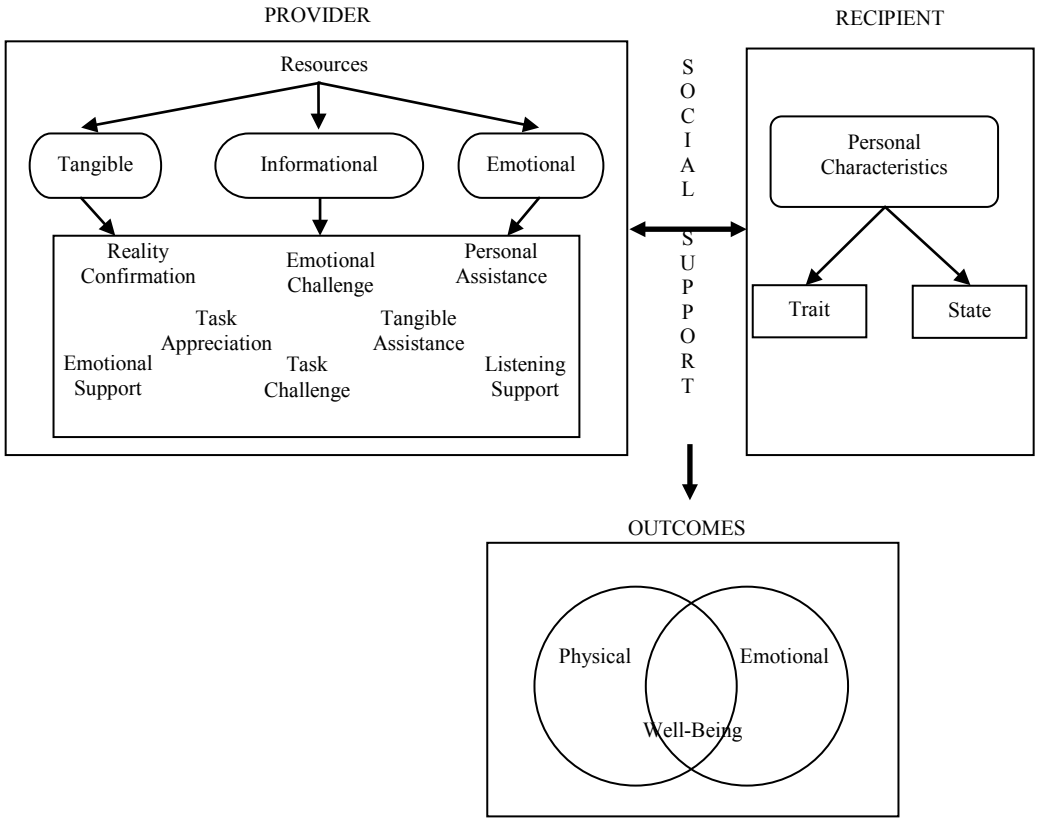
## Conceptual Framework

Social support is a multidimensional concept that was originally defined by three classifications: (a) tangible, (b) informational, and (c) emotional (Cobb, 1976). However, this initial concept failed to provide perspective for both formal and informal providers, as well as account for environmental factors such as social class or family background (Richman et al., 1993). Following the social support model outlined by Cobb (1976), Pines, Aronson, and Kafry (1981), narrowed these broad areas into six distinguishable types of social support. The different types of social support included, listening support, emotional support, emotional challenge, social reality, technical appreciation, and technical challenge (Pines, Aronson, & Kafry, 1981). In 1993, Richman et al. (1993) further examined social support and expanded upon the six types of social support, including two additional types, tangible assistance support and personal assistance support (Pines et al., 1981). According to Richman et al. (1993), the eight areas of social support are possible when the recipient perceives behaviors from another person as enhancing his or her well-being.

In order to assess social support as a multidimensional concept, Richman et al. (1993) developed the Social Support Survey- Clinical Form (SSS-C). Richman et al. (1993) originally developed the SSS-C to assist social workers in better supporting their clientele. The model helped social work practitioners assess changes in their clients' support network as well as perceptions of the support their clients were or were not receiving (Richman et al., 1993). The form collected five pieces of information from

each of the eight topological areas: (a) the number of support providers, (b) composition of the respondent's social support network, (c) satisfaction with the support received, (d) how difficult it would be to obtain more support, and (e) the perceived importance of the support for the respondent's well-being (Richman et al., 1993).

Figure 1. Model of the Social Support Process




The SSS-C and the model for which it is based has been tested for clinical usage and proven to be a helpful tool in assessing social support. Specifically, the SSS-C was examined and tested on the basis of content validity, concurrent validity, construct validity, and reliability and found to have "high clinical utility for practitioners" (Richman et al., 1993, p. 304). Richman et al. (1993) research filled the gap left by previous models that were not well documented, did not provide distinct areas of examination, or a useful tool for measuring social support. In contrast to prior studies,

the Richman et al. (1993) model provided a "spectrum of support that practitioners and clients may find useful in assessing social support and in planning appropriate intervention strategies" (p. 291).

The foundation established by Richman et al. (1993) using the SSS-C was useful in the field of social work, but has also been proven to be a valuable tool for examining social support within athletics. For example, the field of social work often depends on family support structures to assist individuals in need of help (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins & Rosenfeld, 2001). Similarly, athletes often developed core relationships with teammates and coaches who provided support at different points in their experience (Jowett, 2003; Nixon, 1994; Tracey, 2003; Vallée & Bloom, 2005). Furthermore, during periods of athletic injury, players might build a close connection with athletic trainers in addition to the support received from teammates and coaches (Biviano, 2010; Barefield & McCallister, 1997; Robbins & Rosenfeld, 2001). Therefore, similar concepts and analysis can be applied for studying the athlete's perceptions regarding the support they are or are not receiving.

Based on the literature, the Social Support Survey has been supported as an effective tool for assessing perceptions of social support from a number of individuals such as teammates, coaches, and athletic trainers (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins & Rosenfeld, 2001). The three primary studies investigating injured student-athletes' perceptions of the social support received from teammates, coaches, and athletic trainers all used quantitative methodologies and a version of the Social Support Survey. However, using the Social Support Survey in this manner required individuals to self-report their perceptions of others and did not allow the researcher the opportunity to

investigate the potential deeper meaning behind the numeric scores. Further research is needed to investigate, on an individual level the perceptions of injured athletes regarding the social support they receive from support providers, such as teammates, coaches, and athletic trainers.

The current study was guided by the Social Support Model presented by Richman et al. (1993), detailing eight distinguishable forms for social support. The Social Support Model allowed the researcher to define and explain interactions between individuals and groups as it pertained to social support being given and received within the environmental context (Richman et al., 1993). In other words, the researcher was able to ask questions that consider the specific context for each athlete, such as playing time, class year, injury type, or coaching changes. The model included four elements that played a critical role in assessing the interaction between individuals, their environment, and their need for physical and emotional support (Richman et al., 1993). These elements include: (a) the recipient of support, (b) the provider of social support, (c) the interactional exchange process between provider and recipient, and (d) the outcomes of the exchange process (Richman et al., 1993).

Across multiple studies, support for college athletes looked very different than support at other competition levels (Bianco, 2001; Clement & Shannon, 2011; Robbins & Rosenfeld, 2001). Prior to athletic injury coaches often served as primary support for college student-athletes, but care transitioned to athletic trainers and teammates once he or she sustained an injury (Barefield & McCallister, 1997; Robbins & Rosenfeld, 2001; Nixon, 1994). Research suggested the trends shifted because coaches viewed their role as technical instructors and needed to focus on the remaining healthy players (Robbins &

Rosenfeld, 2001). In contrast, athletic trainers found themselves in position to assist athletes with emotional support issues while addressing the athlete's physical recovery needs ((Barefield & McCallister, 1997; Mann et al., 2007; Morgan & Giacobbi, 2006). Teammates were also a source of support during periods of injury offering injured athletes an outlet to vent frustrations and a continued connection with the team. Regardless of the nature of the support or the provider of the support, the social support model established by Richman et al. (1993) accounts for the different providers and their specific relationship with the recipient and provided a sound theoretical foundation for the current study.

## Social Support Providers

### Teammates

Based on the specific individuals' needs, support might be administered by a variety of different providers. Social support providers may include family, friends, spouse, relatives, co-workers, clergy, medical staff, or mental health professionals (Richman et al., 1993). In the case of student-athletes research indicated social support often fell to teammates, coaches, and athletic trainers (Loutsch, 2007; Morgan & Giacobbi, 2006; Robbins & Rosenfeld, 2001). In a study examining 10 downhill skiers, Bianco (2001) found injured skiers expressed a desire and need for social support. Specifically, the skiers looked to teammates for tangible support in the form of arranging medical care, contacting family members, assisting with travel plans, as well as smaller tasks such as packing luggage or running errands. For the majority of participants in Bianco's (2001) study, teammates and family members served as the primary support for the injured athletes.

Loutsch (2007) reiterated the importance of supportive teammates for club sports athletes as well as collegiate athletes. In her study, Loutsch (2007) indicated college teammates often take on a more vital role in the social support network, because they can relate and identify with the injured athlete better than coaches or athletic trainers. Furthermore, Loutsch (2007) found social support from teammates assisted injured athletes to remain connected to their team and avoid feelings of isolation.

Tracey (2003) focused on the collegiate student-athlete and further supported previous research conclusions regarding the importance teammates have on the injury recovery process. While conducting interviews with 10 injured division III student-athletes, Tracey (2003) found that they acknowledged and appreciated the support provided by teammates during their time of injury, despite finding it emotionally challenging to attend practice sessions (Tracey, 2003). Furthermore, throughout the interviews, many participants reported that talking about their emotions to teammates or other injured athletes was helpful (Tracey, 2003). Even as student-athletes approached their return to competition, their teammates played a vital role in assisting student-athletes to remain positive and stay motivated (Tracey, 2003). Additionally, injured student-athletes viewed the social contact provided by teammates as beneficial in helping them remain connected to their sport (Tracey, 2003).

Morgan and Giacobbi (2006) further analyzed social support dynamics for student-athletes by interviewing eight division I collegiate players, along with 12 parents, and six coaches. Their study revealed teammates played a vital role in supporting student-athletes dealing with adversities such as death or divorce of parents, athletic injury, or the pressures associated with college sports (Morgan & Giacobbi, 2006).

Morgan and Giacobbi (2006) noted, as parental relationships became more distant, teammates and coaches became increasingly more important support providers for student-athletes experiencing difficulties, such as athletic injury. A student-athlete who was interviewed for the study described his teammates as, "The friends, people that you bleed with, blood, sweat, and tears…It's almost like a brotherhood" (Morgan & Giacobbi, 2006, p. 307). Similar to previous research, Morgan and Giacobbi's (2006) study reiterated the importance teammates have on the student-athlete experience, particularly in supporting athletes dealing with adverse circumstances. The teammates interviewed in their study taught the athletes many lifelong lessons, as well as allowed them to stay grounded and have fun while competing at the highest collegiate level (Morgan & Giacobbi, 2006).

These four studies detailed the importance that teammates have on an athlete's experience as social support providers (Bianco, 2001; Loutsch, 2007; Morgan & Giacobbi, 2006; Tracey, 2003). Loutsch (2007) provided evidence that parents often assisted with supporting younger athletes, but support for collegiate student-athletes often fell to teammates and coaches. Furthermore, the research revealed, support from teammates became more critical during times of adversity, such as injury (Morgan & Giacobbi, 2006). Injured athletes looked to their teammates for assistance with simple task such as grocery shopping to more complex areas, such as emotional support (Bianco, 2001; Morgan & Giacobbi, 2006). Based on the literature, teammates have a unique ability to understand what the injured athlete is experiencing and motivate them toward returning to competition (Morgan & Giacobbi, 2006). Additionally, support from teammates helped keep the injured athletes connected to others within the team and avoid

feelings of isolation (Tracey, 2003). Teammates exhibited unique characteristics and were able to provide perspectives and support that differed from athletic trainers and coaches, thus making them a vital part of the injured student-athletes' experience.

**Coaches**

The relationship between the coach and the individual athlete plays a major role in their success and achievement (Chase, Lirgg, & Feltz, 1997; Jowett & Chaundy, 2004; Kassing & Infante, 1999). Several factors can affect the relationship an athlete has with their coach, including gender, type of sport (i.e., team sport versus individual sport), competition level, playing time, or the athlete's ability to compete (Chelladurai, 1980; Jowett & Chaundry, 2004; Smoll & Smith, 1989). Additionally, cognitive factors such as self-esteem or higher levels of anxiety might influence the coach-athlete dynamic (Kenow & Williams, 1992; Smoll & Smith, 1989).

Kenow and Williams (1992) provided one of the first studies examining the complexity of the coach-athlete relationship, while investigating the coaching behaviors of a male head coach and his collegiate female basketball team. The researchers developed a 28 item Coaching Behavioral Questionnaire (CBQ) that evaluated athlete's perceptions and reactions to specific coaching actions (Kenow & Williams, 1992). The researchers found that athletes who displayed higher trait anxiety, higher state cognitive anxiety, and lower state self-confidence perceived and evaluated coach's behaviors more negatively (Kenow & Williams, 1992). In other words, those athletes who experienced hardships and challenges that might have affected their self-esteem rated their coaches' performance lower. The study also revealed that athletes perceived several coaching behaviors as more negative than their coaches' perception (Kenow & Williams, 1992).

Another difference in athlete-coach perception was athletes overestimated their coach's pregame mental and physical anxiety, while underestimated his self-confidence (Kenow & Williams, 1992). Ultimately, the results of this study demonstrated that coaches should be more supportive and less negative with high anxiety and low self-confident athletes (Kenow & Williams, 1992). Athletes who fell into this category required increased support and additional encouragement (Kenow & Williams, 1992). Furthermore, this study helped to outline the clear divide between the perceptions of the athletes and their coaches (Kenow & Williams, 1992).

Jowett (2003) utilized the construct of closeness, commitment, and complementarity (3 Cs) to further explore coach-athlete dynamics. While examining a single coach-athlete dyad, Jowett (2003) discovered a relationship built on progressive and regressive spirals. During the course of the research, the coach and athlete reported positive feelings of support, trust, shared understanding, acceptance, intimacy, and respect (Jowett, 2003). At the same time the relationship experienced low points, with the pair feeling isolated, angry, frustrated, and incompatible (Jowett, 2003). Furthermore, the researcher attributed a general lack of understanding between the coach's and athlete's wants, needs, and desires as preventing them from continuing or at least restoring their otherwise positive coach-athlete partnership (Jowett, 2003). The study by Jowett (2003) helped to further define the complex relationship between coaches and players. Although, coaches are capable of providing athletes with support and other positive feeling, they can also have a negative effect on an athlete's experience.

In order to explore elements of expert coaching within team settings, Vallée and Bloom (2005) examined five Canadian coaches and their associated basketball and

volleyball teams. Vallée and Bloom (2005) used qualitative methodology to identify four overarching categories commonly displayed by coaches within their study: (a) coaches' attributes, (b) individual growth, (c) organizational skills, and (d) vision. According to the study, successful coaches created democratic environments, while remaining open-minded, balanced, composed, caring, and genuinely interested in their athletes (Vallée and Bloom, 2005). The researchers noted the importance of coaches to lead by example, and establish relationships with players built on trust, respect, and communication (Vallée & Bloom, 2005). Furthermore, the authors recognized the vision provided by coaches was the lynchpin influencing the effectiveness for the other three categories displayed by successful coaches (Vallée & Bloom, 2005). According to Vallée and Bloom (2005), the coaches' vision determined every step of their mission, from preparing the team for competition to fundraising.

Despite the plethora of information detailing the successful coach-athlete relationship, research suggest these dynamics change during times of injury. According to Nixon (1994), athletes became reluctant to communicate with coaches and trainers during times of athletic injury. The author referenced an athletics culture predicated on playing through pain and acknowledging that pain is part of competition (Nixon, 1994). While investigating 156 former and current division I student-athletes who experienced significant injuries, Nixon (1994) discovered 93.6% had played while hurting. Approximately 39.7% of the athletes surveyed reported feeling "a great deal" of pain before seeking help from the athletics trainer (Nixon, 1994, p. 345). Furthermore, the study revealed 29.5% of athletes actively participated in sports, despite feeling a considerable amount of pain (Nixon, 1994).

Prior to injury coaches have been known to be deeply involved in several aspects of the athletes' lives (Grossman, Jamieson, & Hume, 1990; Halbert, 2007; Robbins & Rosenfeld, 2001). However, during the injury process studies revealed, athletes were more likely to talk with trainers and teammates, rather than coaches (Barefield & McCallister, 1997; Mann et al., 2007; Morgan & Giacobbi, 2006; Nixon, 1994). While investigating the social aspects of athletic injury, Nixon (1994) indicated 75% of injured athletes turned to trainers, 61.5% turned to teammates, and 55.8% turned to coaches for help and encouragement. A potential explanation for the lower percentage of athletes seeking assistance from coaches was, 49.4% of athletes felt pressured by coaches to play hurt (Nixon, 1994). Consequently, 66% of injured athletes reported trying to avoid or hide their injuries from their coaches (Nixon, 1994). Contrary to the information provided by athletes, coaches of injured collegiate players overwhelmingly denied that the physical welfare of athletes was ignored and disagreed with the notion that athletes should hide pain or feel guilty regarding their injury (Nixon, 1994). Furthermore, coaches rejected the concept that athletes should play through injuries, because winning is everything (Nixon, 1994). Despite these statements described by coaches, nearly half of the athletes' surveyed felt pressured by coaches to play while hurting and two-thirds reported hiding their injuries from coaches (Nixon, 1994).

Coaches play a critical role in the athletes' and the teams' success both on and off the playing surface. Coaches influence tangible aspects, such as playing time during practices and games, travel, and financial aspects. Additionally, coaches can have positive effects on anxiety levels affecting players' motivation, dedication, and overall attitude (Kenow & Williams, 1992). Based on the literature found during this review, the

coach-athlete dynamic may experience a series of high points and low points, but is ultimately rooted in a foundation built on trust, respect, and communication (Jowett, 2003; Vallée & Bloom, 2005). However, during times of injury, athletes hesitate to communicate their feelings and emotions to coaches. Despite serving as a primary support for athletes prior to injury, research suggest injured athletes are 20% more likely to seek support from athletic trainers and six-percent more likely to ask a teammate for assistance, rather than a member of the coaching staff (Nixon, 1994). Although, researchers have attempted to provide an explanation for athletes choosing the support of one provider over another, few studies have taken a qualitative approach or offered background into the student-athletes expectations and perceptions surrounding support (Nixon, 1994). Robbins and Rosenfeld (2001) gathered information from the coaches' perspective that provided one explanation for their sentiments regarding injured athletes. Based on survey questionnaires and informal interviews, Robbins and Rosenfeld (2001) found, Assistant Coaches viewed themselves as sports instructors and not attendants to psychological issues related to athletic injury (Robbins & Rosenfeld, 2001). Furthermore, Head Coaches often attempted to maintain their position of authority and did not wish to influence team morale by singling out individual athletes and providing them with a more personal relationship (Halbert, 2007; Robbins & Rosenfeld, 2001). A review of the literature revealed divergent information regarding the level of support provided by coaches (Nixon, 1992). Some athletes reported supportive coaches, while other athletes described a lack of understanding and concern on behalf of their coaches (Nixon, 1992; Robbins & Rosenfeld, 2001). Specifically, previous literature described a potential disconnect between the perceptions of support provided by coaches and the

actual support interpreted by the athletes. Thus, further research is required to examine the perceptions and communication styles of injured student-athletes regarding the social support received from coaches. Additionally, research is needed to establish basic expectations injured student-athletes have regarding the different support providers, to ensure adequate levels of support are being offered.

**Athletics Trainers**

Teammates and coaches play a major part in supporting athletes prior to injury, but athletic trainers are often depended on to take a larger role following an athletic-injury (Biviano, 2010; Barefield & McCallister, 1997; Robbins & Rosenfeld, 2001). An athletic trainer might be the first medical professional to examine an injured athlete and from that moment, a connection is formed (Barefield & McCallister, 1997; Mann et al., 2007; Moulton, Molestad, & Turner, 1997). In addition to addressing physical wounds, athletic trainers and medical professionals also attend to emotional and psychological issues related to injury (Mann et al., 2007; Moulton, 1997; Robbins & Rosenfeld, 2001). A 2007 study surveying four prominent sports medical associations revealed 80% of staff respondents, "often" or "sometimes" discussed emotional and behavioral concerns related to injury with athletes (Mann et al., 2007, p. 2142). Research suggest that athletic trainers are excellent resources for injured athletes because they have the expertise as well as the certification to identify psychological distress, counsel athletes, and make counseling referrals as needed (National Athletic Trainers' Board of Certification, 2004).

Athletic trainers are prepared with the education and skills necessary to assist student-athletes while they are physically and emotionally recovering from athletic-injury (Barefield & McCallister, 1997; Mann et al., 2007). For a variety of reasons, including

training, background knowledge, and the amount of time spent with athletes, studies indicate athletic trainers are the best equipped personnel to address the psychological aspects associated with athletic-injury (Biviano, 2010; Barefield & McCallister, 1997; Mann et al., 2007; Robbins & Rosenfeld, 2001). Furthermore, in many cases the role of the athletic trainer extended well beyond the care and prevention of athletic injuries (Moulton, Molestad, & Turner, 1997). While studying 14 division I, certified athletic trainers, researchers found, athletes were willing to disclose personal issues, as well as problems related to their athletic injury (Moulton et al., 1997). In fact, athletic trainers reported athletes would discuss issues related to academics, eating disorders, sexuality, career choices, and conflicts with the coaching staff to name a few areas (Moulton et al., 1997). According to the research presented by Moulton et al. (1997), athletic trainers felt they were in a unique position to support injured athletes because of the "special relationship that exist between athlete and athletic trainer" (p. 150). Specifically, the athletic trainers surveyed viewed themselves as safe, approachable, caring, people whom athletes could trust in disclosing personal information (Moulton et al., 1997). However, despite the athletic trainers' beliefs in their ability to counsel athletes on a variety of personal issues, 86% of trainers preferred working with injured athletes whose psychological and emotional problems were related to athletic-injury, rather than other personal issues (Moulton et al., 1997).

Moulton et al.'s (1997) work emphasized the importance athletic trainers had in supporting injured athletes. Based on this study, athletic trainers formed unique relationships with injured athletes and provided counseling on coping with athletic injuries, as well as support for a variety of personal topics (Moulton et al., 1997).

Finally, the research presented by Moulton et al. (1997) revealed the two most frequently discussed topics amongst injured athletes and their athletic trainers were (a) conflicts with the coaching staffs and (b) concerns related to a players' health. This disconnect described between injured athletes and their coaches as well as teammates has been documented throughout the literature and further reiterated why many believe athletic trainers are the best equipped support providers for injured players (Barefield & McCallister, 1997; Kenow & Williams, 1992; Nixon, 1994).

**Summary of Support Providers**

Athletics plays a large role for student-athletes and athletic-injury has the potential to drastically affect their lives, both on and off the playing surface. Several studies presented during this review indicate student-athletes might experience feelings of anger, boredom, frustration, confusion, and disappointment (Johnston & Carroll, 2007; Lockhart, 2010; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). However, the assistance and social support provided by teammates, coaches, and athletic trainers often allowed injured athletes to feel a sense of relief and reassurance, thus adhering to their rehabilitation schedules and recovering faster (Johnston & Carroll, 1998; Robbins & Rosenfeld, 2001; Tracey, 2003). In particular, teammates frequently identified and related with the injured student-athletes' situation, thus having the ability to decrease feelings of isolation and help hurt players to stay connected to the team (Tracey, 2003). Coaches also displayed tremendous influence with athletes as well as the ability to affect players' motivation, dedication, and overall attitude (Kenow & Williams, 1992). Although injured athletes viewed coaches as a potential support provider, many athletes

were hesitant to seek support from coaches and would rather confide with their teammates and athletic trainers (Nixon, 1994; Moulton et al., 1997)

These studies provided insight into the student-athlete's experience, but few studies have used a qualitative approach to explore the dynamics between student-athletes, and their teammates, coaches, and athletic trainers. Individualized characteristics such as the type of injury, the level of sports competition, the athletes' past history of injury, or the relationship with a specific support provider should be taken into consideration. Although, these characteristics can be captured through surveys and statistical data collection, they are difficult to examine on an individual basis using quantitative methods. Additionally, few studies provide solutions and specific information on what student-athletes expect from a particular support provider. It is important that athletes feel supported so they seek the attention needed, in order to identify their injury, rehabilitate the injury, return to competition sooner, and avoid many of the emotional challenges that can have a negative effect on the student-athletes' overall experience.

With the volume of athletes suffering injuries and the potential negative psychological effects associated with athletic injury, it becomes increasingly important for athletes to heal both physically and mentally. Oftentimes doctors, surgeons, and physical therapists assist with the physical recovery, neglecting the emotional and psychological needs of the injured athlete (Biviano, 2010; Halbert, 2007). However, studies indicate the psychological response and recovery from injury is equally as important as the physical recuperation (Biviano, 2010; Halbert, 2007; Mann et al., 2007; Reasor, 1999).

## Synthesis of Injured Student-Athlete Literature

Based on prior research, it is believed that prior to injury, coaches and teammates serve as primary sources for student-athletes to receive social support (Nixon, 1994). However, after sustaining an injury, research also indicated the athletic trainers' role increased, while coaches and teammates showed lower levels of support (Nixon, 1994; Robbins & Rosenfeld, 2001). Despite a plethora of quantitative studies that examined social support for athletes in general (i.e., recreational, high school, collegiate, and professional), few studies utilized a qualitative approach to investigate the social support provided to injured collegiate student-athletes. The pressure, expectations, challenges, and goals of college student-athletes are likely quite different than other levels of competitive athletics. Additionally, previous research has utilized broad samples, including comparing genders, competition levels, and domestic versus international athletes. Focusing on the research methods, research theory, and the sample populations, the following paragraphs detailed the current gaps in literature.

Most of the studies examined during this literature review were quantitative in nature and provided insight into the amount of support receive or the differences in various types of support. While the quantitative studies provided statistical measurements informing the audience about how much support the injured student-athletes received, the research is limited by the ability to answer qualitative questions surrounding social support. For example, previous studies did not establish a starting point for injured student-athletes' expectations or ways that injured student-athletes communicate their support needs. Furthermore, quantitative methodologies do not allow researchers to answer the "why" questions, including why athletes prefer a specific

support provider over another. Additionally, informal inquiries were made during the Robbins and Rosenfeld (2001) study, but further inquiry was recommended by the researchers. A qualitative approach would allow future researchers to investigate beyond numerical data and capture the perceptions of injured student-athletes regarding social support.

Another limitation of the prior studies was based on the administration of the Social Support Survey. In some instances, such as Clement and Shannon (2011), the surveys were administered by athletic trainers, which may have influenced the results. In other words, student-athletes may not have felt comfortable responding honestly to questions with athletics staff in the room or if athletic administrators had control of the survey. Furthermore, the Social Support Survey was provided as a self-reported tool, designed using a likert scale to record athletes perceptions of social support. In most instances, the scale included a 1 to 5 rating, with 1 being least desirable and 5 being most desirable. Using the instrument in this manner does not allow for the researcher to validate information or ask clarifying questions that might shed light onto the subject. While previous studies showed some success in rating athletes' perceptions regarding support providers, additional research was required to expand the literature and view information with a different lens. The methodological limitations using quantitative procedures and the potential bias associated with athletic trainers distributing the test, may have limited the scope of the research.

Social support as a theoretical concept has been well-defined and several aspects of it have been extensively researched. However, there are a couple of theoretical limitations within how the framework has been applied to other studies. First, social

support can be provided by anyone interacting or communicating with the individual in need of support. However, the vast majority of social support research on collegiate student-athletes found during this review focused primarily on teammates, coaches, and athletic trainers. This assumption neglects the potential support that might be provided from parents, friends, professors, or community members. Unlike high school or recreational athletes, collegiate student-athletes spent several hours per week in practices, workouts, and competition, interacting on a daily basis with their teammates, coaches, and athletic trainers (Kissinger & Miller, 2009). Although these primary support providers may contribute the bulk of support for injured college athletes, there remains the potential for external support to influence the athlete's experience.

Another limitation was that social support required communication and therefore involved all the challenges associated in that process (Richman et al., 1993). If the recipient was unwilling to seek or accept support or the provider was unable or unwilling to provide support, then the process does not result in an exchange of resources (Richman et al., 1993). Thus, a limitation exists where in order for the support to have an effect on the recipient, the efforts of the provider must be perceived as support. In other words, although a student-athlete might receive advice, guidance, assistance or other forms of social support, he or she must perceive the support as helpful in order for it to affect their experience. Additionally, within a research context, if the student-athlete does not associate an experience as supportive, there are challenges in capturing that information.

A third topical area for limitations in past research was discovered with regards to several sampling restrictions. The various studies presented in this literary review presented a wide array of sample populations used to obtain information. Prior studies

incorporated various competition levels, geographic regions, and failed to account for gender difference, which created inconsistencies or gaps within the literature (Appaneal, Levine, Perna, & Roh, 2009; Chan & Grossman, 1988; Corbillon et al., 2008; Johnson, 1997; Rose & Jevne, 1993). Many of the previous studies on athletic injury failed to account for gender differences and simply merged data from both male and female student-athletes. An analysis of the three primary studies that focused on student-athletes and used the Social Support Survey, revealed that researchers did not distinguish between genders (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins and Rosenfeld, 2001). Further clarification is needed in this area because there are substantial differences between male and female collegiate sports (Johnson, 1997). For example, studies have shown that males and females are injured at different rates and injure different parts of their bodies (DeHaven & Lintner, 1986).

In addition to tangible gender distinctions, sports participation has often been psychologically perceived as a masculine activity (Koivula, 2001). Although these views are based on societal stereotypes, they can influence the behavior and attitudes of athletes (Koivula, 2001). One example of how this scenario might look in reality is, a female athlete might not respond in the same way as a male athlete because of fear and being called, "not lady-like". Another psychological development indicated women were more anxious, tense and used different coping methods than their male counterparts during periods of athletic injury (Johnson, 1997). These studies reference the vast distinctions when comparing gender and sports, including differing expectations, injury frequencies, and coping methods. Therefore, gender should be taken into account when studying the student-athlete's perceptions regarding social support during athletic injury.

The various competition levels of the athletes should also be taken into consideration. For example, Chan and Grossman (1988) studied recreational runners, while Rose and Jevne (1993) used a combination of amateur, semi-professional, and professional athletes to conduct their research. It is important to consider the varying levels of competition, because amateur athletes may not have access to athletic trainers or large coaching staffs, which can provide increased direction and support. Furthermore, the focus of amateur athletics is often on teaching and skill development, versus professional sports that are centered on entertaining audiences, generating revenues, and winning the competition.

In addition, while some studies focused specifically on collegiate athletes, they rarely accounted for the increased pressure and attention placed on student-athletes competing at the division I level versus division II or division III levels. Division I athletics are often reserved for elite student-athletes who practice and compete at the highest collegiate level (Griffith & Johnson, 2002; NCAA, 2007). Conversely, division II and division III athletics programs often play a smaller role within the entire student experience (NCAA, 2007). Additionally, division I programs provide funding for their sports teams differently than division II and division III schools (NCAA, 2007). These distinctions in competition level have the potential to create increased media attention and athletic pressure for athletes and other athletics personnel (i.e., teammates, coaches, and athletic trainers). Therefore, these athletes might experience differing levels of stress, thus requiring different forms of support. Furthermore, athletes competing at the division I level, likely have access to greater resources for support such as larger

coaching staffs, more trainers, and more athletic administrators to aid them during difficult times (Griffith & Johnson, 2002).

Another sampling limitation of the prior studies included comparing international and domestic athletes. Previous research examining athletic support did not account for differing international expectations. For example, on the subject of coping strategies related to athletic injuries, Kolt and Kirby (1994) studied 115 Australian gymnasts, while U. Johnson (1997) examined 81 Swedish athletes. Additionally, Corbillon et al. (2008) examined 72 Canadian college student-athletes using the social support survey that had been previously used by Robbins and Rosenfeld (2001) with American student-athletes. It is important to distinguish between U.S. college athletics and international college athletics, because the expectations, competition levels, and demands placed on these athletes can be drastically different (Popps et al., 2009). Collegiate athletics in the United States are often viewed as stepping stones toward professional sports careers or as means of paying for college (Popps et al., 2009). Conversely, many foreign countries do not emphasize collegiate sports competition and focus more on academics (Popps et al., 2009).

In a recent study, international student-athletes reported academic achievement as a higher priority than athletic competition when compared to their U.S. counterparts (Popps et al., 2009). Several scholars attributed the distinction between foreign and domestic athletes on their upbringing, noting "Most international student-athletes develop their talents in the club-based system, while most United States born student-athletes hone their sporting skills in school-based competition" (Popps et al., 2009, p. 96). This important factor likely played a critical role in the way that domestic versus international student-athletes viewed the purpose of college sports and created a need to study the populations independent of one another.

Given the gaps, limitations, and differences presented by previous studies in regards to research methodology, competition level, geographic region, and gender, further research was necessary to expand the literature on student-athletes' perceptions of athletic injury. Based on an extensive literature review, no qualitative studies were found that examined the perceptions, expectations, and communication styles of injured U.S. male, division I, collegiate student-athletes with respect to the social support they received from teammates, coaches, and athletic trainers. However, it is important that we continue to explore the relationship between injured student-athletes and their support providers to ensure practitioners are assisting injured athletes to the best of their abilities.

## Summary of the Literature

Social support is a multi-dimensional concept aimed to help recipients adapt to pressures, hardships, and stressors related to a particular situation. Within the field of athletics stress and hardships can be attributed to a number of issues including athletic injury. Time periods where athletes experience an athletic injury are extremely challenging, especially for college athletes who often relied on athletics to help shape their identity (Chen, Snyder, & Magner, 2010; Lockhart, 2010). One major factor that assisted athletes with emotional recovery from injury, was the social support received throughout the rehabilitation process (Robbins & Rosenfeld, 2001). Essentially, social support allowed the athlete to reduce ambiguity, complexity, and uncertainty, thus providing the affected individual with a sense of personal control (Richman et al., 1993; Robbins & Rosenfeld, 2001). In receiving social support, athletes often conceptualized realistic alternatives to their stressful situations and gained the skills necessary to recognize and accept assistance from others. In other words, supportive interactions from

providers (i.e., teammates, coaches, and athletic trainers) are critical in order for the recipient to grow as well as recovery from a stressful situation such as athletic injury.

A variety of tools and methodologies have been utilized to capture information about injured student-athletes. Several studies found during this literature review relied on a version of the Social Support Survey to determine the satisfaction, availability, and contribution of social support for injured student-athletes (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins & Rosenfeld, 2001). Based on these literary findings, three main themes regarding social support for injured collegiate student-athletes emerged: (a) the psychological effects of athletic injury; (b) the social support received by those who have been injured; and (c) the individuals most commonly associated with providing social support to injured student-athletes (i.e., teammates, coaches, and athletic trainers). Research suggested the most common emotions experienced by injured student-athletes were feelings of boredom, frustration, jealousy, regret, depression, and fear (Johnston & Carroll, 2007; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). In order to cope with these emotions, athletes frequently depended on the support of others. Specifically, previous studies indicated that unlike high school or recreational athletes, collegiate student-athletes relied on their teammates, coaches, and athletics trainers to assist during periods of athletic injury. Furthermore, the type of support might have varied based on the relationship of the support provider, but in general support transitioned from the coaching staff prior to injury towards teammates and athletic trainers after sustaining an injury (Barefield & McCallister, 1997; Robbins & Rosenfeld, 2001; Nixon, 1994).

Despite the various studies focused on injured-student-athletes, there was limited information on student-athletes' perceptions and communication styles regarding athletic injury. Many of the previous studies utilized a quantitative approach that examined the satisfaction levels, availability levels, and overall contribution levels of social support provided to injured athletes (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins & Rosenfeld, 2001). Consequently, several of these studies were restricted by methodology, sampling, and conceptual limitations. Some of these limitations included, using differing competition levels (i.e., recreational, collegiate, professional), geographic regions, failing to account for gender distinctions, or an inability to delve deeper into a players' individual circumstances.

Based on the literature presented on social support for injured athletes, a qualitative study focused on the social support perceptions and communication styles of injured, male, division I collegiate athletes was not only possible, but essential in expanding the research to better assist student-athletes as well as other campus stakeholders. The Social Support Model offered by Richman et al. (1993) has been widely accepted throughout various studies and proven useful to practitioners seeking to gain greater understanding of support needs. Thus, using this conceptual framework, the current research aimed to expand the literature by answering the questions regarding injured athlete's perceptions of the social support provided by their teammates, coaches, and athletic trainers.

# Chapter III: Methodology

Athletic injuries have the potential to drastically affect a student-athletes' experiences both inside and outside the classroom (Adler & Adler, 1989; Chen, Snyder, & Magner, 2010; Lally & Kerr, 2005). However, with the appropriate support providers in place, student-athletes have the ability to decrease some of the negative aspects associated with athletic injury, including stress, anxiety, and recovery time that might ultimately affect their overall student experience (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001; Russell, 2007). Thus the purpose of this study was to gain a better understanding of the expectations injured student-athletes have for their support providers. Furthermore, the current study aimed to clarify the communication style and perceptions of injured student-athletes regarding the social support provided by their teammates, coaches, and trainers.

Chapters I and II illustrated the significance of sports injury research, as well as the literature gaps in studying social support for injured student-athletes. Scholarly literature indicated that many student-athletes were proud of their athletic identities and might experience a perceived loss of identity during times of athletic injury (Chen, Snyder, & Magner, 2010; Lockhart, 2010). In addition to the potential for identity loss, other studies have found injured student-athletes experienced feelings such as frustration, jealousy, regret, depression, anger, fear and isolation while recovering from athletic injuries (Johnston & Carroll, 2007; Loutsch, 2007; Wiese-bjornstal et al., 1998). Research indicated that teammates, coaches, and athletic trainers are three of the primary support providers for injured athletes, particularly at the collegiate level (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins & Rosenfeld, 2001). Furthermore, with

the necessary support, injured athletes are more motivated, thus more likely to adhere to rehabilitation schedules, gain control of their anxiety levels, and enhance their self-confidence (Hamson-Utley et al., 2008). Therefore, a study providing further understanding of how best to support injured student-athletes becomes critically important to players, coaches, trainers, teammates, and other stakeholders throughout the university community.

According to Merriam (2002), the overall purpose of a basic interpretive qualitative research project is to understand how people make sense of their lives and their experiences. These types of inquiries are focused on three main objectives: (1) how people interpret their experiences, (2) how they construct their worlds, and (3) what meaning they attribute to their experiences (Merriam, 2002). Thus, a qualitative approach is most appropriate to better understanding the expectations, perceptions, and communication styles of injured, division I, male, student-athletes and the social support they receive from teammates, coaches, and athletic trainers.

Through the use of qualitative methodology, the researcher was able to gather information by using different instrumentation from previous studies (i.e., use of interview techniques) on social support and injured athletes. Interviews helped the researcher delve deeper into the student-athlete's experience and consider individualized circumstances. Richman et al. (1993) Social Support Model was used as an interpretive lens for the findings. The researcher utilized semi-structured interviews to gather detailed information regarding the experiences of injured male, division I student-athletes with respect to their perceptions of the social support provided by teammates, coaches, and athletic trainers. This chapter described how the constructivist paradigm informed

this study as well as detailed the research design, including the sampling strategy, selection criterion, data collection, and data analysis. Additionally, this chapter focused on building creditability for the study through describing the researcher's subjectivity as well as detailing validity and reliability measures.

## Paradigm of Inquiry

A paradigm of inquiry provides the researcher with an analytical perspective and strategy for integrating structure with process (Corbin & Strauss, 2008). In other words, paradigms help researchers' link complex relationships to a process that allows for the consistent collection and analysis of information. The researcher selected the constructivist paradigm based on the assumption that individuals seek understanding of the world in which they live. Throughout this study, the researcher attempted to gain better understanding of how injured, male division I student-athletes experienced social support during times of athletic injury. Constructivists believe that "meanings are constructed by human beings as they engage with the world they are interpreting" (Crotty, 1998, p. 43). Furthermore, the constructivist approach allows for different people to create meaning in different ways, even in relation to the same phenomenon. This is an important factor when considering the various types of injuries, backgrounds, sports, as well as differing personalities and expertise of support providers. With these distinctions in mind, it is critical that individuals using the constructivist approach rely as much as possible on participant viewpoints to construct knowledge of what is being studied (Creswell, 2009; Crotty, 1998). The following reasons explain the role of constructivism as the most appropriate paradigm for the study.

First, the constructivist paradigm, provided the opportunity to interpret the meanings others have about the world (Creswell, 2009). Corbin and Strauss (2008) described the constructivist viewpoint as, "concepts and theories constructed by researchers out of stories that are constructed by research participants who are trying to explain and make sense out of their experiences or lives, both to the researcher and themselves" (p. 10). As such, the researcher investigated the relationship between injured student-athletes, and their teammates, coaches, and athletic trainers from the viewpoint of the injured student-athlete.

Secondly, in order to gather information regarding the injured student-athlete's experience, the researcher utilized open-ended interview questions that are commonly used in the constructivism paradigm. The goal of constructivism is to rely as much as possible on participant viewpoints on the subject matter that is being studied (Creswell, 2009; Crotty, 1998). Therefore, the more open ended the question, the better it allows the researcher to carefully listen to what people say and do in their life settings (Creswell, 2009). During this project, the researcher was able to construct meaning of the injured student-athletes' experiences with his teammates, coaches, and athletic trainers, in addition to the ability to consider the context for each individual situation.

Third, constructivism factors in the context and setting of the participant (Creswell, 2009). Crotty (1998) wrote, "no object can be adequately described in isolation from the conscious being experiencing it, nor can any experience be adequately described in isolation from its object" (p. 45). Constructivists believe, the basic generation of meaning is always social, arising in and out of interactions with a human community (Creswell, 2009). Therefore, in order to better understand the social support

experience of an injured collegiate athlete, researchers should consider the personal context of the situation, including sport played, competition level, type of injury, support providers, athlete's expectations, and other individual details. Many of these personal details and specific experiences are challenging to capture using quantitative methods, but were more evident using the qualitative methods employed in this study (Clement & Shannon, 2011; Robbins & Rosenfeld, 2001).

In summary, a paradigm is a basic set of beliefs that guide actions or influence the research (Creswell, 2009). The constructivist researcher is looking for the complexity of multiple realities, rather than narrowing the meaning into categories or a few ideas as often seen in quantitative studies. Based on the recent study conducted by Clement and Shannon (2011), who explicitly wrote, "Future research is needed to continue to define the complex relationship between actual social support and perceptions regarding it" (p. 468), there is an obvious need for further examination into what influence social support providers have on the experience of injured, male, division I student-athletes. Several studies have examined the satisfaction levels and availability of social support for injured athletes, but very few have investigated the student-athlete's expectations or communication styles (Clement & Shannon, 2011; Corbillon et al., 2008; Robbins & Rosenfeld, 2001). Constructivism was the paradigm used in this study because it was believed that a deeper understanding of the injured student-athlete's experience would be achieved. Using this paradigm, the researcher was able to consider environmental factors as well as investigate the individual circumstances that might influence the social support provided to injured student-athletes by their teammates, coaches, and athletic trainers.

## Research Design

The current study utilized a basic interpretive qualitative design to address the issues related to injured student-athletes perspectives surrounding interactions with their teammates, coaches, and athletic trainers. Quantitative research typically focuses on relating or comparing measured variables, so that numbered data can be analyzed using statistical procedures (Creswell, 2009). Furthermore, quantitative studies often seek to test existing information or theories, rather than searching for the meaning individuals or groups place on a particular experience (Creswell, 2009). On the other hand, the strength of gathering qualitative data is the ability to focus on a specific case or experience, revealing the different layers of complexity through the collection of vivid descriptions provided by participants (Miles & Huberman, 1994). The relationship between a student-athlete and his teammates, coaches, and athletic trainers is naturally complex, with aspects pertaining to academic development, athletic accomplishment, and socialization often seen as competing priorities (Barefield & McCallister, 1997; Jowett, 2003; Nixon, 1994). These relationships are further complicated when a student-athlete becomes injured, as primary support providers (i.e., teammates, coaches, and athletic trainers) still have team goals, team obligations, and objectives of winning (Barefield & McCallister, 1997; Nixon, 1994).

Although there are several options for qualitative design (e.g., grounded theory, phenomenology, narrative analysis, ethnography, and case study), a basic interpretive inquiry best allowed the researcher to gather an in-depth perspective and answer questions related to the participating student-athletes' perceptions, expectations, and communication styles regarding social support from teammates, coaches, and athletic

trainers. Many of the other qualitative approaches have an additional purpose or focus on varying aspects of the investigation. For example, ethnography examines the interactions of the individuals within the larger cultural and societal context, whereas phenomenology seeks to understand the underlying structure of the phenomenon (Merriam, 2002). These factors and the multifaceted relationships between athletes and support providers made a basic interpretive qualitative design ideal for this study. In order to address the problems of practice and research questions, a qualitative design was determined as the most appropriate method of research for this study. The design is based on the assumption that the purpose and function of student-athletes within the collegiate setting is unique and important, thus worthy of study. Creswell (2009) notes that a qualitative design is appropriate for researchers seeking further understanding of an individuals' or groups' experience.

First, qualitative design emphasizes people's lived experiences and is typically viewed as more appropriate for discovering the meanings people attach to events and behaviors (Miles & Huberman, 1994). The current study aims to further investigate the meanings, expectations, and perceptions student-athletes place on the social support provided by their teammates, coaches, athletic trainers, thus a qualitative design allowed the researcher to delve deeper into these relationships. Secondly, using qualitative interviews, the researcher had the ability to ask probing and clarifying questions, which provided greater understanding and identification of previously uncharted issues. Third, although prior studies exist that explored the relationship between injured student-athletes and their teammates, coaches, and athletic trainers, the vast majority of research found while reviewing literature utilized quantitative methods and failed to capture the richness

of data that can be collected through qualitative analysis. Many of the previous studies focused on aspects such as availability or satisfaction levels of social support provided to injured-athletes without considering the potential challenges that might hinder social support, such as miscommunication or unmet expectations.

In summary, a qualitative design was used to add breadth to the various quantitative studies that captured the general perspective of injured student-athletes. A basic interpretive qualitative study provided the researcher with the flexibility and further confidence to believe, "we've really understood what has been going on" (Miles & Huberman, 1994, p. 10). But qualitative research is not without limitations. Scholarly critics have expressed concerns as the primary method for gathering information involves the researcher and his or her presence might bias the study (Creswell, 2009; Miles & Huberman, 1994). Additionally, qualitative research has been scrutinized on the basis of validity, reliability, and generalizability (Creswell, 2009). These limitations and challenges will be addressed in the sections of subjectivity and trustworthiness, respectively.

## Recapitulation of Research Questions

This study sought to better understand the injury experience of division I, male collegiate student-athletes in regards to the social support provided by their teammates, coaches, and athletic trainers. Accordingly, this study answered the following research questions:

1. How do injured, division I, male, collegiate student-athletes perceive the contribution of support provided by their teammates, coaches, and athletic trainers?

2. How do injured, division I, male, collegiate student-athletes express the need for social support from teammates, coaches, and athletic trainers?
3. What expectations for social support do division I, male collegiate student-athletes have of their teammates, coaches, and athletic trainers during periods of athletic-injury?

The significance of responding to these questions allowed for practical implications such as better support for injured athletes, but also provided much needed insight into a population that is often guarded and hard to reach. Additionally, the qualitative approach used for the current study added to the previous literature by permitting the investigator to gather and analyze information in a different manner than previously employed.

## Sites and Sampling

A total of 20 division I, male, collegiate student-athletes were recruited from two private universities competing in the same athletic conference. The schools' athletic conference was strategically selected for several reasons, including an equal focus on both academics and athletics. For example in 2012, the conference held the third highest ranking in single-year Graduation Success Rate amongst all division I leagues. Within the same timeframe, the conference will crown more than 20 champions in respective men's and women's athletics competition. The conference is also recognizable throughout the United States because of continued success in both the men's and women's NCAA basketball tournament. Furthermore, the conference has shown progress amidst the changing landscape of conference realignment by expanding upon their total population of over 82 million people within a geographic footprint of nine

states. As a result, the conference not only boasts a rich history of growth and achievement, but looks to continue building a legacy for years to come.

The majority of schools competing in this particular athletic conference are considered "mid-major" institutions. Mid-major schools typically represent successful sports programs that are not competing in one of the six major athletic conferences (i.e., Atlantic Coast Conference, Southeastern Conference, Big East, Big 10, Big 12, and Pacific 12). Although mid-major sports programs are focused on athletic success, they typically do not generate the enormous revenues of the major conferences and thus do not spend money for sports at the same rates (Fusfeld, 2011). Financially, schools competing in major athletic conferences spent an average of $61.55 million on athletics, compared to mid-major schools that spent an average of $21.73 million (Fusfeld, 2011). For the purposes of this study, mid-major schools were sought because the gamut of student-athletes attending these types of institutions. Mid-major schools are likely to have student-athletes with aspirations and talents to pursue professional sports careers, while also catering to students who are likely to finish their playing careers at the collegiate level. This diversity in experience provided greater depth for the research. Additionally, mid-major schools still have many of the similarities associated with big-time athletic programs, including athletic pressure to win, travel requirements, and support structures (i.e., larger coaching staffs and more athletic trainers). Both schools represented in this study have a long history of academic and athletic success, including Graduation Success Rates that are significantly higher than national averages and multiple NCAA appearances in various sports.

University A is a private university located in a metropolitan area along the east coast of the United States. University A is a mid-size institution with approximately 10,000 undergraduate students. The tuition cost at University A exceeds $45,000 and tends to be a bit more selective with their applicant pool than University B. University A competed in 24 varsity sports and boasts a 92% student-athlete Graduation Success Rate in 2011.

University A attracted a global and diverse student body reporting a demographic population of 58% white, 10% Asian, 7% Black, 7% Hispanic, and 5% international. At the time of this study, University A had several academic programs receiving national attention and recognition. Furthermore, students attending this school were often described by faculty and administrators as "forward thinking and driven." These traits were often seen in regards to grades, where most students maintained a 3.2 GPA or better and respect was paid to a more worldly perspective. In other words, University A students often viewed their students as members of a global community.

The athletics culture at University A was in transition with the addition of a new Athletic Director. Several of the staff members and coaches had been recently promoted or were new to the institution. Furthermore, University A seemed to have an increased focus within the athletics community on academics, fundraising, and community development. Although men's basketball was the most popular sport at University A, there was a less consistent buzz for other sports throughout the institution. Less popular, though athletically competitive sports such as baseball, soccer, or volleyball drew smaller crowds. Students might be incline to support a men's basketball contest if the opponent

was well-known, but in general athletics were viewed as secondary to other interest such as internships, student organizations, and city-wide events.

University B is a private, religiously affiliated university, located in a metropolitan area along the east coast of the United States. University B is a mid-sized institution with approximately 5,500 undergraduate students. University B competed in 20 varsity sports and boasts a 91% student-athlete Graduation Success Rate in 2011. The tuition cost at University B exceeds $37,000.

Due to the religious nature of the institution, many students focused on spiritual enlightenment and a strong commitment to community service. Religious services were held daily and the school participated in numerous service projects including Helping Hands, Habitat for Humanity, and Hunger and Homelessness. Students at University B remained academically motivated with most students maintaining better than a 3.1 grade point average. In terms of demographics, there was an even split of males and females, with approximately 80% of students identifying as white, 5% black, 2% Hispanic, 2% Asian, and 1% Native American.

The athletics culture at University B remained steady and was driven by the long tenure of their Athletics Director. Many of the staff members and coaches had been in their roles for a number of years and seemed to have a more collegial approach in their work. However, these close relationships did not appear to carry onto the student-athletes, as many players seemed isolated and unaware of the other teams. Athletic prestige at University B revolved around men's basketball, where there was a history of success by coaches and players in the professional ranks. When men's basketball was competing, campus became a virtual ghost town, with students and staff trying to gain

access to the arena. Despite success in many other sports including women's basketball, men's cross country running, and women's field hockey, most of the attention was garnered by men's basketball.

## Sample Description

Based on 2010-2011 data, the NCAA supports approximately 444,077 student-athletes, from more than 1,000 schools participating in the three divisions of college sports (NCAA, 2011). Approximately 169,037 students attending 346 colleges and universities compete at the highest, division I athletics level (NCAA, 2011). Out of this large population, 91,013 students are division I, male collegiate athletes (NCAA, 2011). Investigating all or most of these 91,013 student-athletes or the 346 schools was not feasible given the scope for this project, thus the researcher selected two mid-major schools to conduct the study. The schools were selected based on their similar student populations, academic standards, and athletics resources. Additionally, the proximity of the institutions provided a convenience for the investigator, as well as access to the student-athlete populations who attended these two schools.

## Participant Selection

Although 91,013 is a large number, there are a limited number of student-athletes who have sustained a moderate to severe athletic-injury and who might be willing to discuss their injury experience. According to Patton (1990), sample size must take into account "the purpose of the study, the resources available, the questions being asked, and the constraints being faced" (p. 181). In this case, the challenges associated with outreach to division I athletes including their potential celebrity status, the macho athletic culture, and various layers of gate-keeping have been well-documented in the literature (Adler & Adler, 1989; Nixon, 1992; Thamel, 2009). Despite the limited number of qualitative

studies, previous research indicated that data saturation can be achieved within 12-15 interviews (Guest, Bunce, & Johnson, 2006). As a result, in order to achieve the objectives of this study, a total of 20 injured, division I, male, collegiate student-athletes were selected, a near equal amount from each university.

There were several criteria for participation in this study, the list included:

- At least 18 years of age
- A male athlete competing at the division I collegiate level
- Enrolled as a full-time student (12 or more credit hours for undergraduate, 9 or more credits hours for graduate)
- Sustained a moderate to severe athletic injury
- Participation in a team sport

In order to have participated in the study, each student-athlete needed to be currently enrolled as a full-time student as well as competing at the Division I athletic level. In addition to the student-athletes, academic classification, the study also focused on their injury severity. The National Athletic injury Registration System defined injuries based on the length of time missed due to athletic injury. Injuries are then divided into three categories: (a) minor, 1 to 7 days; (b) moderate, 8 to 21 days; and (c) severe, more than 21 days (Hootman et al., 2007). This study used collegiate student-athletes who sustained moderate to severe injuries requiring them to miss eight or more days of athletic competition (i.e., practices, workouts, or games). The researcher selected this timeframe to provide the injured student-athletes time to reflect on their experiences, believing minor injuries (i.e., injuries lasting one to seven days) did not allow sufficient time for athletes to adjust to life with an athletic injury. Furthermore, student-athletes

suffering from minor injuries may not require social support from teammates, coaches, or athletic trainers, as they usually are quicker to return to competition.

The sample was further defined by gender as all participants in this study were males. Based on previous studies, gender differences may exist in the level of social support provided, as well as the expectations of male and female student-athletes (Stadden, 2007; Johnson, 1997; Wasson, 2003). Given these parameters, the results of the study are confined to schools and athletes with similar athletic populations.

## Sampling Strategy

This study utilized a combination of purposive and snowball sampling in order to identify student-athlete participants. There are several definitions of purposive samples, but the common elements are based around the theme that "participants are selected according to predetermined criteria relevant to a particular research objective" (Guest et al., 2006, p. 61). Seidman described purposive sampling as "the most effective basic strategy for selecting participants for interview studies" (2006, p. 52). Furthermore, purposive sampling is commonly used in qualitative research because smaller samples of people are required with specific context around a certain topical area (Miles & Huberman, 1994).

As previously documented, male, division I, student-athletes participating in team sports were determined to be the most appropriate respondents to the research questions regarding injured student-athletes in this study. Once a participant was identified and agreed to the study, snowball sampling tactics were used to recruit other injured collegiate student-athletes who fit the selection criteria. Snowball sampling was deemed

an acceptable method to connect with a student-athlete population who are often hard to reach and well-insulated by numerous gatekeepers (Adler & Adler, 1989).

In terms of the number of interviews conducted, research suggests that in as few as four interviews, information can be rendered as extremely accurate (Guest et al., 2006). Furthermore, studies have shown, after 12 interviews new themes rarely emerged, thus making small samples quite sufficient in providing complete and accurate information (Guest et al., 2006). As a result, 20 student-athletes were sought for interviews regarding athletic injury.

## Interview Design

Interviews were the primary method of data collection used for this study. Interviews were utilized in order to "understand the lived experience of other people and the meaning they make of the experience" (Seidman, 2006, p. 9). Interviews are commonly used in qualitative studies and viewed as "a necessary, if not always completely sufficient, avenue of inquiry" (Seidman, 2006, p. 11). Furthermore, interviews have been seen as a "powerful way to gain insight into educational and other important social issues through understanding the experience of individuals whose lives reflect those issues" (Seidman, 2006, p. 14). In this case, the researcher was curious about the injury experience of division I, male, student-athletes.

Interviewing was particularly important to the study of injured collegiate student-athletes because it provided this unique population the opportunity to make meaning of their experience through words and language (Seidman, 2006). In addition, interviews are frequently described as "the primary way a researcher can investigate an educational

organization, institution, or process…" (Seidman, 2006, p. 10). More specifically, the interview design was most appropriate for study because:

1. Interviewing allowed the researcher to understand the complexities associated with high-profile, as well as lesser-known collegiate student-athletes.
2. Interviewing provided the researcher opportunities to put behavior into context and allowed access to understanding the injured student-athletes actions.
3. Using interviews affirmed the importance of the individual without denigrating the possibility of community and collaboration.

**Semi-structured Interviews**

In order to gain further insight on the relationship between injured student-athletes and their teammates, coaches, and athletic trainers, semi-structured interviews were utilized. By using semi-structured interview techniques, the researcher had the ability to be more flexible with his word choice and ask open ended questions. According to Merriam (1998), "this format allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic" (p. 74). Furthermore, semi-structured interviews allowed the researcher to discover the meanings and essence from the perspectives of injured student-athletes (Miles & Hubermah, 1994). Additionally, using semi-structured interviews allowed for adaptability, providing the researcher the opportunity to follow-up on ideas, probe responses, and further investigate the perceptions and emotions players have regarding athletic injury (Bell, 2005).

All interviews occurred face-to-face, in a quiet space away from anything that might distract the participants, such as peers, colleagues, or excessive noise. The researcher utilized a digital recording device as well as detailed written notes to capture the participant's responses. Using a digital recorder assisted with the accuracy of information and decreased the potential for researcher bias (Bell, 2005; Miles & Huberman, 1994). Furthermore, to provide consistency between interviews, each participant was asked the same set of initial demographic, and basic open-ended questions, followed with the researcher asking clarifying or probing questions as needed. Open-ended questions were utilized to allow the participant to reflect and present the most important aspects of their experiences. Interviews lasted approximately 45-60 minutes to allow the researcher the opportunity to build rapport and trust with participants, while gathering necessary details from the student-athlete's viewpoint. All interviews were then transcribed and a copy of the interview was provided to each participant in order to verify the accuracy of the information. In order to review the information while it was still fresh, participants were allowed three days to member check the interviews and add any pertinent details not provided during the original meeting. This also provided an opportunity for student-athletes to clarify additional information and insights that may have been previously overlooked. A few student-athletes responded, thanking the researcher for providing this information, but no athletes questioned the accuracy of the information.

Table 1.

*Summary of Crosswalk of Research Questions and Interview Questions*

| Research Questions | Interview Questions |
|---|---|
| 1. How do injured, division I, male, collegiate student-athletes perceive the contribution of support provided by their teammates, coaches, and athletic trainers? | 19, 20, 21, 22, 23, 24 |
| 2. How do injured, division I, male, collegiate student-athletes express the need for social support from teammates, coaches, and athletic trainers? | 14, 15, 16, 17, 18 |
| 3. What expectations for social support do injured division I, male collegiate student-athletes have of their teammates, coaches, and athletic trainers during periods of athletic-injury? | 10 , 11, 12, 13 |

**Interview Protocol**

Following a semi-structured interview protocol, the researcher began each conversation with a brief over of his background as well as the purpose of the research, the structure of the study, and the interview format. Prior to beginning the interview or any audio recording, the researcher ensured the participant of the confidential nature of the study and that all identifiable information would be removed before publishing the results. Specifically, all information that could be used to identify participants was removed from the audiotaped interview transcripts. A list linking the participant's actual names to their pseudonyms was kept separate from the interview data in a locked desk draw inside the researcher's home. Furthermore, all of the records from this study were kept private and destroyed upon publishing the final results of this study.

The initial interview questions were basic demographic inquiries regarding the student-athlete's background and athletic history. The next phase of the interview

process was broken into three sections based on the research questions and conceptual framework. Specifically, the researcher asked several questions regarding the (a) perceived contribution of support for student-athletes, (b) communication from injured student-athletes, and (c) expectations of injured student-athletes. Follow-up and clarifying questions were asked as needed in order to delve deeper into specific topics and examples. The interview concluded with the researcher offering sincere remarks and providing information pertaining to member checks by the participant.

## Pilot Interview

Pilot interviews are viewed as excellent ways to develop a better understanding of the theories, test methodology, and explore the meanings that similar participants might attribute to the research topic (Maxwell, 2005). During the pilot interview, the researcher conducted two separate 60 minute interviews with current division I, male, student-athletes who had sustained moderate and severe athletic injuries during their playing careers. These students were recruited in-person and were genuinely excited to share their experiences. Both interviews were recorded and later transcribed, with copies of the interviews provided to the student-athletes to verify the information. The researcher began by explaining the purpose of the study and the specific role that the participants played in regards to the pilot interview. The participants were asked to answer all questions as honestly as possible and to be themselves throughout the interviews.

Seidman (2006) suggest that interviewers should not be afraid ask questions when they feel unsatisfied with the participant's response and desire more information. Both pilot interviews revealed an initial hesitancy from the student-athletes to disclose information, resulting in several follow-up questions being asked by the researcher.

Additionally, the pilot interviews displayed a clear need for the researcher to establish a strong rapport and exhibit expertise with the student-athletes to better gain their trust. A second lesson that was learned as a result of the pilot interviews was related to participants wanting to ensure they were fully answering questions. This resulted in the first interview participant asking several follow-up and clarifying questions to the researcher. The researcher was hesitant to answer the follow-up questions as he did not want to bias the participant's answers. The researcher appeared to solve this issue for the second interview by asking the participant to tell stories about experiences, rather than using more direct questions. Seidman (2006) suggest that storytelling, when targeted at particular aspects of the participant's experience, can lead to treasured moments in interviewing. Finally, the pilot interviews helped shape the ordering of interview questions and confirmed that interview questions were helpful in answering the research questions of the study.

As a result of the pilot interviews, some adjustments were made to the interview protocol in order to provide additional clarity for the participants. For example, the researcher added a brief opening description of his background and interest in the topic. While this change was subtle, the supplementary information placed the student-athletes at ease and allowed them to more freely respond to questions. Another change made to the interview protocol was to ask the participants about their relationships with teammates, coaches, and athletic trainers prior to discussing specifics regarding their injury. Because reliving the injury could invoke emotions that are not related to support providers, it was important to examine the behaviors of the teammates, coaches, and athletic trainers before the injury occurred. Finally, questions asking for vague details

such as, “How were interactions between you and your coach?” were adjusted to ask for specific examples such as, “Describe a typical interaction between you and the coaching staff prior to sustaining an injury”. These changes provided added clarification for participants and made the interviews flow smoothly.

## Data Collection and Data Analysis

### Data Collection

Qualitative data frequently consist of quotations, observations, and detailed accounts of a person’s experiences, opinions, and knowledge (Merriam, 1998). In order to collect this information, the current study utilized in-depth, semi-structure participant interviews.

The researcher began outreach by contacting athletic administrators at both institutions used in this study. The purpose of this initial outreach was to notify university officials of the research focus and solicit an initial pool of potential candidates. The researcher then contacted potential participants via email in order to introduce himself and the general purpose for the study. Students who responded to the email inquiry were screened to ensure they met eligibility criteria of being a currently enrolled, division I, male, student-athlete, who suffered a moderate to severe athletic injury. In several instances, student-athletes provided cellphone numbers to allow for faster and easier communication. If the student-athlete did not respond to the initial email communication, then a second follow-up email was sent. After the second email, if the student-athlete had not responded or declined to participate, his contact information and any evidence linking him to the study was deleted. Participants who were interested and met the selection criteria were asked to respond via email and were then scheduled for a

45-60 minute, in-depth interview. In addition to scheduling an interview location and time period, the researcher's follow-up email communication provided participants background information regarding the purpose of the study, a procedural explanation, as well as an informed consent form prior to the interview. Interviews were conducted during the Fall 2013 academic semester, while some sports were still in full competition and others were beginning their seasons. By conducting interviews during the athletic season, interactions and emotions remained fresh in players' minds.

In order to maintain consistency between participants, each interview was guided by the interview protocol. According to Patton (2002), interview protocols ensure the same basic lines of inquiry are pursued with each person, while allowing the researcher to explore, probe, and ask questions that elucidate and illuminate the subject being studied. Another advantage of utilizing interview protocol is that it forced the researcher to decide how best to use the limited time available. Additionally, the interview protocol provided a framework that allowed the researcher to develop questions, sequence those questions, and make decisions about which information would be pursued in greater depth (Patton, 2002).

In the current study, in-depth semi-structured interviews lasting approximately 45-60 minutes were conducted with each participant. An interview design was determined to be the best way of collecting information in order to respond to the research questions regarding social support for injured collegiate student-athletes. Unlike observations, which can be intrusive or document reviews that may contain incomplete information, interviews allowed the researcher control of the questions and the ability to focus on the specific topic (Creswell, 2009). The researcher believed that individual

interviews were beneficial in eliciting open and honest responses from a student-athlete population that is historically hard to reach and ingrained with a mentality to play through pain (Adler & Adler, 1989; Nixon, 1992). Prior to beginning each interview the research outlined his intentions for the project and a basic format for how the interview would be conducted. Participants were notified that at any point they could stop the interview or decline to answer a question without having to provide any explanation. The researcher then explained the Informed Consent form and asked each participant to verbally acknowledge their understanding and agreement with the document. The researcher then detailed the method of data collection, including using a digital recording device during interviews and taking notes. Each participant was provided with information on how the data would be secured and confidentiality maintained, including the usage of pseudonyms. Each interview began with the researcher reading verbatim a thank you statement for participating in the study, before delving into the interview questions.

Following the interview protocol outlined in Appendix A, the research began asking basic demographic questions, followed by inquiries to assist in responding to the research questions regarding the perceptions injured student-athletes had about the social support received for teammates, coaches, and athletic trainers. After exhausting the line of questioning, the researcher thanked the participant for their involvement and reiterated they would receive a written transcript via email. The participants were asked to review the transcripts for accuracy or add any further comments and return it within three days. At the conclusion of the interview, the participants were asked if they were aware of any other student-athletes who fit the selection criteria and might be interested in participating in the study. In some instances, participants enjoyed the interview and advocated for

fellow student-athletes to contact the researcher and schedule an interview time. Finally, the participants were offered a $10.00 gift certificate as appreciation for their willingness to support this study.

**Data Analysis**

According to Merriam (1998), qualitative research is not a linear, step-by-step process, thus data collection and analysis is a simultaneous activity. In qualitative research, the process for data analysis involves preparing the data for analysis, moving deeper towards greater understanding of the data, and making an interpretation of the larger meaning of the data (Creswell, 2009). In short, data analysis is making sense out of massive amounts of information and according to Patton (2002), "involves reducing the volume of raw information, sifting trivia from significance, identifying significant patterns, and constructing a framework for communicating the essence of what the data revealed" (p. 432). In this study, the researcher used interview techniques to capture the perceptions and experiences of injured student-athletes. Following the athlete interviews, the researcher was able to process the data using Creswell's (2009) six major steps for analysis.

The first step involved organizing and preparing the data for analysis (Creswell, 2009). During this phase the researcher transcribed verbatim the information gathered during each of the student-athletes' audio taped interviews. Following the audio transcription, copies of the work were sent to the participants to review for errors, omissions, or clarifications. After verifying with each student-athlete that the information collected accurately reflected their experiences, the researcher compiled field notes and later converted these into memos to supplement the audio recordings (Miles &

Huberman, 1994). According to Maxwell (2005), memos are an essential technique in qualitative research that captures critical thinking about data and stimulates analytical insight. The transcribed text was double-spaced allowing the researcher to easily add notes, comments, and thoughts. Additionally, in order to increase readability of the written transcripts, the researcher used boldface black letters to display interview questions, italic black lettering for clarifying questions, and green lettering for participant responses.

The second phase involved thoroughly reading the transcripts in order to become familiar with the student-athletes' responses (Creswell, 2009). According to Creswell (2009), the researcher should seek a general understanding of the information and reflect on the overall meaning. During this phase the researcher carefully reviewed the transcripts, while inserting comments in the margins of the document and highlighting critical pieces of information. The thoughts of the researcher were recorded in the margins of the transcription pages in order to capture reflective comments in the moment (Creswell, 2009).

Once the data had been organized, transcribed, and carefully reviewed, the third step was to begin detailed analysis using an open coding process (Creswell, 2009). Creswell (2009) described coding as, "the process of organizing the material into chucks or segments of text before bringing meaning to the information" (p. 186). During this phase, the researcher reviewed the transcript for a second time seeking to define and develop concepts for further analysis. Based on a review of the interview transcripts and memo notes, broad organizational codes were established to assist the researcher in formally analyzing the data (Maxwell, 2005). These organizational codes were then

considered within the context of previous literature, which allowed for repeat ideas and themes to emerge.

During the next step, the researcher developed substantive codes that detailed the student-athletes' concepts, beliefs, and perceptions regarding the social support provided from teammates, coaches, and athletic trainers. Maxwell (2005) described substantive codes as "categories taken from participants' own words and concepts" that help develop a sense of what's going on (p. 97). In other words, participant's thoughts and perspectives that might prove important to the study are grouped together. Based on the common responses that arose within the organizational codes and further detailed through various substantive codes, the researcher was able to make some determination regarding how participants viewed the social support they received. Essentially, the coding process was pivotal in providing a detailed level of analysis that categorized raw data into separate themes in order for the researcher to gain a deeper understanding of how injured student-athletes perceived the social support provided by teammates, coaches, and athletic trainers.

In order to assist with data management, storage, coding, organization, and retrieval the researcher used the computerized software program Atlas.ti. One advantage in using Atlas.ti was the accessibility of information, because the program can locate all text associated with a specific code or topic, which allowed the researcher to determine if participants were responding to a code in similar or different manner. A second advantage of using Atlas.ti was the programs ability to organize information and group similar concepts. In short, the software program facilitated the processes of segmenting,

categorizing, annotating, retrieving, and searching within and across documents and categories.

The fifth step in the data analysis process involved the presentation of the information (Creswell, 2009). Qualitative research relies heavily on detailed descriptions and themes to represent the participant's experiences (Creswell, 2009). However, when attempting to present this information, the researcher must make decisions on what information is eliminated and what is presented as relevant findings (Seidman, 2006). The current study used quotations, examples, and stories told by the injured student-athletes to make sense of their perceptions regarding social support from the teammates, coaches, and athletic trainers. Based on grouping common stories and perceptions together, the researcher was able to uncover patterns and establish themes.

The final step in the data analysis process involved "making an interpretation or meaning of the data" (Creswell, 2009, p. 189). In the current study, the researcher discussed what lessons were learned and determined if the new findings supported existing concepts or deviated from them (Creswell, 2009). Furthermore, new research questions that arose during the investigation are presented for future inquiry. The interpretation, implications, and future research topics are presented in chapter five of this dissertation.

**Data Presentation**

The data that was gathered from the interviews was presented using rich descriptions and thematic coding analysis. In qualitative research the investigator often uses detailed wording to describe the experience of others, in this case injured student-athletes. The goal of the researcher was to provide thick, rich descriptions that explained

the perceptions, expectations, and communication styles of injured, division I, male student-athletes at the two schools being studied. The quotations, examples, and stories from the student-athletes were grouped together to show a relationship between the participant's experiences. The individual responses were then analyzed and coded for themes. Based on these findings, nontraditional concepts were noted and grouped together based on their appropriate theme or new themes were recognized.

Lastly, the investigator used thematic analysis to creatively present the information that emerged from the data. By organizing the concepts into themes, the researcher was able to uncover patterns and categories that reflected meaning of the respondent's world (Patton, 2002). Furthermore, this approach allowed for greater understanding of the data and enabled the researcher to provide a detailed account of each interview and create a picture of the injured student-athlete experience.

## Researcher Subjectivity

Oftentimes, in qualitative studies, the researcher is utilized as the primary instrument in gathering, analyzing, and interpreting data (Maxwell, 2005). As a result, there is the potential for the researcher's bias to affect the data collection, analysis, or interpretation of the information. Maxwell (2005) wrote, "The fact that the researcher is part of the world he or she studies- is a powerful and inescapable influence; what the informant says is always influenced by the interviewer and the interview situation" (p. 109). Thus, it is critical that the researcher reflect on his or her own experiences, predispositions, assumptions, and perspectives that might ultimately affect the study (Maxwell, 2005). Furthermore, researchers should address their subjectivity and take precautions that assist with maintaining an impartial lens and minimizing bias.

A commonly used technique that aided the researcher in controlling for his own bias was "bracketing" (Fischer, 2009). The concept of bracketing typically, allows the researcher to identify any vested interests, personal experiences, cultural factors, assumptions, and hunches that could influence how he or she views the data (Fischer, 2009). In order to remain consistent with this approach, the researcher's subjectivity is described, as well as the investigator's background in relationship to athletic injury, interest in the topic, and any preconceived notions regarding teammates, coaches, athletic trainers and athletic injury.

As someone who participated in athletic competition throughout childhood and reached the Division I collegiate level in the revenue producing sport of basketball, I have seen firsthand the affect injury can have on the student-athlete experience. As an average, non-starting athlete, I have sustained both minor and moderate injures being sidelined for periods ranging from one day to two and half weeks. During my athletic career, which combining recreational, high school, and collegiate playing days, spanned more than a decade, I have witnessed and experienced both positive and negative relationships involving injured players, athletic trainers, and their coaches.

During my high school career, I remained relatively healthy, sustaining only minor injuries that did not require much social support from teammates, coaches, or athletic trainers. However, I remember my coach being very concerned with most athletic-injuries, especially the injuries of starting players. It is important to note that access to medical staffs and athletic trainers was not common for my school district, so the coach's responsibilities were likely expanded to include a higher level of social support. However, during my collegiate experience, I recall having between one and

three athletic trainers at every practice and every game. In my opinion, coaches were concerned about injuries, but not as understanding or supportive as high school coaches were. I remember my college coach asking, "Are you hurt or are you injured?" This question required student-athletes to assess their injuries and determine if they were hurt, but felt good enough to play or if they were injured and unable to compete. Similar to the high school setting, I believe starters were provided with more support than non-starters from teammates, coaches, and athletic trainers. My observation that athletic trainers and coaches provide greater attention and higher levels of support for injured star players, versus their non-starting counterparts is consistent with the literature on athletic injury (Turman, 2006).

Ultimately, I believe that my experiences were distinctive and defined by aspects such as the institution, competition level, athletic personnel, and the era that I played. These factors are obviously unique to a specific athlete or population, further identifying the need for this study and additional investigation into the topic of athletic injury. After acknowledging my experiences as a player and teammate, I utilized several common methods to ensure my subjectivity did not influence the study.

## Trustworthiness

Both quantitative and qualitative inquiries seek honest, meaningful, credible, and empirically supported research findings (Patton, 2002). However, quantitative research often seeks to measure, whereas qualitative inquiries seek further understanding (Pyett, 2003). As a result, the techniques used to ensure trustworthiness of qualitative studies are slightly different from the validity and reliability standards of quantitative research. Based on the four criteria for trustworthiness presented by Guba (1981), the researcher

was able to ensure the standards of credibility, transferability, dependability, and confirmability were met.

The standard of credibility is utilized to determine, that the study results represent what is actually being examined (Guba, 1981; Shenton, 2004). In other words, did the researcher accurately record the phenomenon under scrutiny (Guba, 1981; Shenton, 2004)? In the current study, the researcher implemented several procedures to promote confidence in the study's credibility. First, the investigator adopted research methods that were well established within qualitative inquiry. Semi-structured interviews were used to provide participants the opportunity to verbalize their thoughts, prospectives, and experiences on the subject of social support for injured student-athletes. The information from the interviews was recorded and then transcribed verbatim to ensure correctness. The researcher then utilized member checking by allowing participants to verify that the themes presented in the findings accurately reflected the message and perspectives the injured student-athletes hoped to convey. Lastly, in order to add further credibility to this study, the researcher conducted a pilot investigation. During this time, the researcher fine-tuned the interview questions to ensure they appropriately addressed the research questions and the topic of athletic injury.

Secondly, the researcher gained a familiarity with the participants, while investing time to get to know them. In order to establish trust and build a greater understanding of the overall environment, it was recommended that researchers spend a significant amount of time building these relationships (Creswell, 2009; Shenton, 2004). Creswell (2009) acknowledged that increased time with participants provided more accuracy of findings. The length of time spent interviewing participants for the study remained consistent with

similar qualitative research regarding social support and student-athlete injury (Johnston & Carroll, 1998; Udry, Gould, Bridges, & Beck, 1997). The researcher was aided in establishing rapport with student-athletes due to his background as a former division I athlete. Several participants felt the researcher could relate to their stories because he had been there at one point in his life. In addition, the researcher's athletic expertise assisted in gaining access to a population of students who were well protected from outsiders. This previous experience supported the notion that the researcher was considered an "insider" helping to develop trust with participants.

Another measure employed by the researcher was a peer review which provided an external evaluation that affirmed the substantive codes found during the interviews were consistent with the participant's quotes. Allowing a colleague to review the data not only promoted credibility, but assured the collected information aligned with the research findings. Additionally, while presenting the findings, the researcher used rich, thick descriptions to describe the participant's experiences. Providing detailed accounts of the experience results in a more realistic study and adds to the credibility of the findings (Creswell, 2009; Shenton, 2004).

Finally, the researcher used tactics that helped to ensure honesty in the informants. For example, each student-athlete was provided the opportunity to decline participation in the study, in order to "ensure that the data collection sessions involve only those who are genuinely willing to take part and prepared to offer data freely" (Shenton, 2004, p. 66). The researcher explained confidentiality and the steps taken throughout the project to keep the participants' identities safe.

The standard of transferability in qualitative research refers to the extent in which the findings can be applied to other situations (Guba, 1981; Shenton, 2004). A similar standard is frequently used in quantitative studies with large samples, where validity or generalizability is easily measured. However, qualitative studies are typically unique to smaller samples and individual experiences, which make it challenging to apply these conclusions in other situations. Therefore, in order to promote the standards of transferability, it is recommended that the researchers focus on providing the reader with specific parameters and background throughout the study (Guba, 1981; Shenton, 2004). For example, Shenton (2004) suggest,

> It's important that sufficient thick description of the phenomenon under investigation is provided to allow readers to have a proper understanding of it, thereby enabling them to compare the instances of the phenomenon described in the research report with those that they have seen emerge in their situations.

The researcher presented an in-depth picture of the injured student-athlete's experience, in addition to information regarding the sample population, descriptions of the sample sites, and data collection procedures. Furthermore, thick, rich descriptions, quotes, and themes were used to demonstrate strength of the data and to equip readers with the knowledge necessary to compare studies and draw appropriate conclusions.

The third measure of trustworthiness refers to the dependability of the study. The dependability of the study examines, if the study were repeated with the same context, the same methods and the same participants, would similar results be obtained (Guba, 1981; Shenton, 2004)? The researcher supported the dependability of the study by providing a detailed description of the procedures followed throughout the inquiry. In addition to providing the research design, the investigator also presented the interview protocol and specific questions that were asked in each interview. By presenting the exact steps taken

throughout the research, future investigators can repeat the procedures, if desired or assess the extent to which the proper research practices were followed (Shenton, 2004).

The final measure of trustworthiness is confirmability, which refers to ensuring findings are the result of the experiences and ideas of the informants, rather than the opinions and preferences of the researcher (Shenton, 2004). In order to promote confirmability in a study, experts recommend the researcher disclose and fully admit any predisposition (Guba, 1981; Shenton, 2004). Therefore, the researcher acknowledged his athletic background and interest in the topic at the beginning of each interview. Additionally, the investigator utilized a journal to collect and gather his thoughts and emotions surrounding the research project. Topics covered in the journal included, the researcher's past as a collegiate athlete, previous successes and frustrations with teammates, coaches, and athletic trainers, as well as empathy for student-athletes regarding the hardships of intercollegiate athletics. After acknowledging these feelings and emotions, the researcher was able to approach each interview and interaction with an open-mind thus capturing the experiences of the participants rather than his own. Lastly, the section on "Subjectivity" detailed any potential bias in order to provide greater awareness for readers.

In qualitative inquiry the researcher is frequently the instrument used for data collection, therefore, steps must be taken in order to provide high-quality information that is credible, trustworthy, authentic, and fair to the people being studied (Patton, 2002). Several measures were used throughout this investigation to confirm the accuracy of the information provided, including establishing research and interview protocols, spending prolonged periods of time getting to know participants, acknowledge potential researcher

bias, as well as allowing participant member checks. Each of these methods and the procedures detailed throughout this section are widely accepted in the field of qualitative research and has been utilized to promote the trustworthiness of this study (Guba, 1981; Shenton, 2004).

## Ethical Considerations

When researchers analyze and interpret qualitative data, issues emerge that require good ethical decision-making (Creswell, 2009). In the current study, the researcher is a school administrator at one of the institutions in which the study was conducted. Although, the researcher does not directly work with the athletics department or maintain any personal relationships with any of the participants in the study, there was a possibility that some of the student-athletes might have an awareness of the researcher's administrative role. As a result, there was concern that student-athletes might feel additional pressure to participate in the study and may not provide honest responses. The researcher was able to diminish these ideas by building trust during the interview setting and reinforcing his purpose as a researcher and not an administrator. Additionally, there were no foreseen risks associated with the interview questions or probing questions that would place the participants in harm's way or display them in a negative manner.

Another precaution taken by the researcher was to develop an Informed Consent Form for each participant to review prior to engaging in the study. Through the usage of this form, participants were notified about the purpose of the research, selection criteria, steps taken to ensure confidentiality, as well as the benefits for participating in the study. For example, all participants were given pseudonyms and guaranteed the information provided during the interviews would not be shared with the athletics department or other

administrators at their institution. Finally, The George Washington University Institutional Review Board (IRB) approved the dissertation proposal prior to the collection of data to ensure participants would be protected throughout the study.

Lastly, in order to increase participation rates, student-athletes who were interviewed for the study were offered a $10.00 gift certificate. This incentive was used to motivate student-athletes, but was not viewed as influencing the participant's responses or the results of the study.

## Summary

Collegiate student-athletes are a unique population, who provide excitement for fans and often revenue and notoriety for institutions (Adler & Adler, 1989; Nixon, 1992; Thamel, 2009). As thrilling as it might be for an athlete to play a college sport, it can be equally devastating when that sport is taken away, especially due to an athletic injury (Wiese-bjornstal, Smith, Shaffer, & Morrey, 1998). Research suggest that injured athletes might experience a range of emotions including, boredom, frustration, jealousy, regret, depression, and fear while unable to participate in athletic competition (Johnston & Carroll, 2007; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). Therefore, it is critical that injured student-athletes receive the necessary support from those closest to them, to help persevere through difficult times. The purpose of this inquiry is to describe how division I, male, injured student-athletes experience social support from their teammates, coaches, and athletic trainers.

Throughout this chapter, the researcher detailed the qualitative methods utilized to answer the research questions related to social support for injured student-athletes. The researcher provided information regarding the two mid-major schools selected, as well as

the selection criteria for participants and a brief description of the sample population. Additionally, the techniques for data collection and data analysis were presented. In summary, data was collected using semi-structured interviews and analyzed using Creswell's (2009) six steps for analysis. Finally, this chapter discussed the researcher's subjectivity and provided the reader as well as future researchers with standards to assess the trustworthiness of the study.

The purpose of chapter three was to establish the procedures used to acquire empirical evidence and analyze it with the goal of answering the research questions. Thus, the information presented in this chapter provided a blueprint that was essential for the readers' awareness and helpful in the likelihood that future researchers wish to follow a similar path. Chapter four presented the results of the study, including participant experiences regarding athletic injury. Chapter five discussed the results and implications of the findings for this study.

# Chapter IV: Results

## Overview

The purpose of this qualitative research project was to describe how division I, male, injured student-athletes experienced social support from their teammates, coaches, and athletic trainers. The participants were interviewed face-to-face, using a semi-structured, pilot-tested interview protocol. Three research questions were examined in the study:

1. How do injured, division I, male, collegiate student-athletes perceive the contribution of social support provided by their teammates, coaches, and athletic trainers?
2. How do injured, division I, male, collegiate student-athletes express the need for social support from teammates, coaches, and athletic trainers?
3. What expectations for social support do division I, male collegiate student-athletes have of their teammates, coaches, and athletic trainers during periods of athletic-injury?

As previous research has concluded, athletic injury is a complex phenomenon with numerous facets to consider throughout the experience. The conceptual framework developed by Richman et al.'s (1993) Social Support Model provided the structure to examine the multidimensional concept of social support during athletic injury. This social support framework allowed the researcher to define and explain interactions between individuals and groups as it pertained to social support being given and received by injured student-athletes. The model included several elements that played a critical role in assessing the interaction between individuals, their environment, and their need

for physical and emotional support (Richman et al., 1993). The Social Support Model (Richman et al., 1993) served as the foundation in the development of the research questions and guided the presentation of the findings.

In order to examine and gather meaning from the information collected during the interview process, Creswell's (2009) steps for analysis were utilized. The first step of the analysis process involved reading the field notes, listening to the audio tapes, and transcribing the data collected (Creswell, 2009; Maxwell, 2005). This process allowed the researcher to organize the data and truly hear the stories of the participants. The second and third steps in Creswell's (2009) analysis process involved thoroughly reading the transcripts and coding them based on larger concepts that could be further examined. During these phases, the transcripts were reviewed twice and organizational codes were established to assist with formal analysis. In the next phase, substantive codes were developed based on the participants' specific words and common responses identified within the organizational codes. Computerized software was utilized to assist with data management and storage throughout the coding and analysis process. Finally, the codes were reviewed and mapped together to create themes. The significant themes that emerged from the interview process are presented in table 2.

Table 2

*Themes that Emerged in Response to the Research Questions*

| Research Questions | Research Themes |
|---|---|
| 1. How do injured, division I, male, collegiate student-athletes perceive the contribution of support provided by their teammates, coaches, and athletic trainers? | (a) Increased engagement and support from athletic trainers<br>(b) Support providers established a sense of belonging<br>(c) Support providers offered positive encouragement<br>(d) Teammates were viewed as the most beneficial providers of social support |
| 2. How do injured, division I, male, collegiate student-athletes express the need for social support from teammates, coaches, and athletic trainers? | (a) Limited communication as an attempt to play through the pain<br>(b) Reluctance to speak about support needs<br>(c) Utilization of non-athletic support providers |
| 3. What expectations for social support do injured, division I, male collegiate student-athletes have of their teammates, coaches, and athletic trainers during periods of athletic-injury? | (a) Assistance with reestablishing control and security<br>(b) Maintain the status quo and treated like the injury did not occur<br>(c) Lowered expectations for support providers, and internalized the recovery process |

The fourth step in Creswell's (2009) analysis process listed the background characteristics of the student-athletes as well as rich descriptions of their responses to the interview questions, thus illustrating their experiences as injured, division I, male, student-athletes and their perceptions of social support received from teammates, coaches, and athletic trainers. The fifth step involved the presentation of findings, which are presented in this chapter using quotations, examples, and stories told by the injured student-athletes.

In order to properly organize this chapter, the data was grouped into themes that emerged from the participant's interviews. The results were not presented in a hierarchical format from most important to least important, or by frequency because several of the themes overlap and cannot be examined in complete independence. Therefore, the findings are presented and organized based on the theme identified by the research question. Thick, rich descriptions provided directly by the participants were used as often as possible to illustrate concepts and provide examples. Each narrative provided an in-depth account of how injured, division I, male, student-athletes experienced social support from their teammates, coaches, and athletic trainers.

In summary, the injured student-athletes interviewed for the study experienced a variety of emotions and may have been supported by teammates, coaches, and athletic trainers throughout their injury experience. Several factors including, type of injury, length of injury, time of injury, and playing time, proved relevant when examining the injured student-athletes' social support structure, communication styles, and expectations for support providers. Based on these factors, injured student-athletes might approach their recovery differently and thus require different types of support. Regardless of the injury, the majority of student-athletes interviewed in the study said their teammates contributed the most to their emotional well-being and that they valued their teammates support more than other providers. Coaches were found to take a more business-like approach to the team and even potentially intimidated the injured student-athletes, thus leading to a decrease in communication during periods of athletic injury. However, for those support providers who met or exceeded the injured student-athletes' expectations by opening lines of communication, providing words of encouragement, assisting during

physical recovery, and developing a plan for rehab, their support was perceived as needed and appreciated by study participants.

## Participant Profile

Twenty injured, division I, male student-athletes, at two universities competing in the same mid-major athletic conference were interviewed for the study. Eleven participants represented Institution A (55%), while nine represented Institution B (45%). The participants in the study ranged in class year from freshman through graduate studies and represented a multitude of sports. The student-athletes interviewed for the study sustained various injuries in terms of severity, with some lasting a few weeks, while other athletes were unable to participate in full competition for more than a year. Of the participants, eight considered themselves to be substitute players (40%), while 12 thought of themselves as starters (60%). Out of the 12 starters who participated in the study, eight attended Institution A (67%), while four attended Institution B (33%). The participants also came from diverse backgrounds and identified with a variety of ethnicities. Table 3 summarizes the participant profiles including, the injured student-athletes' pseudonyms, sports played, university represented, injury type, length of the injury, class year, ethnicity, and position on the team.

Table 3

*Summary of the Participants*

| Puesdo | Sport | School | Injury Type | Length | Year | Ethnicity | Pos. |
|---|---|---|---|---|---|---|---|
| Conan | Baseball | A | Shoulder | 6 mos. | Fr. | White | Starter |
| Tom | Baseball | A | Hand | 3 wks. | Sr. | White | Starter |
| Bobby | Basketball | A | Knee | 1 yr. | Grad | African American | Starter |
| Christian | Basketball | A | Hip | 1.5 mos. | Soph. | African American | Starter |
| Kevin | Basketball | A | Knee | 4 mos. | Soph. | Hispanic | Starter |
| Ric | Rowing | A | Back | 2 yrs. | Jr. | White | Sub |
| Freddie | Soccer | A | Ankle | 1.5 yrs. | Jr. | White | Starter |
| George | Soccer | A | Knee | 6 mos. | Jr. | White | Starter |
| Kyle | Soccer | A | Knee | 1 yr. | Soph. | White | Starter |
| Jeff | W. Polo | A | Shoulder | 6 mos. | Jr. | Latin American | Sub |
| Johnny | W. Polo | A | Knee | 1 yr. | Jr. | White | Sub |
| Calvin | Baseball | B | Knee | 7 mos. | Jr. | White | Starter |
| Kurt | Baseball | B | Shoulder | 2 yrs. | Jr. | White | Starter |
| Shane | Baseball | B | Hip | 5 mos. | Jr. | White | Sub |
| Mark | Basketball | B | Foot | 2 wks. | Sr. | African American | Sub |
| Marshal | Basketball | B | Knee | 1 yr. | Soph. | African American | Sub |
| Randy | Basketball | B | Hand | 9 wks. | Jr. | White | Sub |
| Talan | Basketball | B | Head | 3 wks. | Sr. | White | Sub |
| Keith | Lacrosse | B | Finger | 1.5 mos. | Jr. | White | Starter |
| Steven | Lacrosse | B | Shoulder | 6 mos. | Soph. | White | Starter |

**Conan.** Conan was a freshman pitcher on the baseball team, who initially injured his shoulder during his high school career. The injury was not treated until a few months before starting college, thus he was just returning from injury at the time of the interview.

**Tom.** Tom was a senior, starting member of the baseball team at the time of the interview. He was injured during his junior year, when he was hit by a pitch and forced to sit out for three weeks.

**Bobby.** Bobby was a highly touted member of the basketball team, who began his career at another division I institution. After suffering three significant leg injuries, Bobby transferred schools to the represented university to finish his playing career.

**Christian.** Christian was one of four freshmen on the basketball team who received national attention for his starting role. During his freshman year he injured his hip going after a loose ball and sat out approximately six weeks.

**Kevin.** Kevin was one of four freshmen on the basketball team who received national attention for his starting role. Kevin entered college with knee pain that was further aggravated when he was hurt attempting a lay-up during competition.

**Ric.** Ric was a freshman on the rowing team and elected as a captain when he experienced debilitating back pain that caused him to miss more than two years of competition. Although Ric returned to compete with the team, he had not regained his full strength at the time of the interview.

**Freddie.** Freddie was diagnosed with an ankle injury after his freshmen season on the soccer team. Freddie had just finished an excellent season where he was named to the all-conference rookie team when his injury sidelined him for more than a year.

**George.** George became a starter on the soccer team as a sophomore and injured his knee shortly after the season concluded. Although the recovery time was initially six weeks, during surgery the doctors discovered additional damage that forced him to extend his recovery period to six months.

**Kyle.** Kyle injured his knee during high school soccer practice prior to his freshman year at the represented university and was unable to participate in team

activities for the first year. Once he returned to full form as a sophomore, he earned a place in the starting line-up.

**Jeff.** Jeff originally hurt his shoulder in high school as a member of his country's national water polo team, but aggravated the injury competing during his freshman year of college. After being unable to play through the pain, Jeff had surgery and sat out of competition for six months during his sophomore year. Jeff returned for his junior season and at the time of the interview was a contributing member of the university's nationally ranked water polo team.

**Johnny.** Johnny was a multi-sport athlete in high school who injured his knee playing volleyball. As a result, Johnny was unable to participate in team activities during his first year of college. Johnny returned for his sophomore and junior seasons, and at the time of the interview was a contributing member of the university's nationally ranked water polo team.

**Calvin.** Calvin was a sophomore starter on the baseball team, when he injured his knee trying to make an acrobatic move while running to first base. As a freshman, Calvin was named to the conference all-rookie team.

**Kurt.** Kurt was a high profile starting pitcher for the baseball team. Kurt pitched his freshman year with pain in his elbow, which by his sophomore year developed into a tear in his shoulder that caused him to miss nearly two years of athletic competition.

**Shane.** Shane was a starter on the baseball team prior to injuring his hip in October of his freshman year. Shane elected to play through the pain and had surgery in August 2012, just before starting his sophomore year. At the time of the interview, Shane was fully recovered and battling to regain his starting position.

**Mark.** Mark was a sophomore, traveling with the basketball team for a nationally televised tournament, when he learned that he would be unable to play, due to a foot injury. After sitting out two weeks, Mark returned to competition and had an exciting career.

**Marshal.** Marshal injured his knee during basketball workouts at the university during the summer of his freshman year and thus was unable to participate in team activities for the first season. Marshal previously injured his other knee in high school, so at the time of the interview, he was excited to start his college playing career.

**Randy.** Randy was a substitute player on basketball team, who during his sophomore year injured his hand going for a rebound in practice. Randy recovered from injury and continued playing quality minutes for the team, but stated he did not have aspirations of continuing his basketball career at the next level.

**Talan.** Talan was a walk-on member of the basketball team who sustained a head injury during a practice session his junior year, causing him to miss three weeks of competition. At the time of the interview, Talan had fully recovered and was regarded as one of the hardest working members of the team's practice squad.

**Keith.** Keith was a starting member of the lacrosse team who broke his finger during his freshman year after being hit with a lacrosse stick during practice. The injury sidelined Keith for approximately six weeks. At the time of the injury, Keith was starting for the lacrosse team and seen as one of the group's leaders.

**Steven.** Steven experienced a shoulder injury that deteriorated over the course of three or four years while playing lacrosse. Steven played through his freshman year and elected to have surgery in August prior to the start of his sophomore season. At the time

of the interview, Steven was regaining his strength and preparing to return to competition for the spring season.

## Results of Research Question One: How do injured, division I, male, collegiate student-athletes perceive the contribution of support provided by their teammates, coaches, and athletic trainers?

Injured, division I, male, collegiate student-athletes who were interviewed for the research project expressed many of the similar emotions outlined in previous research, including feelings of boredom, frustration, jealousy, regret, depression, fear, self-doubt, and loss of identity while attempting to cope with their injuries (Johnston & Carroll, 2007; Lockhart, 2010; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). Previous literature also established that in order for social support to be effective, the injured student-athlete must acknowledge, recognize, understand, and perceive the attention given by others as support (Richman, Rosenfeld, & Hardy, 1993; Robbins & Rosenfeld, 2001). An injured student-athlete may interact with a variety of people who are attempting to assist them in recovering, but these interactions may or may not be considered helpful. By answering this research question, support providers will have a better sense of what actions and behaviors injured student-athletes considered supportive.

### Theme One: Injured Student-Athletes Perceived an Increase in Support and Engagement from Athletic Trainers

Prior to athletic injury, student-athletes spent large amounts of time interacting with both teammates and coaches. For teammates, these moments might be spent discussing topics ranging from their sport, to social trends such as girls or video games. Based on the interviews conducted, when talking to coaches, the conversations usually

involved discussion of tactical strategies to improve the student-athlete's ability, or a check-in on the player's academic performance. Prior to injury student-athletes typically reported limited interactions with their athletic trainers. However, following the athletic injury, student-athletes perceived an increase in support from their athletic trainers. In other words, most injured student-athletes interviewed for the research project perceived a transition that involved an increase in engagement and support with athletic trainers.

Before injury, Bobby mentioned the relationship with his athletic trainers was non-existent. He explained there was no need to see the athletic trainers, because he wasn't injured. Bobby stated, "I didn't spend time with the trainers before I got hurt, I didn't know them that well. I just knew that they were the trainers and if I needed help, they were there to help me."

Conversely, once he was injured, Bobby's interactions with the athletic trainers increased. Bobby mentioned being able to form high-quality relationships with his athletic trainers during the recovery process:

> After I got injured and had to be there every day, I started hanging out with them more, going out, getting something to eat, it was pretty good…I didn't really have a relationship with the trainers until I got hurt, because I was really focused on playing the game and wasn't worried about what was going on with my body or taking care of my body. But just talking to them, talking about stuff outside of basketball, playing video games with them, doing different stuff outside of basketball, and getting my workouts done at the same time, built that strong relationship.

Freddie followed a similar trend in relationship building throughout his recovery process. Freddie did not initially spend any time with his trainer, but really connected with her following his athletic injury. Prior to injury Freddie stated, "She was brand new to [the city] and [the school]. She was still finding her feet. I didn't really have a

relationship with her at all." However, after discovering his knee was injured, Freddie began developing a close connection with his trainer. He mentioned,

> She was a really soft spoken, nice girl. I think it stressed her out as much as it stressed me out. I know it really emotionally affected her… Me and her were together the hour before practice, the hour after practice, and the time that they were practicing. I spent so much time with her, so when I was in a bad mood, she was in a bad mood. When she was in a bad mood, I was in a bad mood. I know that did affect her when she felt useless. She was like, "It's my job to make him better," and she can't do it. I still speak to her now. She's not here anymore, and I text her once a week or something. I know how much the injury affected her. Our relationship was strong, but I know it definitely made her very stressed.

George echoed similar sentiments regarding the positive transition that occurred between him and his athletic trainers. When asked about the interactions between him and the athletic trainers prior to injury, George responded,

> Not a whole lot just because I didn't really need to see them. I mean, up until I would say, halfway through my sophomore year, I didn't really have many injuries. Like freshman year, I had problems with my knees, but it was just soreness. So it might be like I'll get an icepack on my way out. It wouldn't require me to come in an hour early and leave an hour later. So my relationship between me and the training staff wasn't really developed, it was kind of just we knew each other, but like we didn't really interact a whole lot.

But following his athletic injury, George began establishing a relationship with athletic trainers. When asked about his interactions with the trainers following the injury, he stated,

> Our trainer was really supportive. She just pretty much told me it's going to be hard. You really need to be on top of your treatments. You can't be missing anything. Like, we're going to be working every day to get you back and if you ever need anything you can call or text me any time. We can try to work through your problems or if you need something, I can come help you.

Steven was a lacrosse player who experienced limited interactions with his trainer prior to athletic injury. Steven had a minor injury that required some communication between him and the athletic trainer, but still felt a limited connection. When asked

about the amount of time he spent with his athletic trainers prior to injury, Steven replied, "No time at all, until half way through the season I rolled my ankle and I was in there for about two weeks, and then after that, no time at all." However, following his shoulder injury, Steven perceived an increase in time spent with the athletic trainer:

> Now I'm there for almost an hour and a half to two hours per day, we're getting pretty friendly. It's not just about injury and how I'm doing, that still is in the conversation, but now it's also like more personal stuff, like "How are your kids doing?" Because obviously you're sitting there icing for 30 minutes, so you have to talk about something. So, yea, we talk just about anything.

Kevin's relationship with the athletic trainers was a bit unique because he entered college with some knee pain. He was already building a relationship with the athletic trainer prior to his significant injury and surgery. Kevin stated,

> Particularly for me, since I came to school with an injury, my patella tendon and my tendonitis were kind of severe. My relationship with our trainer was, [he was] the first person I saw every day. For four or five hours working on my knee or whatever problems I had. So I think I built a great relationship with him over the summer. He's an amazing guy. He did a tremendous job with me and my knees, my ankle, I got sick, I got problems in my arms, I got all kinds of problems, and he took care of me. No asking questions or no complaining at all. He was just taking care of my body.

However, despite already establishing a strong relationship with the athletic trainer, Kevin perceived an increase in support during his significant injury. When asked how the relationship with the athletic trainer changed, Kevin mentioned,

> He was there for me 24-7. Some nights I couldn't sleep, I was in so much pain, so I would call him. He was there for whatever I needed. The relationship got stronger, I believe because I spent so much more time with him in the training room. I think I owe him a lot, because he was there, concerned every time he saw me, in the training room or outside. He would ask me, "How are you feeling, how's your knee?" He was concerned about my body and myself all the time.

Based on the interviews conducted during the research project, injured student-athletes perceived an increase in support from their athletic trainers and often talked

about building a bond or friendship. Injured student-athletes mentioned spending limited time with athletic trainers before injury, but establishing meaningful relationships following injury, due to the amount of time they were spending with the athletic trainer. Although supportive relationships could be established prior to injury, this research demonstrated how athletic trainers typically developed their connections following athletic injury.

**Theme Two: Injured Student-Athletes Perceived and Appreciated Support Providers who established a Sense of Belonging during their Recovery Process**

Athletic injury can often be challenging for student-athletes to endure because they are suddenly unable to participate in activities that previously accounted for a significant amount of their time. Furthermore, student-athletes may not have the circle of friends to socialize with outside of their teammates. As a result, injured student-athletes can feel lost and in search of a group people or alternate activities to fill their newfound time. Thus, injured student-athletes benefitted from the sense of belonging established by support providers.

Randy described how the basketball coaches worked to ensure that he felt included in the team's activities:

> They would still talk to me about new plays we were setting up and they wanted to make sure I watched film and to make sure I knew what was going on. It wasn't like I was distant from the team. It wasn't like, "He's hurt, he's not a part of the team." They still wanted me to be involved in seeing all the new things we implemented and the game plans for different teams and things of that nature. And I think it made things better. It made me still feel as though I was part of the team, although I had to sit through three hours of practice as opposed to being able to play.

Marshal expressed supportive interactions from both his coaches and teammates, especially being granted the opportunity to travel despite being injured:

> They just made sure my spirits were up because they knew I would want to be playing. They included me in everything. Usually when someone gets redshirted, or gets injured, they don't travel on the road trips, but I travelled for every road trip. Coach wanted to make sure I was there to watch everything and get used to the experience and the other circumstances so I could be ready for the next year when I had to play.

Mark echoed similar interactions with the head basketball coach:

> He always makes you feel, no matter what the situation is, he always makes you feel like you're a part of the team. You know how you could get hurt and the coach could make you feel like, "Man that kids hurt, and he's not helping the team." But when I was hurt, you know at the end of the practice, we all come in and the head coach would be like "Yo, come on, get in here! You are part of this team still, right?" So that helped too. He always made me feel part of the team and my teammates too. They were just the same way.

Mark then provided an example of ways that his teammates also made sure he felt included. He stated, "At the end of two weeks, towards the end of me rehabbing, I could do certain things, like noncontact stuff. So I could come in and shoot with them. And when I would make shots they'd say, 'Good shot man,' just normal stuff."

When asked about ways his teammates supported him, Conan described similar hands-on support stating, "Sometimes they'll let me field and just have someone else throw the ball back in for me, so I could still field the ball on occasion and stuff like that."

Kyle's teammates also spent quality time interacting with him and allowing him to experience some basic soccer practice:

> I liked it when my teammates would come up – and when I started to be able to be involved and kick the ball a little bit, they would spend time with me. Obviously I wasn't that exciting because they couldn't touch me, but they would kick with me and I appreciated that. My one friend would come with me on the weekend and kick with me and that was good for me, because as it turns out, I like playing soccer a lot and it was good. That was good for me in terms of something of a release.

For Johnny, the support of his teammates left a lasting impression on him:

> I remember the first day that I went and started testing with the team. I was cleared to start treading water. That was a pretty big step. I really felt like I was much more part of the group. I remember that specific day. I was actually passing with the two guys who were my year. I don't remember who I passed with this morning, but I remember who I passed with the first day back after my injury.

Calvin talked about how he initially felt like he was wasting space, but then his teammates encouraged him to continue working hard and taking on a specific role to help support team:

> Honestly, being back on the field, like with my crutches and stuff, watching them play, you get the sense that there is no purpose for you to be there. Like they really don't need you there and you're not really doing anything. You're just taking up space, so you feel like you're just a space taker upper. At that point, it is hard to deal with it. But they didn't see it that way. They enjoyed me being on the bench with them and stuff, and I was just trying to keep it light with them and joke around because baseball is probably the easiest sport to get really frustrated with yourself and start losing control of your emotions. So you always try to keep it light in the dugout and that's when I took my role as the kid who is helping them just relax.

Athletic injury is a challenging circumstance and has the potential to make injured student-athletes feel isolated. However, support providers have the opportunity to ensure that injured student-athletes remain included in activities and feel a part of the team. For the majority of athletes interviewed in the study, both coaches and teammates helped create an inclusive environment by allowing athletes to travel, participate in team drills, or ensuring they still have a role by giving them tasks to complete that support the team. Regardless of the method, injured student-athletes appreciated feeling a part of the team, despite not being able to fully participate in athletic competition.

**Theme Three: Injured Student-Athletes Perceived and Valued Support Providers who offered forms of Positive Encouragement during their Recovery Process**

In addition to feelings of inclusion, injured student-athletes valued positive encouragement and affirmation. Injured student-athletes will not hear the roar of the crowd, the applause for a job well-done, or the exhilarating feelings associated with competition, therefore they appreciated the positive reinforcement offered by support providers. Injured student-athletes interviewed during the research project pointed out that support providers were able to fill some of the void left by competition with words of encouragement, praise, understanding, and acknowledgement throughout the recovery process. Furthermore, in cases where support providers failed to offer positive encouragement, the injured student-athletes experience was negatively affected. However, for the majority of student-athletes interviewed, the positive comments provided the injured student-athlete with hope and a light at the end of a tunnel for what might be a difficult road back to full health.

After suffering a unique knee injury, Bobby appreciated the words of encouragement offered by his teammates, coaches, and athletic trainers. Regarding his teammates, Bobby stated, "They were really supportive. They were basically just telling me, 'It's not the end of the road. This is only a minor setback, to a major comeback.' And basically telling me to keep my head up, because we were having a great season." Bobby then mentioned that his coaches offered similar words of inspiration:

> The coaches were pretty positive too. They couldn't believe what happened, but after they figured out what happened, they were basically pretty positive. They were just telling me the same thing the players were telling me, like "This is not the end of your road" and that they were going to do everything possible to get me back to the full strength they knew I could play at.

Bobby was pleased that the trainers not only offered words of support, but that they aligned their words with actions:

> After the trainer came in and told me that my knee was broke and it was probably going to take a while for me to get back. They were basically looking at about a year and a half of me doing rehab and stuff like that… I was just thinking to myself, "If I want to play this game ever again, then I need to get back to the form." I felt like it was the end of my career at first, but the trainers were telling me, this wasn't the end. They told me to keep my head level and encouraged me to the point where they were pushing me every day, and I was enjoying it because I knew what I wanted to do.

Calvin appreciated the consistent checkups that his coaching staff provided throughout his rehabilitation period. These checks helped Calvin feel that his coaches cared about his recovery:

> The coaches are really respectful with checking up on me so often. Like once a week, like that's a lot. Just getting a call every week. Because with this injury, it's such a slow progressive recovery that nothing much will change in a week. It's not going to change in a month. It's going to change a little bit more the next month and you're just going to slowly get back into everything. But [the coaches called] every week and I took that to heart knowing that they were watching out for me.

Teammates were able to provide injured athletes with positive encouragement as well. Talan appreciated that despite playing limited minutes in games, his teammates were wishing him a speedy recovery and awaiting his return:

> They would tell me, "I want you back here." Like the practice squad guys… I would play practice squad usually for upcoming games, so it would be those 4-5 guys that I would play with who would say, "We need you back to get the whole feeling going."

Mark mentioned similar feelings after being told en route to the game that he would not be able to participate:

> I think I saw the right actions. I knew everyone would come over, pat me on the back, and tell me, "Don't worry about it." Everyone knew I was upset and that I wanted to play, because it was a big tournament. I wanted to play, it was

> nationally televised and I didn't get to play. Everyone basically told me to keep my head up and that's what I thought they would do.

In addition to words of encouragement, some support providers took action or made gestures to show their appreciation for the injured student-athletes. Jeff described his interactions with teammates following surgery:

> After my surgery the entire team came to see me at the hotel. I just went straight back there and the next day they all came to see me, and they all brought me stupid stuff that they knew I liked. My favorite chips are Tostitos, so they brought me like eight bags of Tostitos and just lined my bed with it and just stuff like that. So the team here at [school] is awesome and it helped. You know, I'd get text [messages], "How's the shoulder doing?" and stuff like that. My class [of teammates] would come and see me every day when I was in the hotel, and then after they would help me get dressed and stuff like that. [Teammate#1] had the same surgery when he was in high school and he slept right next to me, so he would help me with my medicines and stuff like that. If he knew I was sleeping and it was time to take medicine, he would wake me and say, "Here, take your medicine." The team was insanely helpful.

George also experienced positive gestures and spoke highly of the understanding exhibited by his teammates,

> My buddies were like really good to me because a couple of them had been hurt. They know how much it sucked to be on crutches and not be able to get around. The kid I was living with at the time was on the team and he really helped me out [by] going grocery shopping, just like getting things done around the room. Pretty much like everyone that lived in my building, which is my class [of teammates], like really helped me out, so they were really supportive and like understanding of how much the smallest tasks became like an issue. Literally, my buddy would wake up early in the morning and take a shower, then get out of the room, because it would take me forever to take a shower because I couldn't—I'd have to like sit on a window sill in the shower. I couldn't put any weight on my foot, so I had to like bag up my brace, put it out of the curtain, and then sit on a window sill in the shower for like 40 minutes. It was a huge process. And he was pretty understanding of how difficult it was for me to do that. It was hard for me to clean up in the room. I couldn't vacuum, I couldn't pick up clothes, or anything, just because it would take me forever to get from one place to another in a small space like that. So I mean, just like little mundane tasks were you're buddy was really looking out for you and that was good.

Johnny injured himself while in high school, but was able to receive support via social media before stepping foot on campus:

> Everybody already knew coming in that I was going to be coming in injured. At that point everybody accepted me, and it was the same get to know your teammates kind of thing that every freshman athlete goes through. Initially it was a lot of support, and we had a team Facebook page where we posted all our inner squad communication. I got a lot of support on there. People were texting me like "If you need anything…" From the team, there was an outpouring of support for sure, and it was definitely a tightknit group. That really helped.

Once on campus, Johnny built a close relationship with the head athletic trainer and appreciated knowing the head athletic trainer viewed him as a leader on the water polo team:

> He [the athletic trainer] called me into his office and asked what I think and why the team thinks that we didn't perform as well last season as what the expectations were. He's like, "The way that we look at it, you guys had all the tools to do really well." [He] asked about how the spring went in my opinion, what the direction of the team is, and what our goals are for next year. He asked about my personal assessment and review of the coaching situation. I could really tell that [the head athletic trainer] kind of looked at me as someone who can positively influence and also accurately communicate with the administration about what's going on in the inner workings or the day-to-day basis. I think that is a very important and valuable relationship that I have at [the university].

Steven appreciated the encouragement from his teammates and spoke about how it caused him to work harder to return from athletic injury:

> For me, they're doing a great job, helping me out. They ask me how I feel, give me a pat on the back, they say "Great job. Keep going," when they see me working hard. It's kind of a two way street for us; I'm their cheerleader because they know I can't play and they're my cheerleader because they know I can't play.

In a few instances, injured student-athletes did not receive the affirmation they were seeking from a support provider. In these cases the injured student-athletes interviewed appeared to be frustrated and disappointed. These negative perceptions

provided further evidence of the significance injured student-athletes placed on receiving positive encouragement. Jeff described his unpleasant experience with his coach:

> It matters. You know, I'm not that kind of guy who thinks that coaches should be like, "Rah Rah…Everything you do is good – every little thing you do." But I do think that coaches should be a person who you can go to who says, "You did something right. Good job doing that." Even if it's once a week, if he sees that you killed at the swim sets or you did something good to say, "Oh, that was good." You know, if you bust your ass on a swim set and come in really good times, he's not going to say, "Oh, really good job," because in his mind that's what you should be doing anyways. And he literally didn't look at me, didn't talk to me after I got my surgery. He just acted like he didn't care. I just don't think he did care. He never asked me how I was doing. Never said keep up the therapy…nothing. I've never had a conversation about my injury to this day.

Johnny had a similar interaction with the water polo coach:

> Then our head coach wasn't involved with spring practice at all, which is when I started playing with the team. Really the first time that I started talking to him about actual water polo was last year – my sophomore season. That was a little difficult because he holds grudges first of all, and also doesn't understand injuries at all. That kind of initially sophomore year – it was a long progression to where we are now, which still – I feel like he still doesn't fully respect my ability or me as a student-athlete and a full person, honestly. The rest of the group does, so I feel like he's back there, and everybody else is here together.

Injured student-athletes often perceived the words and actions of support providers as positive reinforcement throughout their rehabilitation process. In some cases, support providers might have offered words of encouragement, such as "Great job," and others displayed actions that made the injured athlete feel appreciated. For example, coaches may have provided consistent follow-up, whereas teammates may have brought the injured student-athlete their favorite food. However, in some instances the injured student-athlete did not perceive the support provider as offering positive encouragement and this resulted in feelings of frustration and negative emotions for the injured student-athlete. These contrasts in experience describe the significance injured student-athletes placed on receiving positive support. In other words, regardless of

whether the support was perceived as positive or negative, it clearly had an effect on the on the injured student-athletes' emotional well-being and made a lasting impression on them.

**Theme Four: Injured Student-Athletes perceived their Teammates as the most Beneficial Providers of Social Support**

Injured student-athletes relied on various people throughout their recovery process. The research project focused on three key support providers: (a) teammates, (b) coaches, and (c) athletic trainers. At various points in time, support providers assisted the injured student-athlete cope with different aspects of their rehabilitation. However, injured student-athletes interviewed for the study perceived the actions and behaviors of their teammates as more meaningful than those shown by their coaches and athletic trainers. When specifically asked "Of the three groups of folks that we've talked about today, so coaches; trainers; or teammates, whose support did you value the most or find the most beneficial?" Most injured student-athletes declared their teammates.

Bobby formed a very close bond with his teammates before his injury that carried him throughout his extended recovery time. He stated,

> I think the players because it's easy to hear from the training staff and the coaches because that's what they're supposed to do. But when you hear it from the players, some of the players didn't have to be as compassionate. They could have been like, "Oh, he's hurt, it's my time to come up and show off and hopefully I can take his minutes." But that's not how they were. They were the most helpful teammates saying, "Man, we wish we had you out on the court." They wanted to have me out on the floor, so bad that they were going to do anything possible to get me out there.

Calvin experienced part of his recovery during the summer months and found his teammates to be invaluable:

> I'd say my teammates, because I guess I'm around them more and they're my age and I'm with them every day. I'm not with my coaches every day, obviously. Over the summer I'm not going to call the head coach to come hang out. I'm going to call my buddies, my teammates, to come hang out or do something. Yeah, I would say my teammates are always there when we're lifting, so if anyone's going to be there to push you to do the extra rep or whatever you're doing, it's going to be your teammates. And they're the kids that pick you up and then they're looking for you to pick them up when they're doing something wrong. So obviously there's that bond. The bond between the teammates is so much stronger than the bond between the coaches. There's a bond between the coaches and the trainers and stuff, but the teammate bond, it's really the strongest one. If anyone's going to help you the most, it's going to be your teammates. That's how I feel.

In his response to the question, Jeff originally referred to his teammates as "friends," but then corrected himself. He stated, "Teammates, teammates. Sorry, especially my class. And I mean, I've never been injured before, so [Teammate#1] was somebody that I could really relate with. He could relate to what I was going through." Keith made a similar comparison also referring to his teammates as friends, stating,

> Mentally… probably my teammates who are my close friends and my roommates. Because they were around me when it's not just standing on the side of the practice field, they're there for me when I'm in the dorm room and can't use my thumb for something.

Talan noted the frequency of his interactions with his teammates when he mentioned, "I would say the players, just because I interact with them more and they were all really supportive." Johnny felt his teammates accepted him even as a freshman and went out of their way to include him, despite his injuries. He stated,

> My teammates. Definitely the support and the fact that I felt, as a freshman, even when I wasn't playing, that they valued what I had to say and my opinions. I felt like I could have a leadership role from an outside perspective; and then being included in the whole team experience in terms of our social life, traveling with the team, winning with the team. Every day I would hang out and walk with them. I did not feel as though I was alienated by them. That was definitely the most positive experience about the injury coming in.

Many injured athletes referred to their teammates as brothers or family due to their close bond that was frequently formed. Shane felt particularly close with his teammates stating,

> Like I said before, it's a family; it's a brotherhood. They're always making sure I'm all right. They're doing their best not to leave me out. I did feel isolated just for the fact that I was standing on the side while they were doing other things. [But] outside of baseball, we'd always hang out. They would always see what I was doing. They would always keep up with me and talk to me, as if I'd just gone through a whole practice with them. They just kind of distracted me from the injury. That's what helped me a lot. I think if they didn't act the way they did, I would've probably not stuck as well to my rehab. I probably wouldn't have tried to get back as quickly as I did. With their support, it was unreal. They just really helped me out.

Although the majority of injured student-athletes who were interviewed for the study perceived the support of their teammates as more valuable, there were a few players who valued the support of coaches and trainers over their teammate. Conan was concerned about his playing time once returning and appreciated the trust that his coaches placed in him:

> The coaches. When you're hurt, you're worried about your position on the team being at risk. You wonder if you're still going to be a potential starter, but the coaches never seemed to doubt me. Through the entire process they have been really supportive.

Kevin had been working with his trainer prior to his significant injury and built a positive relationship. Kevin appreciated the tangible skills and knowledge that his trainer used throughout the recovery process. Kevin responded,

> Trainer…. I feel like he's the one who knows most about my injury, he was the one that was asking me all these questions about my pain, my sore knee, he was the one who knew about my situation. He was informed about my status at that time, my recovery, I felt really confident talking to him, secure. I wouldn't hide anything from him, I would tell him the truth. If I run for 10 minutes and I was supposed to run for 5 minutes, I would tell him. I had no problems with him. I think he was the one who made sure I was doing the right things.

Mark echoed similar thoughts and appreciated his trainer's understanding of the injury process. He mentioned, "Definitely the trainers. Because they knew the most, they have the most information. They knew what I could do and what I couldn't do. So basically it was, they controlled everything that I did, and that's what they are there for."

The vast majority of injured student-athletes interviewed for the research project found the support of their teammates to be more meaningful than the support of either their coaches or athletic trainers. Student-athletes appreciated the trust shown by the coaching staff and the tangible skills and knowledge shown by their athletic trainers during the injury period, but by in large, injured student-athletes noted spending more time with teammates and valuing the support of their peers over their coaches and athletic trainers. Some of the injured student-athletes referred to their teammates as friends, family, or bothers helping to categorize the strength of the bond and why the relationship was so important, especially during times of athletic injury.

**Summary of Research Question #1**

Injured student-athletes appreciated the support provided by teammates, coaches and athletic trainers throughout the recovery process. The research project showed that prior to injury, student-athletes rarely established relationships with their athletic trainers, but once injured these relationships blossomed. Additionally, injured student-athletes appreciated when the support providers included them in team activities. For example, a sense of belonging was often established when a teammate offered to participate in a warm-up drill with the injured player or if a coach allowed the injured student-athlete to travel with the team.

Injured student-athletes also perceived and valued the positive reinforcement

offered by support providers. Simple gestures such as offering words of encouragement to the injured student-athlete at a time when the road to recovery appeared challenging meant a lot to the player. Although athletic trainers support was perceived to have increased, and teammates and coaches both offered differing types support, ultimately injured student-athletes valued the support of their teammates over other support providers. Injured student-athletes spoke about the unique bond formed between teammates and several players described the relationship as a "brotherhood." As a result of the strong connection, injured student-athletes perceived the support of their teammates as more beneficial to their emotional well-being. In conclusion, injured student-athletes interviewed for the research project perceived the contributions of support providers to be valuable, especially when the support helped establish a sense of belonging or provided positive encouragement. Furthermore, the research project confirmed the value of support providers throughout the injury process and established the overall significance and affect teammates, coaches, and athletic trainers can have on injured student-athletes.

**Results of Research Question Two: How do injured, division I, male, collegiate student-athletes express the need for social support from their teammates, coaches, and athletic trainers?**

College student-athletes are a very guarded population that can often be difficult to reach (Nixon, 1992). At the division I athletics level, many schools will employ media relations staffs as well as coaches or managers to serve as gatekeepers to prevent athletes from potentially saying the wrong things (Adler & Adler, 1989). The subject of athletic injury is not a topic of interest for student-athletes and therefore has gone somewhat

unsearched. Furthermore, when combining the student-athlete's disinterest with the macho culture of male sports, the injured student-athlete's perspective can often go unnoticed. By looking deeper into the how injured student-athletes express the need for assistance, support providers are better equipped to address player's concerns. Thus the significance of responding to this research question will help eliminate barriers, provide insight into a hard to reach population, and ultimately assist support providers when communicating with injured student-athletes.

**Theme Five: Injured Student-Athletes Limited their Communication as an attempt to Play through the Pain**

Athletics is a culture predicated on being tough and playing through pain. Student-athletes who experience pain or injury may wish to continue competing for a variety of reasons including not wanting to relinquish playing time, fear of losing their scholarship, or wanting to help the team succeed. Injured student-athletes who were interviewed for the research project decreased communication or in some instances hid injures from support providers in an attempt to continue competing.

Kurt was experiencing discomfort in his elbow that he said contributed to his shoulder injury. However, despite feeling these pains he did not communicate with his coaches or trainers and attempted to play through the pain:

> After the three months I started throwing again and it's real light. Then once you start progressing into the more strenuous throwing, you're throwing off a mound and stuff. That's when I started to notice my shoulder was getting sore again, like it had been before. But I kind of just let it go and didn't really say anything. I just thought my arm was getting back into shape and then over the winter we were getting ready for our opening series and it was two weeks before that and I was throwing in the bullpen and my shoulder was bothering me so much I couldn't even lift my arm. My arm felt really weak and like unstable almost. And that's when I was like, all right, I can't pitch through this again, or I can't pitch through

this now. So I went to the trainer and I didn't pick up a ball like the rest of the season pretty much.

Mark continued to play through his foot pain for almost two months before discovering he was injured. Once he was diagnosed, he seemed surprised:

> Damn that injury was actually serious. More serious than I thought it was. Because at that point I'd played on it for about two months and I knew I was hurt, but I just played because you know you don't want to sit on the sidelines. You go to class every day, about the time you go to practice, you don't want to sit out. I think it was my immaturity really. If that injury were to happen to me now, I would sit out and get better first. I was young I wanted to play. I was just getting to college really, and I just wanted to play. I was hardheaded and I just kept playing…I was basically playing and I shouldn't have been. But I didn't open my mouth to tell coach or the athletic trainer, that there was really something wrong with me.

Steven also did not consider his injury as a big deal and felt it was something that other players were likely experiencing as well. As a result, Steven elected to continue competing:

> It's kind of been an issue for about three to four years and I used to be a swimmer so that's really taxing on my shoulder…Certain activities would sort of flare my shoulder up, like sometimes an overhead press or a ripping motion with my arm, but it was on and off. I thought everybody was having the wear and tear and I thought I was just experiencing that, so I thought just put some icy hot on it and it will be fine. Then this summer it took a turn for the worst and I couldn't do anything, so I decided to get it taken care of.

Talan experienced a head injury during practice and initially communicated that he was fine when asked by the athletic training staff:

> The trainer said something like "Are you ok?" And I said "Yeah." You know because whenever anyone gets hit they don't want to come off the court, so I said I was ok, but at the end, he could tell. I think everyone could kind of tell I wasn't fully there. Like attentive during practice. And at the end of practice, I walked over to him and he said, "Let me check you out." Then he diagnosed me after a little bit.

When asked, why he attempted to continue playing, Talan responded,

> I guess I didn't want to think I was injured; I didn't want to think I had a concussion. I guess once I'm in practice, I don't want to come out. I didn't want to let anyone down cause they needed bodies and I didn't want to let them down. I probably knew I should have come out, but I guess I didn't want to believe it in my head.

Ric was in a similar position to Talan and felt like the team needed bodies to practice and compete. So although Ric was communicating some of his support needs, he still elected to play through pain:

> It was also a little tricky because I was told by the trainers not to race, but I was 16th freshman, so two boats of eight rowers. So if I didn't race, if I wasn't able to race then that's seven other people that can't race. So it was kind of on me to say, I need to take it easy this week so that I can race, so that those seven other people can race. I would take like one day off during the week so that I wasn't pushing my injury too far so that I couldn't race that weekend. So that's kind of my relationship with the athletic trainers and how it kind of fell apart. They would tell me not to race and I said, "Okay, but I need to." And they said, "Well, you can't." And I said, "Okay, well I'm going to"… Then I kind of went into my coaches and said, "Listen, if I'm the 16th person I want to race." So I didn't even give them really the option to say we don't think it's a good idea. I said I want to if I am the 16th person. And if not, then I won't, but if I am I'll do it.

Shane injured his hip during his freshman season on the baseball team, but did not communicate with any support providers, because he feared losing his starting position and potentially his athletic scholarship. Shane stated,

> The injury actually occurred my freshman fall at the end of the October. I did not get the surgery until August going into my sophomore year, because I was afraid that if I sat out I would just lose everything…The scholarship I had, chance of playing – I mean, this is already an expensive school. I don't know how much money they would be able to support me if I decided to stay for a fifth year. I just really felt like I needed to play through it for me, financially, and overall, as a baseball player.

Jeff experienced a similar financial concern and also the pressure of having other teammates who were already injured. So Jeff elected to keep his injury hidden and play through the pain:

> When I got to [school], [teammate#1] was coming in with a torn ACL, and another teammate was in a car accident and shattered his femur. So I was really nervous coming into school being a freshman and being the third person that was injured. So I kept it to myself and just kept on playing through it. I didn't seek any attention. I kept everything to myself and I was just doing my own things in my room – exercises, therapy and things like that. And then on a trip to [the west coast] I was feeling probably the healthiest I had been since I had gotten hurt. I was kicked in the back of the shoulder blade and I felt it rip. But again, I was nervous about coach and feedback and all that stuff so I didn't say anything and just played through it the whole year.

When asked about why he went to such extreme lengths to mask his injuries and continue competing, Jeff responded,

> You know, really the Latin culture of being a hardass and so in my mind I still have a problem with it, but [I'm thinking], "Oh I'm fine. I'm hurt, but I can keep going." You know, I'm not going to bring attention to something that's not a big deal and look like a pussy. Excuse my language, but I just wanted to play. It's the way it was. I was afraid I wouldn't be able to play with an injury. You know, losing the scholarship and stuff like that, so I just wanted to play. I've always been the guy that's been busting his ass doing everything and I didn't want to not be that person. Because in my mind if I couldn't practice then some people would think I was slacking off. Some people might think that I was faking it. Some people might think that I was you know, being a pussy. And I would just…I've never been that guy. Nobody ever has to question my hard work and I didn't want that to start my first year of college.

Several of the injured student-athletes interviewed during the research project attempted to play through the pain of their injuries. During that time, injured student-athletes would limit or cease communication with support providers including teammates, coaches, and athletic trainers. In a couple of instances, players tried to hide their injuries completely in order to keep playing. There were several reasons offered for why student-athletes elected to play through injury, including fear of losing their scholarship, fear of losing playing time, and a love for their sport. Regardless of the rationale, the lack of communication restricted the abilities of support providers to assist injured student-athletes during this phase of the injury process.

**Theme Six: Injured Student-Athletes were Reluctant to Speak about their Support Needs**

It is not uncommon for injured student-athletes to play through pain and continue to compete. However, at a certain point the pain becomes too great and the athlete is forced to seek help and support. If the injured student-athlete was receiving the desired attention and support, such as positive encouragement or participation in team activities, then he had no problems voicing feedback. However, if the desired support was not offered, injured student-athletes were reluctant to notify support providers about how they expected to be treated. In many instances, injured student-athletes kept their feelings to themselves or utilized support providers outside the athletics environment.

Kyle came to college with an injury and had trouble establishing a relationship with his head coach. Thus, he was hesitant to discuss the injury and better ways he could have been supported. When asked if he was nervous talking to the coach about the injury process, Kyle stated,

> I was because I didn't really know him that well and I had talked to more colleges besides [this university] and then suddenly committed to [this university] because I liked the school and so I didn't know him as well. Actually, I didn't know him as well as the other coaches that I had spoken with and also because when I committed he wasn't the head coach. He was the assistant coach and I committed to a program maybe foolishly, that didn't have a head coach because I liked the school so much. So he was the new head coach and I was just maybe nervous because I guess I didn't know him that well… But I would never feel comfortable going to my head coach and saying I want to talk to you about this stuff. I don't know, he's kind of a little intimidating, too.

In addition, to not communicating with the head coach, Kyle was also reluctant to speak with the majority of his teammates and the athletic trainers about his frustrations and areas to improve the support being offered:

> At that point, I guess I already told my roommate about how I was frustrated that the doctor still wouldn't clear me to play, but besides that I wouldn't have felt comfortable. I would have kind of felt like I was whining and really like hadn't earned it maybe. Like I hadn't played with them so why would they care? It was weird, there wasn't even a memory of me playing with them or being a good soccer player and now I'm injured and they have no memory of that. So it wasn't like, "Oh yeah, this kid like he used to help us, he was pretty good," but there wasn't any of that. It was just, "There's this kid and maybe he'll get better one day." So I think that's why I didn't really talk to them. Maybe a couple times I said, "I'm really frustrated." And they said, "Oh knee injuries suck."

Kurt was slightly intimidated by his head coach and feared talking to him about athletic injury. Kurt stated,

> I was kind of afraid to talk to the coaches because I knew how they felt about my injuries and I didn't want to make it worse, so whenever they said stuff to me I was real straight to the point, just keep it real simple, just not to cause any more problems.

Kurt's rationale for not communicating with the head coach was:

> Our [head] coach is pretty straight and he's not the most outgoing, personable, funny guy or anything, so it's just hard to approach him from that standpoint. He's kind of intimidating. I mean, if he was a little more open and just not so strict all the time, it would be easier to go talk to him. But we know what he expects from us at all times, so it's hard to just go up to him and have a normal, nonbaseball conversation. It's like we have strictly business relationships with him or athletic relationships with him, but that's about it. If he was more open to being—I mean, he doesn't have to know everything about us, it's just like a little bit of a personal relationship, it would make everything a lot easier. But that's why we have with our assistant coaches, which makes it a lot easier to talk to them about stuff.

Although, Kurt spent more time with the athletic training staff, he was also hesitant to provide them with feedback, despite admitting that some of their tactics did not work:

> The trainers I probably talked to them the most because I was always trying to describe things, just to get it figured out. I mean, I spent a lot of time with the trainers and physical therapists. I mean, they always were trying to be positive with me, so I would never talk down to them or anything because they were trying to help, it just wasn't helping me.

Jeff built a positive connection with both his teammates and his athletic trainers, but was struggling to communicate with his team's head coach. The injury seemed to place additional strain on the relationship that prevented Jeff from speaking with his head coach about support:

> I was terrified of telling [the head coach]. I just didn't want to get that look. It's just the look of disappointment. Disappointment, disgust, and anger, like, "How can you let this happen to yourself," kind of thing. He has no comprehension of what being injured is. He has no patience for it. It's not like he yells at you because [the head coach] doesn't even talk really. We'll be at practice and he'll just be doing hand motions telling us what to do. I'm like, "I have no idea what you were just talking about." I just didn't want to get the disappointed look. I just didn't want to be a part of that and I just said, "[Trainer's name] can you tell him that for me?" It had been almost seven, eight months of just being emotionally exhausted and I was like. "I just don't want to deal with this. Can you tell him for me?" He was like "Yeah, I could do that."

George echoed a similar frustration with his coaching staff during the injury process. He felt a distance between his coaches that prevented him from communicating his support needs:

> I think maybe my coach texted me once saying, "If you need anything let me know," but there really wasn't a whole lot of communication. I didn't hear from any of my assistant coaches. I knew that they were aware of what was going on, but my head coach didn't really…I didn't even talk to him on the phone, so I was actually a bit put off about that. I didn't know if I should call him or whatever. But I mean, I was in contact with my trainer all the time so I figured that they were communicating that way, I guess. I kind of felt this sort of a barrier between me and my coaches. I didn't know how to approach a conversation with them about being hurt, whereas, with my trainer I could say, "My knee doesn't feel right. What do I do?"

Steven was injured for six months, but stated he had not thought to provide feedback to teammates, coaches, and athletic trainers. When asked about voicing feedback for support providers, Steven responded,

> No, I haven't. I really haven't thought about it. I don't know. There certainly are things for the training staff that I should recommend that they change because I

never really thought of it because they are doing their job and I'm doing my job and we both have the same goal in mind.

Talan was injured for three weeks and did not feel like his injury or his playing status warranted the concern of the support providers. Talan just wanted to return to competition:

> I didn't talk to them about it that much unless they asked me. If they said "How are you feeling?" I would sigh and say "Uh my head hurts" or whatever. But I didn't really talk too much about it. Maybe I didn't want them thinking I'm milking the injury. I don't want people thinking that. I don't want people thinking I was milking it, I just wanted to get out there. I wouldn't talk or go into too much detail about it.

Shane failed to express his social support needs to his teammates, coaches, and athletic trainers. When asked why he did not speak with them, he responded,

> No, I didn't. I'm not really sure why. I didn't know how to say it to them without, I guess, maybe offending them as far as probably the athletic department. I didn't want to express how frustrating it was not to know who my rehab trainer would be. Looking back on it now, it was something I probably should've had told them. Pretty much right after I finished rehab, the new company had moved in. The new rehab therapists were all here. It's not even something that's going to come up unless they decide to change contracts again. If that happens, hopefully, it's not while I'm still here.

In addition to interviewing injured student-athletes who were hesitant to speak with support providers, a couple of participants mentioned isolating themselves completely. In both instances, the student-athletes experienced severe injuries that kept them out of competition for more than a year. As a result, the injured student-athletes became depressed and withdrew from athletic support providers. Ric talked about isolating himself during injury:

> I was in a really bad place mentally. I kind of ditched all my friends and only hung out with [my girlfriend]. Everyone kind of saw me fall off the face of the earth. I didn't really talk to anybody on my team anymore. I would stop by practice every once in a while or I'd go get breakfast with them every once in a while, but it wasn't nearly like it was when I was actually rowing with them or

> practicing with them or lifting with them, and being an active team member. But that's not an excuse; it wasn't because I was injured. It was just a side-effect of my injury, but it was more of a personal side effect that had more to do with me than with them not accepting me or them not wanting to hang out with me or them not wanting to do stuff with me. It was just my choice of saying "I don't want to be around you guys anymore."

Ric also spoke about gradually returning from his isolation period and working his way back from the injury:

> Sometimes I'd go to practice but not very often, maybe once or twice a month. And I kind of cut myself off from the [university] community, teammates, friends, anything. I just needed some time away for myself to kind of just regain my, I don't know, sense of stability I guess and my happiness. And then I found other outlets, found other things to do to keep myself occupied. And I kind of became happier and happier. And the happier I became the more I would come back and hang out with my friends and see my old teammates and be with them…So it's not like a huge group or a huge team that I'm hanging out with all the time but two, three, or four of my closest friends are from the team.

Freddie spoke about the lack of opportunities to establish friendships outside of the soccer team and how that affected his emotional well-being. During the injury period, Freddie became depressed and began drinking to cope with the loneliness. He stated,

> I think the last four games of the season I couldn't play when the team traveled. So I was left on campus with two or three guys who never travelled because they were never part of the game day squad and it always bothered me. Freshman year I didn't enjoy the first few weeks at college because I was away every weekend. I didn't have a circle of friends that wasn't the team. I would be here, and these kids would have friends because they met them freshman year, when everybody was being really sociable. I didn't. I was really closed off. The only people I knew were the team and girls. When I was here last Fall, I know that the kids that were here should have seen the way I was acting. I was drinking stupid, and I wasn't happy drinking. When we were going out and drinking, I was pretty depressed. I was pretty angry and had no time for anybody. Looking back on that, I'm completely disgusted with myself. It just wasn't me. All the guys on the road, they couldn't see it because they were gone. That was the time that it really affected me, when the team was gone. When they were back, I was fine because I was with my friends. When they were gone and I was missing out, it was horrible. I wouldn't wish it on anybody.

Athletic injury can be a challenging time for players and given the macho culture in male sports, student-athletes are reluctant to discuss their feelings or emotions regarding support. The majority of injured student-athletes interviewed for the study indicated a hesitancy to express feedback on their need for social support. In several of those instances, injured student-athletes referenced a challenging relationship with their coaching staff and specifically feeling uncomfortable talking with their head coach. Additionally, in some of the more severe cases of injury, student-athletes self-disclosed feeling depressed and thus isolated themselves from athletic support providers.

**Theme Seven: Injured Student-Athletes utilized Non-Athletic Support Providers**

Student-athletes perceived injury as a sign of weakness and were reluctant to show that weakness in front of others within the athletics community. In some cases, injured student-athletes did not feel comfortable talking with athletic support providers because they felt the relationship was not strong enough. In other situations, they did not want to get the reputation of being soft or a wimp. Therefore, injured student-athletes who were interviewed for the study depended on the assistance of outside supporters who were not affiliated with their athletics teams, to help them through the difficult injury period.

Kyle spoke about how he did not feel comfortable talking with his coach and the importance of support providers outside of the team, such as his parents:

> I think it's important to have friends not on the soccer team. Those are important, especially if you're injured because your life can't be 100% about soccer. Hopefully your life is not about soccer because realistically, your life is not 100% about soccer. Not even close to 100% soccer because you can't play… So of course parents, I mean it's always frustrating to call home with what ideally you'd be giving to your coach- just kind of like not venting but just [saying], "It's really hard, I'm really frustrated and it really has me down, this whole injury thing." But because I didn't necessarily feel comfortable with my coach, because you

> don't want [him] to feel like [you're] soft or anything. I guess I'm lucky I have good parents, but they were thoughtful and encouraging.

Mark also spoke about the support he received from his parents throughout the injury process, including nightly text messages:

> Of course my parents. My mom would always make sure I'm alright. Text me every night to make sure I'm ok. Make sure my spirits weren't low, make sure I wasn't down on myself and stuff like that. My father he would just do the same thing in a different way. Let me know that injury is a part of the game, that I would bounce back. They would just do typical stuff that a mom's and dad's would do. My dad was a little bit more about sports, so he was more telling me it will be alright you're going to bounce back. My mom was just there for comfort.

Shane mentioned how valuable it was to have parents who had experienced a lot and were able to offer advice and assistance during his injury process:

> Definitely my family. My dad was a college athlete. My mom didn't play any sports, but she dealt with a lot in her life. Both of them have dealt with adversity. They just said, "Hey, this is another bump in the road. That's all it is – a little bump or a little hill. There's nothing you can do now other than get past it." My friends at home always kept up with me [saying], "Hey, how's rehab going? How are things going there?" That really helped me. I knew I had people I could go and talk to if I ever got down about the injury, so definitely just my family and my friends at home

Conan joked that his dad was contacting him so frequently that it started to become annoying. He stated:

> Definitely my dad. He still calls me just about every day to ask me how I'm feeling. Honestly, it gets annoying a lot of the time. He tells me "You're still the same person. I know who you are, I know how hard you work, and you'll get out of this just fine whether it takes another year and a half or just a couple months, you'll get out of this and you'll be the same person you were because you haven't lost anything."

Ric was appreciative of both the emotional and tangible support offered by his mother. He described a detailed interaction of how his mother helped him achieve both his academic and athletic goals:

> Like I said my mom, she knew what I was going through. She saw the affect that it was having on me in rowing, but also just in life and that the injury affected my life. And she did everything that she could to make sure that I was doing okay. She figured out a way for me to fly home, so that I didn't miss any school. I didn't want to miss any classes because of my injury. I didn't really want to take any time off. I knew I was going to do it [back home], but I wanted to go for a weekend. My team had a race on Saturday in New Jersey. My mom booked me an appointment late morning on a Friday. I didn't have any Friday classes so my mom flew me home from [school], I landed at 9:00AM, had an appointment at 10:00AM, got to the appointment, had the appointment and then we got in the car and drove down to New Jersey to see my team race. I said, "My team is really important to me, obviously my school is really important to me, but also my injury important to me. So how can I get all three together?" She's kind of put everything aside to really support me in every way that she could or help me in any way she could, which was really great.

Ric also talked about how important his girlfriend was for his emotional well-being during the injury process.

> I had a girlfriend who was supportive of my injury the whole time, trying to do anything she could to make me happy. She was really supportive on a personal level, just trying to make me happy and seeing that the injury was affecting me negatively in my life and my happiness. So she was trying to really accomplish ways to make me happier outside of rowing. She's also on the women's rowing team. She's awesome. And I said, "Listen [girlfriend's name], please don't talk about rowing at all. I don't want to hear about it." And so she wouldn't talk about her team, she wouldn't talk about my team. She wouldn't talk about practice, which was really important to me. I just didn't want to hear about it. And although that was such a huge part of her life, she just kind of didn't talk about it for a while which was really nice. So yeah, I had a pretty good support system I guess.

Freddie was an international student-athlete who made it clear that he did not want to contact his parents back home and worry them with his athletic injury issues. Instead, Freddie relied on the outside support of female friends both inside and outside the world of soccer:

> There was a girl who was on the girls' soccer team but she quit in her sophomore year because of two bad knee injuries. I ended up starting to hook up with her and she had been through it all. For her to be there, she actually went abroad to [Europe] in the spring, which is when I was probably at my worst. It was when I

had my first surgery, we Skyped a lot. She had been through it all. She was really helpful to me.

Freddie then mentioned the importance of having supporters outside the athletics arena:

There was a girl who I was hooking up with who was completely unrelated to her. That was the best thing I'd ever done. It was the fact that there was somebody to talk to, who was my outlet from athletics. I could whine and say whatever I wanted, and she probably wouldn't have understood half of it. She's not a part of it. Then she would tell me about something that she had done, which was completely unrelated. It was so refreshing and so good. There were a couple times we had a pregame meal, and people would go back and napped before the game. I would be like, "I don't need a nap. I'm not playing." I would go see her and [she would] take my mind off it completely.

Bobby mentioned the support he received from family, but singled out the experiences with his girlfriend at the time. He appreciated the tough love that she expressed and talked about how it motivated him during the rehabilitation process.

Oh, of course! Family, friends, and that's basically it. I had a girlfriend back at [previous university], she was very supportive, she kept me levelheaded and she was the reason that I stayed more levelheaded than anybody else. Because it was easy to hear it from everybody else, but she wasn't sorry for me, she wanted me to be back to where I was. Sometimes I was feeling sorry for myself like, "Why am I going through this? What did I do to deserve this?" and she would say, "What are you going to do differently for it to not happen again?" Stuff like that makes you motivated because you don't want to hear that from your everyday girlfriend. You're expecting something like, "Oh, is there anything I can do?" Yet she was the one who was the hardest on me. She was like, "What are you going to do? Are you going to sit there and mope about it or are you going to do something about it? Are you going to do something so you don't have to go through this again? How are you going to support yourself if you don't get yourself back to normal?" So she was making me think about different things and motivating me at the same time.

While some student-athletes recognized the outside support of friends and family, others appreciated the support of previous mentors and coaches. In addition to his mother, Christian acknowledged that he stayed in contact with his high school coach, who was just a few miles away:

> My high school coach, he's like my father. He took me under his wing when I got here. He called me every day, he just tried to make me forget about the injury. He reminded me that I have a lot of blessings, not just playing basketball. And my mama. My mama called me every day being nervous. I'm her youngest son so she was very nervous, but she called me every day.

Kurt also appreciated the support of his family, especially for driving him to doctor's appointments all over the east coast, but went into depth about the relationship between him and his high school coach:

> My old high school coach, he played in college and professionally and he's been supportive of me as well because he had knee problems. I always talked with him about the rehab process, trying to get back and just being injured, in college, being injured and going professional. How it affects everything. And like the mental side of being hurt, just trying to not get down on yourself and visualize yourself getting back on the field as soon as possible. That's about it.

Injured student-athletes who were interviewed for the study experienced various forms of stress related to their injuries and were seeking what they perceived to be safe places to discuss or in some instances, vent their frustrations. As a result, injured student-athletes utilized their families, especially their parents to disclose information concerning the injury process. In some instances, parents went to extreme lengths to ensure their student-athletes felt supported. Other injured student-athletes depended on girlfriends and friends outside of the sports arena to keep them levelheaded and take their minds away from the sport that they were unable to play. Finally, a couple of injured student-athletes who were interviewed appreciated the continued support offered by their high school coaches. Regardless of the outside supporter, the injured student-athletes interviewed for the study expressed the importance of having assistance and help aside from their teammates, coaches, and athletic trainers.

**Summary of Research Question #2**

The student-athletes who were interviewed for the research project talked about how challenging athletic injury was for them to manage. Part of that challenge for injured student-athletes was their ability to articulate their needs to support providers such as teammates, coaches, and athletic trainers. Initially, several student-athletes who had the ability attempted to play through the pain and continued competing. In these instances, student-athletes cited the possible loss of playing time and a love for their sport as reasons for continuing to participate despite the pain.

Once the pain became too great to compete, injured student-athletes would seek assistance, but were still reluctant to offer constructive feedback to support providers. Several injured student-athletes referenced being intimidated by coaches and not wanting to appear weak in front of teammates as reasons for limiting communication regarding their injury process. However, injured student-athletes often found an outlet to voice concerns with their families, friends, and significant others. In several instances, parents were utilized as sounding boards or support structures for injured student-athletes and girlfriends often helped take their minds off the sport that they were unable to play. In general the injured student-athletes expressed a need for support aside from their teammates, coaches, and athletic trainers.

## Results of Research Question Three: What expectations for social support do division I, male, collegiate student-athletes have of their teammates, coaches, and athletic trainers during periods of athletic injury?

When a student-athlete experienced an athletic injury, there were specific behaviors or actions he expected in terms of social support. Obviously, if the student-

athlete's expectations are being met, he is more likely to express positive emotions and return to competition sooner (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001; Russell, 2007). Conversely, if expectations are unmet, student-athletes might experience a variety of negative emotions that result in slower recovery times and increased stress (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001; Russell, 2007). Additionally, each student-athlete may have different expectations for support from a particular provider. Therefore, it is important for research to address the specific expectations injured student-athletes have for their teammates, coaches, and athletic trainers. Once the desired expectations were identified, support providers are able to make the necessary adjustments to ensure that appropriate communication and actions are being made to properly support injured student-athletes.

**Theme Eight: Injured Student-Athletes expected Assistance with Reestablishing Control and Security**

Athletic injury was a challenging period where injured student-athletes experienced several negative emotions, including a loss of identity, frustration, fear, and self-doubt. Some of the student-athletes interviewed questioned whether they would ever compete again, and if so, would they still be as good a player after returning from injury. Other injured student-athletes had financial concerns and were worried about regaining their starting positions. In these scenarios, the world of the injured student-athlete was changing and there was a great deal of uncertainty. Thus, during these times, injured student-athletes were expecting support providers to help them regain a sense of control and security.

One of the first concerns for several student-athletes interviewed during the research project was the potential financial repercussion of athletic injury. In some instances injured student-athletes were concerned that the institution may not cover their medical expenses leading to financial hardship for the student-athlete and his family. George talked about how he was nervous about the medical cost and his expectation that the school fund the expenses:

> The [athletic trainers] want to make sure that you got hurt during a school practice, which I was nervous it wouldn't be the same, like a Captain's Practice wouldn't be the same as a regular practice because then there's a gray area as to whether the school's insurance will cover the procedure. So I was really worried that this was not going to be on school's time and it was bad. And then that's going to come out of my family's pocket, which would be really difficult for my family to handle. So I don't know if I got lucky because I did get injured, but I was lucky in that it was covered under the school's time.

A lack of financial security can affect the injured athlete's mental well-being as well as his ability to remain at the institution. Ric had a similar expectation for financial security and did not receive the same response and was therefore frustrated when his expectations were unmet.

> We expected that the athletic department would help financially assist the appointments or x-rays or MRIs or surgery or whatever was going to be needed…If the injury happens while you are competing or practicing as a [institution name] athlete supposedly the athletic department is going to cover any flights that you have to go to or any of these appointments that you have or what not. And I actually did go back to the athletic trainers to talk to them and say, "Listen, this is what happened. It is more severe. I need to go see a back doctor. I need to go see a chiropractor, an orthopedic, I might need surgery." I went back to them after the hospital and kind of laid it out for them and said, "I need your help. Like what should I do?" And I did not have insurance coverage in [this city] and my insurance only covers me where I'm from. And they said, "Well, do you have insurance on you?" I said, "No." And they said, "Okay, well your injury didn't happen down here. Your injury was prior to you coming to [school]. So we can't really help you. We can recommend a doctor or get you an appointment but that's all we're going to do for you." Which I thought was a little backwards because in my opinion, at that point they had caused the injury by misdiagnosing me and allowing me to keep practicing.

In addition to financial expectations, injured student-athletes expected their athletic trainers to provide knowledge and security by taking the lead on medical related issues. There are many aspects that must be managed throughout the injury process, including doctor's exams, surgical procedures, and training routines that must all be planned and executed. During this stressful time period, injured student-athletes wanted to focus on recovering from injury and leaving the details to other support providers. Based on the responses of injured student-athletes interviewed for the research project, these tasks were expected to be accomplished by the school's athletic trainers.

Kevin valued the athletic trainers providing him with a sense of security by alleviating his curiosity and answering questions related to his rehabilitation. When asked directly about his expectations for athletic trainers, Kevin responded, "Answer all my questions, because I had a lot. Be there if I had any kind of problems. Like pain or if I needed medicine or to see a doctor. Get my appointments." Kevin's questions revolved around, "When am I going to be able to play again?" What are the "long term problems with my meniscus?" And when should he "Take medicine or [complete his] exercises."

Jeff's athletic trainer was by his side throughout the injury process and offered him a sense of control by providing information and then allowing the injured student-athlete to choose between therapy and surgery:

> The trainer was with me. He was in the room looking at the x-ray with the doctor. He said, "It's bad. You can either try to go through therapy and it'll take a long time and might not necessarily work. Or you can go straight to the surgery." And at that point I was so over being hurt I said, "Let's just go straight to the surgery. Screw spending three months trying to do therapy and then if it doesn't get better end up having to do surgery anyway. So let's just get it out of the way." And he said, "Okay."

Johnny also had a similar experience with his athletic trainer. Johnny spoke about how his expectations were satisfied and he appreciated the athletic trainer taking control of his rehabilitation process:

> My expectations were I guess fulfilled because I didn't really know [the head athletic trainer]. I met him on my recruitment visit, but basically I told him about the situation, what the injury was, how it happened, when the surgery was, when I'm doing therapy. As I said, [the head athletic trainer] is very much the businessman and gets straight to the point. He said, "Give me all your information. Give me your surgeon's contact information, physical therapist contact information, and give me progress updates." So I would update [him] every so often throughout the summer before I came in, so I was already in contact with him about my knee before I arrived. He knew everything once I got here, my physical and all that stuff.

Ric had a related expectation of athletic trainers, but did not receive similar treatment or results. Ric stated that both he and his parents anticipated better medical support from the athletic training staff. He mentioned, "My parents and I expected a lot more from the athletic trainers. We expected them to help me set up an appointment with a doctor in [the city]. I'm not from around here. I don't know any good doctors or even where to go."

George's recovery process began during the spring semester with one athletic trainer, but carried over into the summer with a different athletic trainer. The transition by the athletic trainers left George lacking control, support, and feeling vulnerable. He stated,

> During the spring, I wouldn't have asked for anything more, but during the summer I would have asked for the same treatment. But they didn't really ask, "How are things feeling? Is anything wrong?"…It was really just whoever was there. I had one trainer who was supposed to be like looking after me specifically, but my work schedule was crazy and so was his, so we really struggled to find a time where we could meet. And sometimes he'd be like, "Oh, I have to look after basketball, I don't have time today. Just do stuff on your own. Let me know how it goes." I think during the summer with the trainers, I felt like

> there was no plan for me to get better, it was just "Do stretches." I felt like that for whatever reason, my recovery was kind of pushed to the side.

Shane attempted to be proactive by inquiring about his support structures prior to surgery, but echoed similar frustrations when his athletic trainers failed to solidify a recovery plan for him:

> The biggest thing that impacted me was trying to figure out my rehab plan. I did preoperational and post operational rehab. For the preoperational rehab, I wanted all the paperwork being sent to the guy who was going to be assigned to my rehab work, so that they could both have communication. I kept calling and making sure that this is the person who will be doing my rehab. The office kept telling me, "Yes that will be your person." I showed up the day before my surgery to pickup my crutches and found out that the person assigned to my rehab was no longer employed here because there was a company switch. That really got to me because I'm the type of person that needs to know this is what's going to happen, this is when we're going to do it. And for me to go in the day before my surgery, the only thing I wanted to think about was getting in, getting out, getting to rehab. But now I have no idea who I'm working with. It was just very frustrating that they couldn't even tell me we're in the process of switching. If I'd known that, I could prepare for it, but to get there the day before, it just really got to me.

For coaches, control was often established by providing the injured student-athlete with confidence regarding their return to action. Kyle talked about the emotional challenges of being injured, as well as the uncertainty felt by injured student-athletes and their need for additional confidence:

> I think that's hard because to start with the coaches aren't great communicators and when you're an injured athlete what you really want is someone giving you assurances. Because, I guess your shield is down and you don't have anything going. You're pretty helpless and you kind of need someone to be like, you probably need a coach to be like, "Don't worry. We'll get you back. We need you." You need assurances and I think that's hard. I imagine that was harder for me because there wasn't that sense of assurances.

Mark also expected his coaches to provide him with a sense of control. Specifically, Mark wanted to ensure he was able to take his time throughout the recovery process and that he would be able to play once returning from injury:

> Just when I was ready to get back on the court, they [coaches] were with me out there playing again. I didn't want them to feel like I was rushing to get back to play or anything like that. Just when I was ready to play, I was hoping for the reaction that they gave me. That when I was ready to go, I could come back.

Calvin acknowledged that his head coach helped relieve some of his stress and provided a sense of assurance by allowing him to compete for his starting position once returning from injury:

> I played center field for [the school] and at the time when I was getting injured, there're was a kind of a race to see who was going to be a starter. Then they brought a kid in and we had been kind of battling back and forth between the spot. So when I got hurt, obviously it cleared up the decision for them. I don't think they started to phase me out, but obviously I was not going to be playing for the rest of the year, so I could only contribute on the spy team. But I knew the head coach always gives kids a chance. If that kid right now wasn't playing well, you're going to get the chance to prove yourself. So I know coming back from my injury, I'm going to have another chance. I'm working hard to make sure that chance works out for me, once I get back out there.

Injured student-athletes expected coaches and athletic trainers to help them regain a sense of control during the injury process. In situations where coaches and athletic trainers were successfully able to provide the injured student-athlete a feeling of stability or reassurance, the player expressed positive emotions. Whereas, when the player's expectations were not met, the injured student-athlete often expressed feelings of frustration. For example, in the situations where athletic trainers were able to provide a sense of financial security, injured student-athletes expectations were met and the player expressed feelings of support. However, when the institution did not financially support the athlete or the athletic trainers did not establish a plan for recovery, the injured student-athletes expressed feelings of frustration.

In regards to coaches, injured student-athletes expected them to be patient throughout the recovery and assure them the opportunity to compete for playing time

once returning from injury. During the injury process, there are several unknown factors that may arise, but coaches and athletic trainers have the ability to provide injured student-athletes with support in the form of control. In some instances, control meant the injured student-athlete deciding whether to attempt therapy or have surgery. Whereas, in other situations, control was the security of knowing the rehabilitation plans and gathering a sense of how long the recovery process would likely take. Regardless, of the circumstances, injured student-athletes expected that support providers return a sense of control to them during a time period that can be highly volatile.

**Theme Nine: Injured Student-Athletes Expected Support Providers to Maintain the Status Quo and Treat Them like the Injury did not Occur**

During the period of athletic injury, many things might change for the injured student-athlete including physical abilities, workout routines, and travel schedules. Thus in a world with so many changes, several injured student-athletes interviewed for the research project were seeking consistency. In other words, injured student-athletes expected support providers to continue the status quo and treat them almost like the injury did not occur. Specifically, injured student-athletes seemed to classify support providers based on their roles and expected them to continue fulfilling those duties.

Injured student-athletes seemed to value a sense of familiarity, thus they expected teammates to continue the supportive relationships that were established prior to injury. Freddie talked about things remaining the same between him and his teammates and not wanting to be treated differently:

> I just wanted to be treated normal. I think that was the main thing. I just wanted to be one of the lads, just one of the boys, just a member of the team. I think if anybody tried to do anything for me, I would've stopped to them. Even when I was on crutches or in my boot, everybody was treating me the same. There were

> no exceptions made for me. There was nothing like that. I guess that's the way I wanted it.

Bobby also spoke about the expectation for consistency from his teammates and the desire for them to treat him the same:

> I didn't really expect them to act differently than what they were already doing. Basically they were playing without me and when I got back they were going to play with me, so they acted the same, which was good because I didn't want it to be any different. They were perfect teammates and I was glad to have them.

Kevin had established a great rapport with his teammates and expected that to continue during athletic injury:

> What did I expect from them? Just to be there for me. Help me if I needed anything, whether it's crutches or anytime I had any problems. I didn't really have any expectations because I know how they are. They're my teammates, I know how much they care about me. I knew I didn't have to worry about them. They would always be there for me.

Steven remembered the positive treatment that one of his teammates received the previous year, so he expected similar actions during his recovery period. He stated,

> One of my roommates last year was [hurt] with a foot injury, [so] I kind of expected that it would be similar. Everybody watches out for him and makes sure everything is going good. I don't know, I just expected them to be good teammates, I guess.

George expressed limited expectations for his teammates, but valued knowing that he could request assistance if needed:

> I didn't really expect a whole lot. I was kind of hoping that they'd be able to help me out with little things like that. But I didn't really expect anything of them. Like I wouldn't be mad if it was a Tuesday, and I asked them to grab me a bite to eat on the way back, and they said, "Oh I have class, I can't." I wouldn't be like, "That's messed up or that's not fair." I didn't really expect them to change their schedules to help me out. It was just nice to know that if I really needed something, I could ask.

For the coaches, injured student-athletes seem to understand they had other responsibilities, including working with the healthy players to win games. Therefore, the

expectation for coaches was to continue focusing on winning games. Freddie did not expect much from his coach and said,

> I don't know if I expect more from the coaches. I don't know if that's just me being a bit of a stubborn person and a bit of a hard head. The coaches all they need to do is coach. I definitely feel like people will look at us differently, but I still don't expect that much for my coaches.

When asked to clarify his rationale for the lack of expectations for coaches, Freddie explained the additional pressure placed on the coaching staff and specifically the head coach:

> The coaches are all on the road, and their minds are completely full. It was our coaches first season, and he was under a lot of pressure. After the director had been hiring big names, he upped the salary and stuff. There were a lot of applicants for the job, and he was just an assistant. We had a good season the year before, but he had no real experience as head coach. I think he only got a one-year contract, so he comes in and we're having a bad season, and the team looks bad. So I don't blame him for not doing more.

Tom also had limited expectations for his coaches. When asked if he expected additional support from the coaches, he replied,

> No…In that period we were in the middle of the season trying to make the playoff, so I think they gave me the time that I think I deserved. I wasn't playing, [but] I was being part of the team. Yeah, I mean they were nice about it, I guess. And like I said, it's kind of the coaches whole.

Christian echoed his understanding of the coach's role and the need for the coach to concentration on the rest of the team:

> I just didn't know. I've never been injured before so I didn't know what to expect from people around me…It was a game, I knew there was a game so I knew [the coaches] probably wouldn't give me that much attention while I was injured, so that's probably what it was like. It's a business. You see, people get injured and they get traded or they get cut. They gotta win, they get paid to win, and I understand that. You gotta do what you gotta do to take care of your family. So, I didn't have a problem with it. I understood that he couldn't take care of practice and his twelve other players and then come sit with me, talk with me all the time.

Steven was pleasantly surprised by the actions of his coaching staff after he expected less attention. He stated,

> I kind of expected them to ignore me a little bit more actually. Being injured, I'm kind of irrelevant now. I understand that their job is to win games and I'm not going to be the one winning the games for them and I'm not their main focus.

Kurt expected words of encouragement from his coaching staff and then the trust to work with the trainers to get healthy. Ultimately, he expected the athletic trainer to support him during the recovery process:

> I just expect them to be behind me, like keep being positive, like I'll be back soon. And then give me my space to get healthy and not be on my back all the time like, "What are you doing? What are you doing?" Let me and the trainers work together to get me back on the field where you can coach me.

Although injured student-athletes expected coaches to continue working with the healthy players and spending less time supporting them, there were a few players who expected the coach's support to increase. George had a breakout sophomore year before injuring himself and expected a greater level of support from his coach staff. He stated,

> I did expect them to be more involved in the recovery process, by kind of like checking in. Asking, "How are you doing?" That type of thing and I really didn't see any of that until the summer. I mean, once in a while when I would be in the training room they might poke their head in and be like, "Are you getting better?" But it wasn't like, "How are you feeling? Do you need anything," type of deal…And I think it would have meant a lot to me, just to know that they wanted to see me get better and wanted to see me play. I just felt like they weren't as involved for whatever else they had to do. I guess I felt like me being hurt wasn't that important and that was kind of frustrating to me.

Johnny expressed a similar expectation for his coaching staff. Drawing on his high school experience, he thought his college coach would be more concerned with the recovery process:

> What I would like to have seen, was that he actually cared about my progress, how I was doing, I guess more about me as a person and not just a piece of tender [meat] for him that I'm going to benefit the program. My coach in high school is

> considered one of the best club coaches in the country and has coached national teams, but he also cares about his players much more deeply than just athletes. He cares about the development of us mentally from boys to men. I wish I would have had that here with my coach. I wish that he actually had a hand in my rehab process and would actually speak to me, and not just ignore me all the time and be a huge asshole all the time.

With the expectation that both teammates and coaches were providing limited support, injured student-athletes anticipated that athletic trainers would fill the void and help them throughout the recovery period. Although the primary expectation for athletic trainers was to address the physical issues related to injury, several injured student-athletes also expected athletic trainers to support their emotional mindset. Keith expected athletic trainers to focus on both his physical and mental well-being. He stated,

> Just to help me with all of the medical needs, like all the paperwork and insurance stuff I needed to do. Go to the hospitals and stuff like that. Which for the most part, they did. And I guess be there on the sidelines with me, just so I could talk to someone, I guess.

Bobby also mentioned the desire for the athletic trainer to address issues related to his athletic injury. Bobby seemed appreciative of the relationship built between him and his athletic trainer:

> Just to get me to where I needed to be. That's all I wanted from them. I wanted a friendship and we built that. Involving me with getting to the point where I needed to be, we built that relationship. That's where we got it from. We worked hard every day. We rehabbed every day and my expectation for them was to get me back to where I needed to be.

Johnny's athletic trainer approached the work with a high level of professionalism, but still took the time to build rapport with the injured student-athlete:

> It was mostly professional. [The head trainer] is a very straight to business kind of guy, but you could tell that he definitely cared about my well-being as an athlete…So really, he was very focused on strengthening my knee. He made sure that I knew what his progression was for me as an athlete.

Steven was not initially expecting to build a relationship with his athletic trainer, but added that it was appreciated. He stated, "I just expected them to do their job and get me back, it's kind of a nice bonus that we became friends, I guess." Conversely, Kurt had expectations for his athletic trainers to have a greater level of involvement, but his desires were not fulfilled, leading to frustration:

> Just to be involved like always proactive. Our trainers were there for help, but they were always like reserved and just kind of sitting back and watching. Just to be more proactive. Be up on top of everything, even if you don't specialize in a sport or a type of injury, just do your best. Because I know we had a trainer who would just kind of sit there and not do anything. And you can't do that when you have athletes that who were getting hurt left and right. That's why our team ended up having four labrum surgeries, which is unheard of.

Throughout the recovery process, injured student-athletes did not wish to become a distraction and expected sports life to continue without them. The idea of putting the team first helped fuel the injured student-athletes expectations that coaches must continue to coach and teammates can express words of encouragement, but must focus on playing. Marshal talked about those feelings when he discussed his expectations for teammates and coaches. He stated,

> I knew that they'd be sad for me, obviously, I had to miss my first freshman season of basketball and be hurt. As I would expect them to, they still had to get ready for their season and build up for that. It was a combination of worry for me, but they still had to stay focused on what they had to do. And same thing for the coaches- obviously they felt bad for me as an individual, as a person, since they don't want anybody to go through that, but at the same time, they have a whole season to prepare for.

Christian summarized this sentiment by stating,

> I understood you always have to put the team before yourself. It's a team sport. I was just like, "The faster I get back, the better we're going to be." Yeah, so I was trying to help out by not being in the way and not trying to get too much attention. I would just stand in the background and let them rock.

When initially asked about expectations for support providers, several injured student-athletes responded stating, "I didn't expect anything." However, after a brief pause the student-athletes seemed to outline roles for teammates, coaches, and athletic trainers to follow during periods of athletic injury. Teammates were expected to provide some words of encouragement and some basic physical support for injured student-athletes, only if it was not considered an additional burden. For example, one injured student-athlete said he would ask a teammate to bring him something to eat, only if they were already going to get food. For coaches, the general expectation was to continue coaching and focus on winning games with the healthy players. However, there were a few injured student-athletes who expected coaches to play a larger role in their recovery process, by periodically checking in on them. Lastly, injured student-athletes expected their athletic trainers to primarily address concerns related to their injury recovery, but also support their emotional well-being. The injured student-athletes interviewed for the research project expected support providers to continue doing their jobs and maintain the status quo. Ultimately, the injured student-athletes expected very minimal from their supporters and wanted to attract as little attention as possible, thus keeping the focus on the team and winning games.

**Theme Ten: Injured Student-Athletes Lowered their Expectations of Support Providers and Internalized the Recovery Process**

Injured student-athletes who were interviewed for the study expected their teammates, coaches, and athletic trainers to provide limited social support and maintain the status quo. With support providers primarily focused on continued athletic success, injured student-athletes seemed to look inward for additional strength and support. As a

result, the expectations placed on athletic supporters were diminished in an attempt to not be perceived as a burden. In other words, injured student-athletes who were interviewed lowered their expectations of support providers and personalized their recovery process.

Ric spoke about how he did not want his injury to become a concern for his coaches or his teammates. He stated,

> I really didn't expect my coaches to do anything. There's nothing they can do about my body. It was kind of my, I saw it as my issue and my problem. And I needed to take care of it myself and I didn't really want to concern them or my teammates. I just needed their support. And yeah, they're like verbal support in saying like- "It's okay. It's alright. Just do what you need to do and take your time." Which is what happened with them.

Marshal was coming off a second knee injury within a few years and took it as his responsibility to make a strong return to athletic competition. Although he appreciated the support of others he felt like everyone had their own obligations:

> I wasn't expecting anything. I got hurt. Everyone has their own schedule. They checked in on me to see how I was doing mentally and whatnot, but besides that, they're not capable of doing that much more. We all have five classes per semester along with basketball.

Shane talked about initially blaming others throughout the injury process, but after further consideration, he started holding himself account for his rehabilitation.

> I was angry a lot at myself [and thinking], "Maybe you should've done this and you'd be playing." Or I would kind of point the finger, "He's the reason I'm not playing." But in the end, it all just made me reflect that everything that happens is on me. This is my responsibility to get back out on the field. That's really it. I just started to become more accountable for myself and the things that I need to do to become a starter again.

Shane continued:

> I don't like to talk to too many people about the things that I deal with, whether it be an injury or a family issue. I can't even remember if I spoke to them about my injuries too much. I told the people in my class year because those obviously become your best friends. You live with them, eat with them. You're at baseball with them. I told them. For the most part, I didn't really want to put that on

> anyone's mind. I didn't feel like it was something necessary for them to worry about.

Kevin valued the assistance from others, but mentioned having limited expectations for support providers. He stated, "I honestly don't expect that much from people in general. So I wasn't expecting that much from anyone, not just the trainer, but my coaches, teammates, or my family; but just being there for me, so I could have a good recovery."

George went into detail about the challenges injured student-athletes faced. And although he acknowledged and appreciated the support of others, he credited his internal motivation with helping him to overcome obstacles. He stated,

> Probably that I've never really quit anything, ever. And personally, I set bigger goals for myself. I feel like I've always found a way to get things done. One of my biggest dreams as a kid was to play college soccer, but I've never really had expectations beyond college. If that materializes that's great, but that wasn't really what I dreamed of as a kid. So I felt like if I gave up, I'd be doing myself a disservice. It would be worth my while to do everything right or to the best of my ability and know I did everything I could, but it just wasn't going to work out. So I felt like just not giving up. It was kind of my personal attitude or the way I looked at it. Even though my coaches weren't as involved. Even though I didn't get the right training over the summer, I thought I could do it anyways.

Calvin also viewed the recovery process and his issue to address and didn't really wish to involve other supporters.

> Well, I wouldn't say I really needed help in any way. I felt like with my teammates and the physical trainers and stuff, I felt like this injury was more on me. I needed to take care of my leg because there's only so much they can actually do. Like they can talk to me and stuff, which they did and like, I can be involved with the spy team and stuff, but really when it comes down to it, when I'm doing physical therapy, it's me doing it, I need to push myself. I need my trainer to push me.

Injured student-athletes expected very little from their teammates, coaches, and athletic trainers. In fact, when directly asked about expectations, many injured student-

athletes responded by saying, "I didn't expect anything." While this response might be the byproduct of a macho male sports culture, it was the reality for several of the student-athletes interviewed for the study. As a result, injured student-athletes seemed to place much of the burden on themselves in an attempt to not bother others. Specifically, injured student-athletes viewed the injury as their personal problem and did not wish to worry their teammates, coaches, and athletic trainers.

**Summary of Research Question #3**

Athletic injury can be a very unstable time period for student-athletes who have experienced an injury. Many factors might change such as the recovery timeline, travel routines, or workout schedules. Additionally, the injured student-athlete may face uncertainty surrounding playing time, scholarship eligibility, or their ability to return from the injury. During such a difficult time, injured student-athletes were looking to the support providers to reestablish a sense of control and security. In general, coaches and trainers were far better equipped than teammates to provide the student-athlete with a feeling of stability. In some instances, coaches were able to provide security by ensuring the injured student-athlete would be able to compete to earn his playing time back once fully recovered. In other circumstances, athletic trainers stabilized the situation by confirming that the institution would address any financial obligations related to the athletic injury. In both situations, the support providers were meeting expectations by assisting the injured student-athlete to regain some control during a challenging period.

Another way that support providers were able to meet the expectations of injured student-athlete was to maintain the status quo. Athletes tend to be creatures of habit and enjoy routines, but during athletic injury, schedules and behaviors changed. Therefore, in

order to create a sense of normalcy injured student-athletes expected support providers maintain the roles established prior to injury. In other words, they expected teammates to continue being supportive, but at the same time, focused on playing well. Coaches were expected to continue winning games, by coaching the healthy players; while athletic trainers were expected to focus on the injured student-athletes rehabilitation. Although a few injured student-athletes expected increased support from coaches, the majority anticipated both teammates and coaches would be focused on winning games.

Injured student-athletes perceived a limited expectation for teammates, coaches, and athletic trainers. Despite expressing a desire for stability and familiarity, injured student-athletes frequently stated, "I didn't expect anything." This belief of independence often left injured student-athletes looking inward and viewing the injury as a personal problem that was theirs to solve. With the perception that teammates and coaches are busy preparing to win games, the injured student-athlete interviewed talked about not wanting to draw attention or burden others with their injury.

The expectations of injured student-athlete are a complex matter that involved providing the athlete with a certain degree of control. Secondly, injured student-athletes were hoping things would return to normal, so they expected support providers to establish a sense of familiarity and maintain the status quo. Lastly, injured student-athletes perceived their expectations to be minimal, so they internalized their recovery process and thought of the injury as personal problem.

## Conclusion

In summary, face-to-face, semi-structured interviews were the most appropriate method to explore how injured student-athletes experienced social support from their

teammates, coaches, and athletic trainers. The literature suggests injured student-athletes may experience a variety of negative emotions associated with athletic injury (Johnston & Carroll, 2007; Lockhart, 2010; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). However, with adequate support student-athletes are better equipped to overcome these obstacles and return to competition (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001; Russell, 2007). By conducting one-on-one interviews, the researcher was able to address the complexities of athletic injury and capture the individual nuances associated with each athlete's perceptions, communication styles, and expectations.

The researcher discovered actions and behaviors that injured student-athletes appreciated as well as areas of frustration for them. For example, many of the injured student-athletes appreciated the positive words of encouragement and the inclusive environments created primarily by their teammates and coaches. Furthermore, injured student-athletes spoke about the increased responsibilities for athletic trainers and the development of that relationship due to the athletic injury. However, despite the many positives, including a unique bond with their teammates, injured student-athletes were hesitant to ask for assistance or provide critical feedback to support providers on areas of improvement. Instead, many of the injured student-athletes relied on family, friends, and significant others as outlets and people to vent frustrations related to the recovery process. Additionally, injured student-athletes perceived their injuries as personal issues that should not burden the rest of team. Thus, injured student-athletes had limited expectations outside of support providers offering a sense of familiarity and security.

Ultimately, injured student-athletes seemed heavily influenced by the macho culture that was prevalent particularly in male in athletics. This was apparent for several

injured student-athletes interviewed for the study who continued playing until the pain became too great. Additionally, the machismo culture of athletes likely influenced the participant's responses and actions. For example, several injured student-athletes mentioned their reluctance to request assistant because they did not wish to appear weak in front of their teammates or coaches. However, when support providers took the initiative to offer inspirational words, hands-on assistance, or gestures of reassurance, injured student-athletes felt appreciated. These themes provide important implications for support providers to better assist injured student-athletes, as well as future research, which is discussed in chapter five.

# Chapter V: Interpretations, Conclusions, and Recommendations

The previous chapters presented the problems of practice, problem of research, purpose of the research, significance of the study, and the conceptual framework. Additionally, the preceding chapters included a thorough review of the literature as it related to the research study, the methodology utilized to conduct the study, and the presentation of the findings. This final chapter revisits the problem of practice, while connecting the research findings to the previous literature and conceptual framework. As a result of the study five major findings emerged regarding social support for injured, division I, male, collegiate student-athletes, which influence practitioners and scholars alike. These key findings will be discussed, along with recommendations for how best to support injured student-athletes and opportunities for further discovery.

## Purpose Statement

The purpose of this study was to describe how injured, division I, male, collegiate student-athletes experienced social support from their teammates, coaches, and athletic trainers. The semi-structured interviews conducted at two private universities, competing in a mid-major athletic conference, helped answer the following research questions: (a) How do injured, division I, male, collegiate student-athletes perceive the contribution of support provided by their teammates, coaches, and athletic trainers? (b) What expectations for social support do injured, division I, male collegiate student-athletes have of their teammates, coaches, and athletic trainers during periods of athletic-injury? (c) How do injured, division I, male, collegiate student-athletes express the need for social support from teammates, coaches, and athletic trainers?

## Statement of Significance

Collegiate student-athletes are a unique population who has many aspects that make them different from non-athletes including, potential scholarship funding, academic distinctions, time constraints, and social differences. In many instances, collegiate student-athletes are seen as celebrities and experience certain aspects of college life, such as injury differently than non-athletes. In college athletics, injuries are inevitable and viewed as part of competitive sports (Hootman et al., 2007). During the injury period the student-athlete receives treatment for their medical injuries, but frequently their emotional well-being is overlooked. As a result of their athletic injury, student-athletes might experience feelings of boredom, frustration, jealousy, regret, depression, anger, fear, as well as loss of identity (Johnston & Carroll, 2007; Lockhart, 2010; Rose & Jevne, 1993; Wiese-bjornstal et al., 1998). Previous research indicated teammates, coaches, and athletic trainers played a critical role in helping student-athletes overcome the negative emotions associated with athletic injury (Loutsch, 2007). Furthermore, with the proper support, athletes are able to remain motivated and recover faster from injury (Hamson-Utley et al., 2008; Robbins & Rosenfeld, 2001; Russell, 2007).

By using a qualitative approach to conduct the study and further exploring the research questions, the literature on social support for injured student-athletes was expanded. The study shed light on areas and opportunities for teammates, coaches, and athletic trainers to better support injured college student-athletes. Furthermore, the research project uncovered expectations injured student-athletes had for support providers and how injured student-athletes articulated their support needs. Additionally, the study discovered how injured student-athletes perceived the contributions of support

providers. These concepts remain significant because social support is only beneficial to the student-athlete if he or she perceives the actions or behaviors as being supportive (Richman et al., 1993; Robbins & Rosenfeld, 2001). Therefore, the findings of this study not only contributed to the depth of literature, but also inform teammates, coaches, and athletic trainers of ways to better support injured, division I, male, collegiate student-athletes.

## Revisiting the Conceptual Framework

The conceptual framework for the study was Richman et al.'s (1993) model of social support. Richman et al. (1993) model detailed eight forms of social support that included listening support, emotional support, emotional challenge, social reality, technical appreciation, technical challenge, tangible assistance support, and personal assistance support. Furthermore, Richman et al. (1993) established the principle that social support is only possible when the recipient perceives behaviors from another person as enhancing his or her well-being. Three primary studies by Clement and Shannon (2011), Corbillon et al. (2008), and Robbins and Rosenfeld (2001) investigated injured student-athletes' perceptions of social support received from teammates, coaches, or athletic trainers. Although these studies were quantitative in approach, similarities were found during this study that supports the previous research. First, this study upholds the finding that social support must be perceived by the recipient. The one-on-one, qualitative nature of this study allowed the researcher to capture specific nuances as they related to the participant and his circumstances. The researcher's findings indicated that some actions or behaviors were perceived as support by one student-athlete, yet considered unsupportive or unnoticed by another student-athlete. Second, participants in

this study often viewed the head coach and assistant coaches as technical experts, whose responsibilities were to remain focused on the healthy players. This theme was consistent with previous literary findings, which concluded that the availability of support from coaches was perceived to be less than both teammates and athletic trainers (Clement & Shannon, 2011; Corbillion et al., 2008). Additionally, this theme supports Robbins and Rosenfeld's (2001) claims that coaches see their responsibilities as teaching skills and leading drills. The third similarity was the transition of the athletic trainer during periods of injury. Previous literature indicated a quantitative increase in availability and support from athletic trainers throughout the athlete's injury and rehabilitation (Biviano, 2010; Barefield & McCallister, 1997; Clement & Shannon, 2011; Robbins & Rosenfeld, 2001). The student-athletes interviewed during this research investigation described an analogous increase in their athletic trainers' involvement and support.

In congruence with previous research, this study revealed that injured student-athletes, overall, felt positive about the support they received from their teammates, coaches, and athletic trainers. Although previous literature characterized differences between the three support providers, the general sentiment of injured student-athletes is one of appreciation for the actions and behaviors of their teammates, coach, and athletic trainers (Clement & Shannon, 2011; Corbillon et al. (2008); Robbins & Rosenfeld, 2001). These positive feelings and emotions were echoed in the vast majority of interviews conducted during this research project.

**Summary of the Themes**

A total of 10 themes were identified during the course of this study, which answered the three research questions. Four themes emerged from the first research

question, which asked how injured, division I, male, collegiate student-athletes perceive the contribution of support provided by their teammates, coaches, and athletic trainers. The first theme developed around the injured student-athlete's perception was that the athletic trainer's role increased during periods of athletic injury. Prior to injury, student-athletes mentioned spending substantial time with teammates and coaches, but limited time with their athletic trainers. However, following athletic injury, student-athletes perceived an increase in engagement and support from their athletic trainers. The second theme was that injured student-athletes perceived a sense of belonging that was established by support providers. According to the injured student-athletes, both teammates and coaches often created inclusive environments that resulted in positive emotions during their injury period. Similarly, a third theme materialized around support providers' encouragement of injured student-athletes. Injured student-athletes perceived that many teammates, coaches, and athletic trainers offered actions or words of encouragement that made them feel good. The fourth theme showed that the majority of injured student-athletes viewed their teammates as the most beneficial providers of social support. Although support from coaches and athletic trainers was appreciated, injured student-athletes felt the connection with their teammates was strongest and valued their support over other providers.

Three themes emerged from the second research question, which focused on how injured, division I, male collegiate student-athletes expressed the need for social support from their teammates, coaches, and athletic trainers. The first theme found that injured student-athletes limited their communication as an attempt to play through the pain. The vast majority of the student-athletes, if able, would avoid, downplay, or even hide their

injuries in order to continue competing. The second theme discovered that injured student-athletes were reluctant to speak with teammates, coaches, and athletic trainers about their injury process. In many instances, injured student-athletes did not feel comfortable talking with athletic support providers or providing feedback on ways that support providers could improve. The third theme discussed the importance and value injured student-athletes placed on non-athletic support providers. Injured student-athletes depended on parents, siblings, significant others, or past coaches for support during athletic injury.

The researcher highlighted three themes in the third research question, which discussed the injured student-athletes' expectations for social support from their teammates, coaches, and athletic trainers. The first theme revolved around injured student-athletes' expectations that support providers assist them with reestablishing control and security. Support providers were often able to help injured student-athletes cope with a variety of uncertainty related to their injury. Some of the insecurities were associated with loss of playing time, rehabilitation concerns, scholarship funding, and their ability to return to full strength. The second theme was injured student-athletes expected support providers to maintain the status quo and treat them as if the injury did not occur. During the rehabilitation period, injured student-athletes did not want special treatment and desired to be viewed in the same regard as the healthy players. The last theme discussed how injured student-athletes lowered their expectations for support providers, while personalizing the recovery process. Injured student-athletes did not want to burden athletic support providers, thus they frequently perceived the injury and recovery as their responsibility.

## Discussion of the Findings

Five major findings were identified during the course of this study. The findings were identified by reviewing the 10 themes in the context of the literature. Based on the context of the literature some themes were more appropriate for a discussion on support for injured collegiate student-athletes. The researcher made the decision to focus on these five findings to encompass many of the research themes, as well as the complexity of the themes as they related to the literature and the research questions for this study. The first finding confirms how athletic injury created a stressful environment for injured student-athlete that is in addition to physical pain they experienced. The second finding discussed the recipient's individual traits and characteristics that influenced the exchange of social support. The third finding examined the relationship between injured student-athletes and their coaches, with respect to the larger team dynamics. The fourth finding detailed the business like connection between injured student-athletes and their athletic trainers. The final finding described the bond between teammates and the important role teammates play in supporting injured student-athletes. These five findings served as a foundation for a discussion on social support and areas where providers can better assist injured student-athletes.

### Finding One: Athletic Injury Creates a Stressful Environment in addition to physical pain

The common emotions felt by injured student-athletes have been well documented throughout the literature. Past research has indicated that injured athletes experienced feelings of boredom, frustration, anger, anxiety, disappointment, isolation, and depression during periods of athletic injury (Chan & Grossman, 1988; Johnston &

Carroll, 1998; Johnson, 1997; Rose & Jevne, 1993). Athletic injury places the student-athlete in a challenging situation, one with many decisions and unknown factors. During this research project, injured student-athletes described how athletic injury could create a stressful environment.

Parham (1993) detailed six challenges student-athletes frequently face, that non-athletes do not: (a) balancing academic and athletic pursuits; (b) adapting to isolation of social and more mainstream activities; (c) managing athletic success or failure; (d) paying close attention to their own physical health needs; (e) satisfying multiple relationships, including coaches, parents, teammates, friends, and the community; and (f) concluding their athletic careers and finding other activities to fulfill their needs. During a period of athletic injury it could be argued that all six of these athletic distinction faced by athletes are placed in jeopardy, causing a difficult situation for the injured student-athlete. For example, prior to athletic injury student-athletes spent a substantial amount of time with their teammates and coaches (Chen et al., 2010). By spending time with teammates and coaches, participants were able to develop close, tight-knit relationships within their team. However, once injured, several participants described a change in their schedule and priorities. The majority of injured student-athletes expressed having more free time and the opportunity to explore outside interests, but felt somewhat unprepared to pursue those options. According to the participants, the time constraints and busy schedules placed on student-athletes made it challenging to sustain meaningful relationships outside of their sports teams. While non-athletes are building relationships and socializing, student-athletes might be involved in a host of different activities ranging from study sessions to practice or games (Adler & Adler, 1989; Lally & Kerr, 2005; Simons et al.,

2007). When the student-athletes experienced injury, their routine activities including weight training, practice, games, and sometimes traveling were removed from their schedule. When faced with this reality, student-athletes expressed feeling isolated, frustrated, upset, and alone. In this scenario, not only has the injured student-athlete lost a piece of their athletic safety net, but he may also have been unable to establish meaningful connections outside athletics, creating a stressful situation.

In some instances the student-athlete was injured in the middle of a long season and the team was forced to persevere without them. Several student-athletes mentioned having to watch, somewhat helplessly, as the team continued without them. Many participants internalized the issue and mentioned feeling disappointed or as though they had let the team down. More than half of the participants considered themselves starters or significant contributors to the team and were frustrated with their inability to compete and help their team win. A couple participants suggested the only thing worse than being hurt was being hurt, on a losing team, knowing if they were healthy the team would be in a better position to succeed. Conversely, if the team showed continued success or started winning games, then the injured student-athletes reported feelings of fear or doubt about returning to competition. The notion of losing their starting position or loss of playing made some of the participants feel vulnerable and uncertain of their future. Additionally, many student-athletes received scholarship funding and associated playing time with their financial aid package. Therefore, some injured student-athletes experienced stress related to the potential financial ramifications of being unable to compete or possibly needing another year of athletic scholarship funding. The risk of losing their athletic scholarship

and the inability to afford to remain in school created a stressful environment for injured student-athletes.

During the injury period, obviously the student-athlete's physical well-being was in question and for a few athletes, the thought of not returning from athletic injury was a legitimate possibility. Parham's (1993) reference to student-athlete's ending their playing careers and finding other interest was thrust upon them with little warning or time to prepare. An injured student-athlete could experience the exhilaration of a cheering crowd one day, and the agony of a season or career-ending injury the next day. A couple of participants in this study confirmed Parham's (1993) findings and commented that their injury created uncertainty for their playing career. The ambiguity of the future outcome caused the participants to describe themselves as feeling deeply depressed while recovering from injury. Furthermore,

The pain inflicted from an athletic injury goes much deeper than sore joints, sprained ligaments, or broken bones. Injured student-athletes are required to cope with a variety of challenging and stressful circumstances which might be difficult to navigate. Student-athletes who experience injury are forced to manage situations involving athletic connections, social outlets, financial constraints, playing status, their return to competition, or the possibility of not fully recovering from injury. Ultimately these scenarios place additional stress on the injured student-athlete, further substantiating the need for social support.

**Finding Two: Individual Characteristics Influence the Exchange of Social Support**

Athletic injury is a multidimensional concept with many facets to consider to including the relationship between the support provider and the recipient of the support.

The support providers along with the method and type of support being provided are critical to the student-athlete's recovery process. The three overarching forms for social support are (a) tangible, (b) informational, and (c) emotional (Cobb, 1976). Each of these forms was apparent throughout the study with some injured student-athletes receiving tangible support such as food (i.e., potato chips while in the hotel room recovering), while others appreciated the companionship, or emotional support, offered by teammates, coaches, and athletic trainers. In addition to examining the providers' roles, during the recovery process, specific attention should be directed towards identifying the recipient's unique characteristics. This study was guided by the Social Support Model developed by Richman et al. (1993), who were amongst the first to acknowledge the recipient's personal characteristics and how those traits influenced their perception of social support. Based on a variety of personal traits, the support for the recipient might vary.

Many of the personal characteristics depended upon the individual's traits and their state of mind at the time of the athletic injury. One area of significance was the injured student-athletes' class year. The injured student-athlete's athletic eligibility and moreover their contribution to the team was an important factor to consider when examining their perceptions regarding social support. Student-athletes who were injured before entering college or during their freshman year did not have the ability to prove their skills and establish connections through athletic competition. These athletes were not able to play or played sparingly in games. As a result, the injured student-athlete's teammates and coaches likely did not get to know them as well as they would have if they were able to play. These results are consistent with the Corbillion et al. (2008) study that found starters received significantly more support from teammates and coaches. In

many instances, starters have been with the team longer and have achieved greater levels of success, thus supporters likely feel more comfortable working with them throughout the rehabilitation process.

Another key characteristic was the type of injury sustained by the student-athlete and the associated recovery time. Student-athletes, whose injuries were more severe and required longer recovery periods, had differing perceptions and expectations for support. The perceptions and behaviors of student-athletes who experienced a season-ending injury or perhaps a career-ending injury were different that those who experienced more moderate injuries. In general, severely injured student-athletes required more tangible support and assistance accomplishing basic tasks such as walking to class or cleaning their residential space. Furthermore, student-athletes discussed the potential need for professional support, outside the realm of teammates, coaches, and athletic trainers. This finding regarding the significance of injury length aligns with previous studies that noted frustrations associated with extended rehabilitation periods (Johnston & Carroll, 2007; Johnson, 1997).

The third critical factor regarding how the recipient perceived social support was time period when the injury occurred. Student-athletes who were injured in the middle of their season were not only willing to play through the pain, but they were focused on returning to competition and ultimately helping their team win games. In fact, some student-athletes waited until the end of their season before proceeding with the required surgery, with hopes of returning to competition in time for the next season. In either scenario the rehabilitation process and support needed appeared different. Participants

who missed in-season game competition seemed far more frustrated and anxious than student-athletes who only missed off-season workouts.

Finally, the researcher found that the number of times a student-athlete had been previously injured also contributed to his perception of social support. Prior studies indicated athletes who experienced more injuries reported significantly less support from coaches and teammates (Corbillion et al., 2008). The assumption made by Corbillion et al. (2008) was that potential support providers became desensitized to the athlete's repeated occurrence of injury and did not want those injuries to affect the team's performance. However, student-athletes, who had experienced multiple injuries and were interviewed for this study, seemed less concerned about their injuries than their support providers. These student-athletes mentioned being more independent and better able to cope with the stresses associated with athletic injury because they had been through the injury process before.

Many factors can influence the exchange of social support from provider to recipient. Richman et al. (1993) understood this concept and several examples have been documented throughout the literature. The individual characteristics of the recipient such as class year, contribution to the team, type of injury, length of recovery, and the number of previous injuries are essential factors for support providers to consider in order to make an accurate assessment of what the injured student-athlete actually needs or wants. For example, if a freshman student-athlete were injured at the beginning of his playing season, he might need support integrating with the team and throughout campus life. Whereas, if a senior student-athlete was in the same scenario, he might be interested in pursuing an additional year of athletic eligibility and scholarship funding to enroll in

graduate level coursework. In this instance, the student-athlete would likely rely on their coach to provide them with a sense of stability and support. Therefore, based on these traits, an injured student-athlete might prefer one provider over another, want more or less support depending on their ability to cope with athletic injury, or require a different type of support to address their specific needs.

**Finding Three: Injured Student-athletes Expected Coaches to Place their Needs as Secondary to Team Success**

Collegiate coaches have a tremendous amount of responsibility including setting program objectives, adhering to NCAA guidelines, team management (e.g., recruitment, scholarships, practice), and fundraising (Grossman, Jamieson, & Hume, 1990; Halbert, 2007; Robbins & Rosenfeld, 2001; Vallée & Bloom, 2005). Coaches are often viewed as the leader of the team and are exposed to internal and external pressures which deviates their attention from the injured player and his specific needs (Halbert, 2007; Robbins & Rosenfeld, 2001). In agreement to previous literature, several participants in this study recognized and supported that their coach's main priority should be the well-being of the whole team, not primarily focused on the injured player Halbert, 2007; Robbins & Rosenfeld, 2001). Student-athletes communicated their understanding of the demands placed on their coach's time and were generally satisfied with the amount of time and support their coach offered during their athletic injury.

Prior to athletic injury coaches spent substantial time with student-athletes, working on skill development and preparing for athletic competition. Following an athletic injury many student-athletes described a decrease in time spent with coaches. The reduction of time spent with the coaching staff is consistent with prior literature that

referenced coaches wanting to maintain their position of authority and not wanting to influence team morale by providing an individual player with a more personal relationship (Halbert, 2007; Robbins & Rosenfeld, 2001). Although the majority of research affirmed the conclusion that coaches spend less time supporting injured student-athletes, there has not been consensus on how student-athletes perceive the shift in attention (Nixon, 1992; Robbins & Rosenfeld, 2001). In this study, some student-athletes expressed frustration and felt unsupported, but the majority of injured student-athletes at both institutions seemed content with the support provided by their coaches.

Injured student-athletes attending both schools appeared to relate best with Jowett's (2003) finding that positive relationships were built on trust, shared understanding, acceptance, and respect. Injured student-athletes adopted a common vision of group success and did not want the focus to shift away from the team at large or team goals. The injured players seemed just as concerned for the continued success of the team as they were for their injuries. Therefore, they did not seem to desire the additional attention from the coaching staff, nor did they want any special consideration. In several instances, injured student-athletes trusted in the process and felt coaches would make decisions based on what was best for the team.

One reason why injured student-athletes interviewed during this investigation may have perceived their interactions with coaches as more positive could be that injured student-athletes did not feel additional pressure to play while hurt. Prior literature referenced nearly one-half of athletes felt pressured by coaches to play hurt and two-thirds reported trying to hide their injuries from coaches (Nixon, 1994). However, very few student-athletes at Institution A or Institution B felt their coaches attempted to

influence their decision of whether or not to play through the pain. In many instances, the decision was made in collaboration with the coach, athletic trainer, and injured student-athlete.

It should be noted, that not every injured player experienced positive interactions with their coaches. However, the majority of coaches aligned at least partially with Vallée and Bloom's (2005) philosophy to remain balanced, composed, and display genuine care for the injured student-athletes. Coaches showed their support and concern in a variety of ways including reassuring the athlete about playing time, extending scholarship funding, check-in phone calls, and inclusion in non-contact areas of practice. As a result, coaches met the expectations of the injured student-athletes.

Although coaches are busy and working with various stakeholders, there appears to be a basic understanding that part of their role is supporting injured student-athletes throughout their recovery. The conclusion that coaches met the expectations of injured student-athletes differs from existing literature, which reported nearly one-half of players felt pressured by coaches to play hurt and nearly two-thirds of players reported hiding their injuries from coaches (Nixon, 1994). The evidence in this study suggests that coaches attempted to support injured players, while remaining focused on the rest of the team. Furthermore, some coaches went beyond expectations and developed an even closer relationship with injured student-athletes; in all of those instances the injured player appreciated the additional outreach.

**Finding Four: Injured Student-Athletes Perceived the support provided by Athletic Trainers to be part of their job responsibilities**

When a student-athlete is healthy, they are participating in sports competition and have little reason to take advantage of the athletic training resources. Unless the student-athlete was nursing a previous injury, he may not experience any significant interaction with the athletic training staff. For many of the student-athletes examined during this investigation, their relationships with the athletic trainers was non-existent prior to injury, but developed further following athletic injury. However, for injured student-athletes the relationship felt transactional, professional, and was perceived as part of the athletic trainer's job responsibilities.

Athletic trainers are placed in a unique position where they are frequently in the student-athletes' general environment, but may not have any direct contact unless an injury occurs. Previous literature noted that athletic trainers felt their distinctive relationship with injured student-athletes made them a safe, approachable, caring, and trustworthy when disclosing personal information (Moulton et al., 1997). However, with the exception of high profile sports, such as basketball, the interactions between players and athletic trainers seemed to be more professional. Injured student-athletes often felt like their teammates and coaches needed to remain focused on the season and winning games, whereas it was the athletic trainers job to focus on healing the injured player. Athletic trainers were expected to set appointments, create a rehabilitation plan, strengthen the injured area, and answer questions related to the student-athlete's injury. These tasks are all associated with physical recovery and do not address the psychological effects of athletic injury. Furthermore, this finding differs from prior

research that concluded athletic trainers' educational background, time spent with the athlete, and training made them the best equipped personnel to address the emotional aspects associated with athletic injury (Biviano, 2010; Barefield & McCallister, 1997; Mann et al., 2007; Robbins & Rosenfeld, 2001).

For high profile sports like basketball, where there was a lot of publicity, athletic trainers functioned as a full-time resource. However, outside of basketball at both institutions, the relationships with athletic trainers were perceived as more transactional and business-like. Injured student-athletes at Institution A often referenced the use of graduate students as fill-ins to professional trainers or scheduling challenges with their athletic trainers' availability. In one instance, an injured soccer player mentioned the athletic trainer left early in order to support a member of the basketball team. In several other instances, the trainers were graduate students who supported multiple sports and may have moved to another school upon graduation. At Institution B, injured student-athletes noted the athletic training resources were outsourced to a third party vendor which made it more difficult to form trusting relationships. In those situations, some injured student-athletes mentioned not feeling comfortable with their athletic trainers because the relationship was in transition. The use of graduate student labor or subcontracting an outside vendor are frequently used as cost saving measures, but does not provide injured student-athletes with a stronger foundation of support. Additionally, these business tactics might have an influence on how injured student-athletes perceived their relationships with athletic trainers.

The limited amount of full-time athletic training staff at both Institution A and Institution B, displayed a familiar trend of declining resources that is common throughout

higher education. However, the diminishing quantity of staff made it challenging to provide the type of relationship referenced in previous literature, where athletic trainers served as psychological support structure during periods of athletic injury (Mann et al., 2007; Moulton, 1997; Robbins & Rosenfeld, 2001). Because the number of injuries are slowly increasing and the amount of resources are decreasing, injured student-athletes are caught in the middle and potentially forced to look elsewhere for their support needs (Conn et al., 2003; Hootman et al., 2007). As a result, the relationship with their athletic trainers seemed to fall more in the business or professional category than the personal realm. This premise was consistent with previous literature which detailed a significant increase in the availability of support, but differed in the perceived contribution of the athletic trainers' support following an injury (Clement & Shannon, 2011; Robbins & Rosenfeld, 2001).

Prior to injury, many players noted limited interactions with their athletic trainers. Their exchanges were causal and far less frequent; a polite acknowledgement following athletic competition or greeting at practice was the extent of their interaction. However, after the student-athlete sustained an injury, the athletic trainers' role became more important as they were expected to address concerns related to the injured student-athletes physical well-being. Since student-athletes desire for teammates and coaches to focus on winning games, the athletic trainers' role becomes increasingly significant. Therefore, it is critical that athletic trainers have the time and access to resources that fully allow them to perform their duties and meet injured student-athlete's expectations. As such, it might prove challenging to meet those student-athlete expectations when the athletic training role is outsourced like in the example of Institution B. Although student-

athletes interviewed for this study appreciated the support of their athletic trainers, they struggled to form significant connections and perceived the support from their athletic trainers to be part of their job responsibilities.

**Finding Five: Injured Student-Athletes Perceived their Teammates as being the most Supportive Provider**

Traditionally athletic trainers have been viewed as critical supporters of injured student-athletes. In many instances, the athletic trainers were addressing the injured student-athletes' physical needs and by spending time talking to the athlete and discussing his recovery process, trainers began to address their emotional needs. Clement and Shannon (2011) noted injured student-athletes were significantly more satisfied with the availability and contribution to their overall well-being by their athletic trainers rather than the social support provided by coaches and teammates. Robbins and Rosenfeld (2001) found similar results indicating that injured student-athletes were satisfied with the social support provided by their athletic trainers more so than their coaches.

However, several studies, including this one present opposing views that identify teammates as the most significant providers of social support for injured student-athletes. Previous literature has recognized that the social interactions outside of athletics, between the injured student-athletes and their teammates helped them stay connected to the team (Tracey, 2003). Teammates play a vital role in the student-athletes' experience and have been known to assist injured student-athletes with access to transportation, accomplishing daily tasks, and relieving stress (Bianco, 2001; Morgan & Giacobbi, 2006).

This finding provided a differing perspective from some of the previous literature, but is noteworthy when considering the experiences of the injured student-athlete.

Relationships with teammates usually begin developing in advance of those with either coaches or athletic trainers. With the changes in social media and the evolution of technology, students are able to connect to one another before they step foot on campus. Once they have arrived on campus, student-athletes are thrust into pre-season workouts and training activities that unite the team through their shared experience. In addition to athletics, teammates often have the same major, enroll in the same classes, and share the same living space. Student-athletes tend to have similar friend groups, and, during the interviews, mentioned attending the same parities and community events. Teammates engage, interact, and share in a common experience. In some instances, injured student-athletes recalled teammates reaching out because they had knowledge of the severity of the injury, either firsthand or because a previous teammate had experienced something similar. Participants felt connected to their teammates because of their similar age, current academic situation, and social interactions. There was astounding power in the bond between the injured student-athlete and his teammates that was often referred to as more of a "brotherhood".

Although the coaches were involved in some of the team activities, they were not experiencing situations in the same way as the student-athlete and thus were not viewed as peers. Additionally, there was a power dynamic that student-athletes described between themselves and the coaching staff that may have prevented a stronger player-coach relationship. Furthermore, unless the student-athlete had a previous injury, he had no reason to interact with the athletic trainers. This research expands upon previous literature and confirms the extremely important role teammates play in the injury process.

Thus although, injured student-athletes valued the support received from all providers, the attention from the teammates proved to be the most significant.

**Discussion of Social Support Providers for Injured Student-Athletes**

As discussed throughout the findings, athletic injury creates a stressful environment for student-athletes and can be filled with many negative emotions. The student-athletes' inability to participate in athletic competition and the isolation from certain team activities makes recovering from athletic injury extremely challenging. Many student-athletes are unable to establish friend groups outside of athletics and struggle to cope back on campus if they are not permitted to travel to the rest of the team. Furthermore, there are potential financial repercussions including scholarship funding and medical expense that might be left unpaid based on certain criteria. According to student-athletes examined during this investigation and throughout existing literature, athletic injury placed them in a vulnerable position where they experienced intense emotions such as boredom, frustration, jealousy, regret, depression, anger, fear, as well as loss of identity. These negative consequences are exacerbated by the competing interest and conflicting roles placed on the individual to be both a student and an athlete. The distinction between student-athletes and non-athletes not only helped to further ostracize them from others, but also required injured players to negotiate situations involving social connections, scholarship funding, eligibility, physical pain, and returning to competition.

There are several individuals and some groups who are willing to assist injured student-athletes throughout their journey, but these providers must consider the player's individual circumstances in order to offer the best quality support. Frequently the

responsibility placed on coaches' limit the amount of time they are able to dedicate toward the specific needs of the injured student-athletes. Since a majority of student-athletes had not been previously injured, athletic trainers struggled to build strong relationships in which their contributions were viewed as equal to those of teammates. As a result, injured student-athletes often considered the support of their teammates to be the most significant and valuable during their injury period.

At one point, collegiate coaches were viewed as father figures away from home. Parents entrusted their sons to these coaches to look after them for four years and help them grow from boys to men. Today, coaches have more responsibilities and less time to dedicate towards student-athletes in general, but especially those who are injured. Overall, the focus of the coaching staff remained with the healthy players and winning athletic competitions. A common phrase that was frequently utilized regarding injured players was "next man up". As a result, while injured student-athletes appreciated the attention they were provided, they were reluctant to confide in coaches or depend on them for particular support needs.

Prior research frequently noted that athletic trainers were viewed as a primary source of support for injured collegiate student-athletes. In general, athletic trainers were thought to be more accessible and better equipped to provide support for injured student-athletes, because it was an essential function of their job. However, with increased scrutiny over higher education spending and many athletic programs operating at a deficit, resources are constantly shrinking. Many schools have moved towards hiring fewer athletic trainers, having teams share athletic trainers, employing graduate student trainers, or outsourcing the responsibility. With athletic injuries slowly increasing and

resources at many schools declining, the relationship between injured student-athletes and their athletic trainers is being redefined.

The world of athletics is changing; student-athletes frequently transfer schools, coaches may leave for other opportunities, and resources have become increasingly scrutinized. These are just a few of the factors that have influenced the dynamic between the player, his support providers, and the institution as a whole, resulting in a business-like approach to college athletics. In fact, given the time constraints and overall demands of playing college sports, some student-athletes are viewing their affiliation with universities as an employment relationship. A recent decision by the National Labor Relations Board ruled that Northwestern University football players were employees of the university and had the right to form a union and bargain collectively. This decision could have implications regarding time restraints, termination, taxes, compensation, as well as healthcare benefits which would obviously affect the social support received by injured student-athletes.

A common theme witnessed in this research project as well as throughout the literature is for injured student-athletes to play through pain. However, if a collegiate players' union was able to negotiate for guarantee scholarship funding, medical treatments, additional eligibility, or playing time, an injured student-athlete might make different decisions regarding whether to participate or sit out. Additionally, the union may also wish to examine other factors within a workplace environment such as compensation amount, number of games played, hours of operation (i.e., practice time), and retirement benefits. Although the present decision only affects football players at Northwestern University, many experts believe the ruling will likely encourage students

at other schools and participating in revenue producing sports to seek a similar judgment. The verdict could also expand to non-revenue generating sports or possibly women's sports due to Title XI standards. Therefore, the decision to allow college athletes to unionize could have implications that reshape the landscape of college athletics, including both the immediate and long-term care of injured student-athletes.

It should not come as a surprise given the age and generational characteristics that injured student-athletes strongly value the relationships with their teammates and are willing to bond together. Collegiate student-athletes are categorized in the millennial generation and have become accustomed to working in groups. Words such as collaborative, connected, and confident have been used to describe individuals in this generation, including student-athletes. Today, injured student-athletes seem to place greater significance on relationship building and have thus identified their teammates' as the most beneficial support providers.

In addition to athletic support providers, this study identified a strong connection between the injured student-athletes and their parents. The parents of student-athletes' have invested the necessary time to build a significant relationship, and technological advances have allowed these relationships to continue developing, even while the student-athlete might be hundreds of miles away. As a result, the family relationships are valuable and provide a great outlet for injured student-athletes to discuss their issues and concerns outside of the athletic forum.

It is important for support providers to note that the relationship with injured student-athletes is not pre-determined and can be created with time and effort. Today's injured student-athletes place value on support providers, regardless of their position or

administrative titles, who are willing to listen and invest the time to get to know them as people and not just athletes. In many cases the willing individuals are teammates, but in other instances coaches, athletic trainers, and family members have been valuable support providers. In order for the injured student-athlete to perceive social support as a benefit, the provider must ensure they are appropriately and effectively assisting the athlete. Support providers must dedicate time to engage injured student-athletes in meaningful conversations about their individual circumstances, understand their background and prior health history, and ensure the athlete feels comfortable trusting them during such a vulnerable time period.

## Limitations

There are some limitations in these findings that must be considered. At the time the interviews were conducted, all of the participants were currently enrolled students-athletes with at least some of their athletic season still left to play. Although the researcher spent significant time establishing rapport with the student-athletes, there was a possibility that the student-athletes did not fully disclose their complete opinion, for fear of retribution from coaches or other athletic administrators. Furthermore, establishing trust with the participants was an initial barrier that originally led to some student-athletes providing short, one-worded responses. The researcher's background as a former division I student-athlete and general knowledge of contemporary sporting events proved invaluable in building relationships with the injured student-athletes, enabling deeper conversation and more in-depth responses.

As previously documented, student-athletes are a guarded population that can sometimes prove challenging to reach. In order to conduct interviews, the researcher had

to work around practice schedules, travel requirements, team obligations, and various gatekeepers including media relations personnel, Athletic Directors, and Compliance Coordinators. The study was conducted at two private universities competing in a mid-major athletic conference, in the mid-Atlantic region of the United States. Thus, another limitation is that the findings of this study cannot be generalized to other colleges, universities, or athletic conferences. Finally, the study focused on athletic injury from the injured student-athletes' perspective, but did not investigate from the coaches' or athletic trainers' perspective. Therefore, the findings were based primarily on data gathered from participant interviews and portrayed the perceived support received by injured student-athletes.

## Recommendations for Practice

Observations from this study led to four primary recommendations, by the researcher, for university leadership and athletics administrators to consider. The first recommendation is that coaches and athletic administrators should increase the awareness surrounding the topic of athletic injury. Athletic injuries are a part of sports and as such the topic should be discussed openly and student-athletes should be prepared to handle the ramifications of athletic injury.

The second recommendation focuses on better integration of student-athletes into the larger university community. Student-athletes should receive university support outside of their athletic teams. By introducing student-athletes to social outlets, campus resources, and other opportunities, their support network will be enhanced and they will have a greater awareness of potential opportunities to explore should athletic injury occur.

Third, coaches should place greater emphasis on teambuilding opportunities. Teambuilding not only boosts morale, but also allows coaches a chance to engage with student-athletes in conversations outside of the athletic environment. These conversations are likely to open lines of communication, improve trust, and make coaches more approachable for injured student-athletes.

The final recommendation is early engagement of professional support providers such as counselors and sports psychologist, in the injury process. Athletic injury can be a traumatic experience, especially for student-athletes who suffer season-ending or career-ending injuries. Thus, it is beneficial that severely injured student-athletes and any player in need have access and be encouraged to seek professional support.

**Recommendation One: Increased Awareness Regarding the Topic of Athletic Injury**

As long as there is athletic competition, there will be athletic injuries. Injuries are a part of sports and should receive similar attention as wins and losses. However, in the sports culture, especially within male sports, there is a tendency of playing hurt, playing through pain, and not wanting to appear weak. These stereotypes can wreak havoc on the mindset of a young, impressionable, student-athlete who is attempting to integrate himself into a culture that promotes being tough. As a result, administrators, coaches, and athletic trainers should work to shift the current macho perception by increasing awareness regarding the topic of athletic injury.

An effective way to convey this information would be to host seminars exposing student-athletes to the subject of athletic injury. The purpose of these seminars would be to provide healthy student-athletes with information that would assist them should they

ever become injured. This would also be an ideal time to introduce resources as well as any established protocols for injured student-athletes.

These sessions would be an opportunity for instruction and education. During the meetings, information regarding the potential psychological effects of athletic injury could be presented to student-athletes. By alerting student-athletes to some of the negative emotions associated with athletic injury, including boredom, loneliness, depression, and frustration, players who become injured would be better equipped to address these difficult situations. Additionally, because teammates, coaches, and athletic trainers would also be involved in these meetings, greater awareness surrounding support needs is created. In other words, support providers will also learn about the negative emotions injured student-athletes might experience and may be more understanding and willing to provide a greater level of support.

The seminars would provide an opportunity for the key stakeholders (i.e., teammates, coaches, and athletic trainers) to be in the same room as the student-athlete and discuss topics surrounding such as expectations and communication during athletic injury. By discussing these issues in advance injured student-athletes will have a greater sense of what to expect and the role each stakeholder might play, in addition to their own role in the injury process. Furthermore, these open forums would provide student-athletes with a sense of togetherness and could act as a bonding opportunity; ensuring players recognize they will not face the injury process alone. The sessions could also address tips for coping with athletic injury on an individual level and helpful hints for remaining part of the team. Information is one of the fundamental keys to recovery. Student-athletes in this study were not aware of the potential support their teammates,

coaches, and athletic trainers could provide. Many athletes did not have expectations for their support providers because they had never discussed or experienced moderate to severe athletic injury. By expanding the athletic community's knowledge about athletic injury and the recovery process, the researcher hopes to empower student-athletes and support providers with the education they need to successfully cope with athletic injury. Providing this information in advance, will allow student-athletes to feel more knowledgeable, empowered, and secure should they experience an athletic injury. Creating a more informed culture that understands the significant challenges associated with athletic injury, should produce a more supportive group of providers. Additionally, equipping injured student-athletes with the tools to overcome negative emotions will likely prove beneficial throughout the injury process.

**Recommendation Two: Better Integration of Student-Athletes into the larger University Community**

The moment a student-athlete steps foot on campus, they are separated and treated differently from their non-athlete counterparts. For example, student-athletes are frequently required to return from summer break in order to prepare and train for their upcoming season. In many cases, student-athletes are grouped together for classes, course assignments, and residential housing. While non-athlete students are attending typical freshmen welcome activities, student-athletes are often participating in practice and fitness drills. These unintentional barriers create a wall around student-athletes that impedes their ability to develop relationships outside of their sport or athletic community. Therefore, during times of athletic injury, student-athletes likely do not have a social

support network outside of their teammates, who are still focused on competition and winning games.

When student-athletes are healthy they are able to interact with teammates all the time. Teammates are together during practice, strength and conditioning drills, as well as games. However, when a student-athlete is injured his schedule changes and he is no longer participating in practice, workouts, or games. At that point, while teammates are competing, the injured student-athlete is likely in the training room, working on rehabilitation techniques. Most importantly when the team travels for competition, there is a potential for the injured student-athlete to remain behind on campus. As a result of not travelling with the team, injured student-athletes mentioned feeling isolated, lonely, and depressed. Furthermore, in some instance injured student-athletes felt a loss of their athletic identity and were seeking alternative activities to fill the void left by not competing. However, if student-athletes had more opportunities to engage with the larger, non-athlete community their social circle would be increased and they might not experience periods of isolation. Additionally, student-athletes might engage in more traditional student life outlets such as Greek Life, student organizations, or internships.

One way to integrate student-athletes into the larger university culture is to ensure that they are living in residence halls with non-athlete students. Although it is not necessary for student-athletes and non-athletes to room together, residing on the same floors or suite would provide enough opportunity to get to know one another. A second approach to providing student-athletes with campus resources is to take advantage of the time period prior to the start of the academic year. Many teams, especially those participating in fall and winter sports, return early from summer vacation for strength and

conditioning training. During this time, before the start of classes, student life administrators could provide details on their departments and discuss ways for student-athletes to become better connected.

It is critical that student-athletes be integrated into the larger university community and introduced to people and activities outside of the athletic environment. This recommendation is likely helpful for any student-athlete, but particularly important when considering that injured student-athletes cannot compete and are potentially isolated from their teammates, coaches, and other athletic support providers. By expanding the injured student-athletes social circle and providing him with campus resources and activities, he is more equipped to manage the stress of athletic injury and find social support outlets outside of the athletic community.

**Recommendation Three: Greater emphasis on Teambuilding with Coaches**

Each year athletic teams undergo some form transition. While some student-athletes will graduate, others might transfer to different schools, quit the sport, or join the team as a new recruit. Regardless, the composition and personality of the team is likely to change each season, requiring the stakeholders or involved parties to take time and create or reestablish the team's relationships. This step is particularly important when considering the relationship between injured student-athletes and their coaches and athletic trainers. Teammates spend a substantial amount of time with one another and based on participant accounts are able to form strong bonds regardless of teambuilding activities. However, the relationships between injured student-athletes and their coaches are inconsistent and could use additional development.

Relationships are often built on trust and building trust takes time. At the division I collegiate athletic level, a greater emphasis is placed on winning games and in many instances, coaches must win games in order to maintain their jobs. This dynamic places coaches in a challenging predicament where they are forced to make difficult decisions including priorities for time management purposes. In the case of an injured student-athlete, coaches are sometimes hesitant to spend additional time with hurt players because it might take attention and time away from the rest of the team. As a result, some injured student-athletes felt unsupported by their coaching staff.

In order to help injured student-athletes feel more supported, it is recommended that coaches place a greater emphasis on teambuilding and getting to know their players before an athletic injury occurs. By building a strong rapport early in the relationship, coaches are able to establish trust and open better lines of communication between themselves and the players. Improved communication might then lead to injured student-athletes being more likely to approach their coaches with issues or problems they are experiences during the recovery process. Additionally, coaches would know more about the injured student-athlete and would be better equipped to address the individualized circumstances that might be associated with the injured player.

There are many opportunities for coaches to further develop relationships with their student-athletes. One of the best ways to improve teambuilding is for coaches to take full advantage of their international travel opportunities that the NCAA allows teams to do every four years. In many instances, teams venture to European and Asian countries where they are fully immersed in the culture while still practicing and competing. These international trips are excellent opportunities to not only get to know

one another, but continue working on their sport in a completely different environment and venue. During the years when teams are unable to take long distance trips, programs can still stay local and participate in teambuilding sessions with professionally trained facilitators. Teams could utilize *ropes courses* to work on exercises in trust, communication, conflict resolution, and commitment. Lastly, coaches could organize or host events (e.g., BBQs, luncheons, retreats, and sports viewing parties) that allow players the opportunity to interact with the coaches outside of their formal roles. During these events, it might prove beneficial to implement a sharing portion or get to know you activities in order to deepen the personal experience.

In these instances injured student-athletes are able to form strong relationships with their teammates, and at least working relationships with coaches. Although injured student-athletes may not expect more from their coaches, research suggests they would appreciate a stronger relationship. By building these connections, coaches will be better prepared to support injured student-athletes. Furthermore, injured student-athletes are more likely to feel comfortable and be proactive in working with coaches during the injury period.

**Recommendation Four: Better Inclusion of Professional Support Providers**

During a period of athletic injury, student-athletes have a variety of people that they may depend on for support. These individuals might include teammates, coaches, athletic trainers, parents, mentors, and significant others who provide the injured student-athlete support to cope with the negative emotions associated with athletic injury. However, in the more severe situations, when a dramatic injury has occurred and student-athletes are in greater need, these support providers may not be enough. Therefore, it is

recommended that professional support providers such as counselors and sport psychologists be included in the recovery process.

Many student-athletes sustain minor or moderate injuries that last a few days or even a couple of weeks. For these athletes, the support received from the typical athletic providers (i.e., teammates, coaches, and athletic trainers) might suffice. However, for the athletes who suffer season-ending or potentially career-ending injuries, additional support is likely required. These horrific injuries are less frequent, but can have a tremendous effect on the student-athletes' ability to be successful both on and off the playing surface. In addition to the more common emotional feelings injured student-athletes experience, including boredom, anxiety, frustration, anger, jealousy, and regret, severely injured student-athletes might also feel depressed and fear of never playing again. In some instances, these negative emotions have been known to lead to more serious issues including academic trouble, drug and alcohol abuse, as well as violence.

Given the potential negative consequences that are associated with athletic injury, especially for moderate or severely injured student-athletes, it is recommended that teammates, coaches, athletic trainers, and athletic administrators highly encourage or mandate that injured student-athletes speak with a trained support provider. As the researcher experienced, student-athletes are already reluctant to externally discuss their support needs, therefore it is imperative that administrators, coaches, and athletic trainers remove the stigma generally associated with seeking help and make it more acceptable for student-athletes to request assistance. In some instances, these qualified individuals are already employed at the institution, although some schools may have to seek

alternative arrangements. In either scenario, it is important that student-athletes with any type of injury have access to these resources and are encouraged to utilize them.

## Future Research

The perceptions, expectations, and communication styles of injured, division I, male, student-athletes were revealed throughout this research project. Hearing the participants' stories helped broaden the researcher's viewpoint regarding the experiences of injured student-athletes. Student-athletes are an extensively researched population, but additional research on this group, specifically regarding the topic of athletic injury, will lead to a better understanding of social support and the assistance required for injured student-athletes during their injury process. The researcher believed that the project added to the existing literature regarding the importance of social support for injured student-athletes, but future research is needed to better support this population.

The first rational step for further research would be to duplicate this study at other universities with similar student populations (i.e., division I, male, student-athletes, with moderate to severe injuries) who also compete in similar athletic conferences. Conducting additional research at similar schools would help determine if the findings of this study were unique to these two schools or common across comparable populations. Furthermore, selecting similar institutions would continue to provide insight on a population that remains academically focused, but with some aspirations and skills to continue competing professionally.

Conversely, another future study might involve conducting a similar investigation with student-athletes competing in major athletic programs. By conducting the study with student-athletes competing in major athletic conferences, future research would be

able to determine if the expectations for teammates, coaches, and athletic-trainers are different. Additionally, researchers would discover if resources and support services provided to student-athletes are different between athletic conferences, and if the difference causes participants to perceive more or less supported being offered. Therefore, it might be interesting to examine how the elite athletic population, many with aspirations to play professionally, responds to athletic injury.

Another recommendation is to examine the topic of social support for injured student-athletes from the viewpoint of coaches and athletic trainers. The majority of earlier research was from the student-athletes' point of view, so it would be advantageous to research the support providers' perspectives. In addition to coaches and athletic trainers, future studies should also examine other important relationships in the student-athletes' lives including parents, significant others, and community mentors. By examining these support providers' thoughts, future researchers will be able to compare and contrast information and identify commonalities that may improve the injured student-athletes' experiences or enhance the ability of providers to offer support.

Finally, further exploration is required on the personal characteristics and how these traits influence the exchange of social support. It was beyond the scope of this research project, but it is recommended that future researchers examine how class year, playing time (i.e., starter versus non-starter), nationality, ethnicity, injury severity, and the number of previous injuries affect the social support process. This additional research has numerous possibilities for examination, and could be critical in expanding the knowledge on social support for injured student-athletes.

## Summary and Conclusion

Athletic injuries are inevitable in sports competition and as long as there are injuries, there will remain a need for social support. Athletic support providers such as teammates, coaches, and athletic trainers are capable of assisting injured student-athletes to cope with potential feelings of boredom, frustration, jealousy, regret, depression, anger, fear, as well as loss of identity. Although it is easy to list the potential negative emotions associated with athletic injury, it is much more challenging to address these areas of concern for each injured student-athlete. Support providers must consider many individualized factors and characteristics when attempting to assist injured student-athletes including class year, playing time, type of injury, length of recovery, and number of previous injuries. Based on the findings of this study, support providers are generally meeting the needs and expectations of injured student-athletes, but there is still room for improvement.

After interviewing 20 injured, division I, male student-athletes at two private universities competing in a mid-major athletic conference, ten themes emerged. Based on these themes, injured student-athletes appreciated their support providers who offered words of inspiration and encouraged opportunities for inclusion. These motivational expressions and gestures of support were critical, because in the macho world of male athletics, injured student-athletes are unlikely to ask for assistance. While expecting little assistance from others, hurt players internalized the injury and viewed the recovery process as their problem. Despite injured student-athletes' valiant attempts to keep the focus on the larger team, support providers still made efforts to assist them throughout the recovery process. And for the majority of injured student-athletes, the support of

their teammates was viewed as the most beneficial, despite the perception that athletic trainers' time and efforts increased during periods of athletic injury.

There are several recommendations for support providers to better assist injured student-athletes. It begins with educating players and athletics personnel on the topic of athletic injury, so that all parties are better equipped to address the subject in the event that an injury does indeed occur. Next, coaches and athletic administrators should look to better integrate student-athletes into the student culture of the institution. This step will provide injured players with healthy outlets and larger social circles to rely on for support, should an injury transpire. In addition to providing student-athletes with opportunities to participate in non-athletic activities, coaches and administrators should place a greater emphasis on getting to know their players. This task can be accomplished in a variety of informal settings, including BBQs, luncheons, retreats, and sports viewing parties. Lastly, student-athletes need access and encouragement to seek professional assistance from trained psychologists. These specialists will provide those student-athletes who are most in need with support to avoid negative consequences and behaviors.

Athletic injury creates a very stressful environment for injured student-athletes. However, with the knowledge of how injured student-athletes perceive injury, communicate their needs, and ultimately what they expect, support providers have the ability to improve injured student-athletes' experience. Like most people, student-athletes want to know they are supported and the best time to display that appreciation is when it is needed the most. Improving the injured student-athlete's experience not only

helps the individual player, but also reassures others student-athletes if they are in a similar position.

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## Appendix A: Interview Protocol

### At Start of the Interview

#### Sample Script

"Good Morning. Thank you for agreeing to meet with me and sharing in this research experience. My name is Vernon Williams and I'm working on a research project with

The George Washington University. I am very interested in learning about your experiences as in injured, division I student-athlete. I hope the results of the study will not only help to expand the knowledge on athletic injury, but also assist teammates, coaches, and athletic trainers better support injured student-athletes.

I played division I basketball, so I am aware of the demands, pressures, and benefits to competing at such a high level, so I really appreciate you taking the time to speak with me. Just a reminder, this interview will be recorded so that I can truly listen to your answers to my research questions and not be inundated with taking notes. I want to be engaged while listening to your stories. I will be jotting down key words and ideas to help me begin the data analysis process. I want to be clear that you can be truthful and honest about your experiences at this institution, regardless of my role within the higher education community. All information you provide will be maintained confidentially and kept in a secure location. Lastly, you are welcome to stop the interview or decline to answer a question at any point. Do you have any questions before we begin?"

- Explain and provide the participant with informed consent document for him to provide verbal consent.

**Demographic Information**

1. How old are you?
2. What year are you (i.e., Freshman, Sophomore, Junior, or Senior)?
   a. Do you reside on-campus or off-campus?
3. Which ethnicity (if any) do you identify with?
4. What is your major?
5. What sport do you play?
6. How many years have you played this division I sport?
7. Would you say you are a starter or substitute player?
8. What was your injury?
   a. How did you sustain your injury?
9. How long were you unable to participate in athletic competition due to the injury?
   a. How long ago did you sustain the injury?

**Theoretical Construct: Expectations of Injured Student-Athletes**

10. Describe your relationships with teammates, coaches, and athletic trainers, prior to being injured?
    a. Describe a typical interaction between you and your teammates prior to sustaining an injury?
    b. Describe a typical interaction between you and the coaching staff prior to sustaining an injury?
    c. Describe a typical interaction between you and the athletic training staff prior to sustaining an injury?

11. What were your initial thoughts following your athletic injury?
    a. How did you think your teammates would respond to your athletic injury?
    b. How did you think your coaches would respond to your athletic injury?
    c. How did you think your athletic trainers would respond to your athletic injury?

12. What expectations of support did you have for your teammates, coaches, and athletic trainers?
    a. What actions or behaviors were you hoping to see from your teammates?
    b. What actions or behaviors were you hoping to see from your coaches?
    c. What actions or behaviors were you hoping to see from your athletic trainers?
    d. If none, why do you think you had no expectations of support providers?

13. How have your expectations for support changed as a result of your athletic injury?
    a. Did teammates, coaches, and athletic trainers meet your expectations of social support following your athletic injury?
    b. Were there any actions or behaviors by teammates, coaches, or athletic trainers that surprised you?

**Theoretical Construct: Communication from Injured Student-Athletes**

14. How did your teammates, coaches, and athletic trainers discover that you were injured?
    a. What information did you provide regarding your injury to your teammates, coaches, and athletic trainers?
    b. How did you determine what information would be included or excluded from conversations with teammates, coaches, and athletic trainers?
    c. Did you attempt to play through your injury or hide your injury from others? Why/why not?
15. Can you tell me about the typical interaction between you and your teammates during the time in which you were injured?
16. Can you describe a typical conversation between you and your coaches during the period you sustained your athletic injury?
17. How would you describe the communication between you and your athletic trainers during your athletic injury?
18. Did you provide feedback to your teammates, coaches, or athletic trainers on how their support affected your emotional well-being during your injury?

**Theoretical Construct: Perceived Contribution of Support**

19. What actions or behaviors did your teammates, coaches, and trainers display that you felt positively contributed to your emotional well-being?
20. What actions or behaviors did your teammates, coaches, and trainers display that you felt negatively contributed to your emotional well-being?
21. How did the support you received or did not receive from your teammates, coaches, and athletic trainers contribute to your overall emotional well-being?
    a. Of the support providers, whose support did you value the most or find most beneficial?
22. Were there any extenuating circumstances that might have affected the social support you received from teammates, coaches, or athletic trainers (i.e., coaching change)?
23. This research project focused on teammates, coaches, and athletic trainers, but were there other people who you felt were essential to the support you received throughout the injury process?
24. Were there any other areas or items that you were hoping to talk about that I did not ask a specific question?

**At Conclusion of the Interview**

- Thank student for participation
- Provide follow-up information concerning transcript verification (member check)

## Appendix B: Recruitment Email to Participants

Date:

Dear Student-Athlete,

I am a former division I athlete, pursing a doctorate in Higher Education and currently researching the topic of social support for injured student-athletes. Through this research study, I would like to understand injured student-athletes expectations, communication styles, and perceptions of support provided by their teammates, coaches, and athletic trainers. Your personal experiences as an injured student-athlete are very important to me and make you an vital part of the study. Your participation is essential and will not only add to the existing literature, but also help others to better support injured student-athletes.

As a former athlete, I fully understand the importance of discretion, so I would like to assure you that our discussions and conversations will be strictly confidential. Furthermore, in order to protect your identity, at no time will your name, perspectives, email address, or even school name be shared with anyone else. You will also have the opportunity to review the written transcripts taken from our discussion to ensure the accuracy of the information. Your statements will then be compared with other student-athlete's perspective in order to identify common themes. Following the completion of the study, the research findings will be presented in my doctoral dissertation.

I would appreciation your support, and participation in assisting me to complete this project. In an effort to show my gratitude for your time and consideration, I would like to offer you a $10 gift card. Please let me know if you are interested in participating in the study or if you have any questions. I can be contacted at vwilliam@gwu.edu.

Sincerely,

Vernon T. Williams
Doctoral Candidate

## Appendix C: Research Consent Form

Principal Investigator: Rick Jakeman, Ed.D Telephone number: (202) 994-5123
Sub-Investigator: Vernon T. Williams Telephone number: (202) 994-3722

1) Introduction

The athletic landscape is constantly changing around us and in order to best support student-athletes, research must keep up with the fast pace. This exciting research opportunity is being conducted under the direction of Dr. Rick Jakeman of The George Washington University's Graduate School of Education and Human Development (GSEHD), Higher Education Administration program. Please read this form and feel free to ask any questions that will help you decide if you want to participate in the study. Your involvement in the study is completely voluntary, and you can decide to quit at any time. Your academic or athletic standing will not be affected in any way should you choose not to take part or to withdraw at any time.

2) Why is this study being done?

Athletic injuries are inevitable in sports and can be devastating to the student-athlete's experience. This study is being conducted in order to examine the injured student-athlete's expectations, perceptions, and communication style in regards the social support provided by their teammates, coaches, and athletic trainers. Since there are few studies that focus on male, division I, student-athletes, your perspective on this subject matter is invaluable and will assist in better supporting injured players.

3) What is involved in this study?

Should you decide to take part in this study, you will be interviewed by the sub-investigator regarding your experiences as a student-athlete. The interview will be audio-taped and last approximately 45-60 minutes at a private location that is convenient for both parties. The audio-tape will then be transcribed, with all of your identifying information removed. The transcription will only be read by the sub-investigator and the participant, in order to ensure the information accurately described the student-athlete's experience.

4) What are the risks of participating in this study?

The nature of the study is designed to minimize potential risk for participants. For example, identifiable information is removed, private interview space is used, and test interviews were conducted. After conducting the test interviews, modifications were made to further explain the study and increase the student-athlete's comfort level during the interview process. Furthermore, participants have the ability to refuse to answer a question, take breaks, or completely remove themselves from the study at any point. Your refusal to answer questions or withdraw from the study in no way will negatively affect your academic or athletic standing with the institution.

5) What are the benefits to taking part in this study?

Your participation in this study will not directly affect your student-athlete experience. However, you will help shape the experience of future athletes by ensuring they receive adequate and appropriate support needed to overcome athletic-injury.

6) What are my options?

You can choose to participant or decline to participate in this study. Additionally, if you decide to participate now and later change your mind, you can remove yourself from the study at any time.

7) Will I receive payment for being in this study?

There is no compensation for your participation in the interview. However, you will be given a $10 gift card as a token of appreciation for your support of this study.

8) How will my privacy be protected?

The records and any identifiable information from this study will be kept strictly confidential. Participants will be assigned a pseudonym to ensure privacy. If you decide to take part in the study, all information that could be linked to identify you will be removed from the audio-taped interview transcripts. The sub-investigator will maintain the only list matching you to your pseudonym and that list will be shredded after publishing the final results of the study.

9) Problems or questions

The Office of Human Research at The George Washington University can provide additional information about your rights as a research participant. Should you choose to contact them, they can be reached at (202) 994-2715. Additional information about this study can be obtained by contacting the sub-investigator, Vernon T. Williams, at email vwilliam@gwu.edu or telephone number (202) 994-3722.

10) Prompt for Participant Verbal Consent

By providing your oral consent prior to being interviewed, you will confirm that the study has been explained to you, that you have been given the time to read this document, that your questions have been satisfactorily answered, and that you voluntarily agree to participate.

Investigator Statement

I certify that the participant has been given adequate time to read and learn about the study and all of their questions have been answered. It is my opinion that by their oral consent the participant understands the purpose, risks, benefits, and the procedures that will be followed in this study and has voluntarily agreed to participate.

| | |
|---|---|
| Student Researcher | Date of Informed Consent |

## Appendix D: Codebook

1. Age- Age of the student-athlete at the time of the interview.
2. AT Expectation- Expectations that the injured student-athlete has of their Athletic Trainer.
3. AT Relationship during Injury- The injured athlete's relationship with his Athletic Trainers during the time he was injured.
4. AT Relationship w/o Injury- The injured athlete's relationship with his Athletic Trainers while he was not injured. This might be before or after depending on the injury time.
5. Class Year- The class year of the student-athlete (Fr., Soph, Junior, Senior, Grad).
6. Coach Expectation- Expectations that the student-athlete has for his coaches during periods of injury
7. Coach Relationship during Injury- The injured athlete's relationship with his coaches during the time he was injured.
8. Coach Relationship w/o Injury- The injured athlete's relationship with his coaches while he was not injured. This might be before or after depending on the injury time.
9. Communication- Any form of communication between the stakeholders (student-athlete, teammates, coaches, or athletic trainers).
10. Emotion- Content- The emotion of "Content" expressed by the student-athlete regarding the injury experience.
11. Emotion- Doubt- The emotion of "Doubt" expressed by the student-athlete during the injury experience.
12. Emotion- Frustration- The emotion of "Frustration" expressed by the student-athlete during the injury experience.
13. Emotion- Independence- The feeling of "independence" expressed by the athlete. May be expressed before, after, or during the injury process.
14. Emotion- Loneliness- The emotion of "Loneliness" expressed by the student-athlete during the injury experience.
15. Emotion- Relief- The emotion of "Relief" expressed by the student-athlete.
16. Emotion- Stress- The emotion of "Stress" expressed by the student-athlete regarding the injury experience.
17. Ethnicity- The ethnicity that the student-athlete identifies with (if any).
18. Experience Playing- The length of time the student-athlete has played their sport in college
19. Financial- Any reference made regarding financial matters.
20. Head vs Asst Coach- Any differences noted by the student-athlete between head coaches and their assistant coaches

21. Identity- Any reference made regarding the injured student-athlete's identity or how they viewed themselves.
22. Injury Cause- What caused the actually injury for the student-athlete
23. Injury Length- The length of time the student-athlete missed due to injury
24. Injury Type- What type of injury the student-athlete sustained
25. Major- The major or field of study for the student-athlete
26. Negative Behavior- Any negative behavior expressed by the student-athlete from teammates, coaches, trainers, or other support providers.
27. Other Support- Any support provider outside of teammates, coaches, or athletic trainers.
28. Play thru pain- An expression or desire to have the athlete play while feeling hurt/injured. This may be expressed by teammates, coaches, trainers, or the student-athlete himself.
29. Playing Time- Estimated playing time, either starter or substitute.
30. Reflection- Thoughts, feelings, or emotions expressed in hindsight by the injured student-athlete. In some cases, these will be life lessons.
31. Residence- Where the student-athlete lives locally, either on-campus or off-campus.
32. Sport Played- The sport the student-athlete plays for the school.
33. Teammate Expectations- Expectations that the student-athlete has for his teammates during periods of injury.
34. Teammate relationship during injury- The injured athlete's relationship with his coaches during the time he was injured.
35. Teammate relationship w/o injury- The injured athlete's relationship with his teammates while he was not injured. This might be before or after depending on the injury time.
36. Teammate Support- Positive support displayed or expressed by the injured student-athlete.
37. Unique- Any unique factors about the injury experience (i.e., promotions, number of supports, backgrounds, injury time period, etc.)

## Appendix E: Themes that Answered the Research Questions

RQ 1: How do injured, division I, male, collegiate student-athletes perceive the contribution of social support provided by their teammates, coaches, and athletic trainers?

- Theme One: Injured Student-Athletes Perceived an Increase in Support and Engagement from Athletic Trainers
    - Code: AT Relationship during Injury
    - Code: AT Relationship w/o Injury

- Theme Two: Injured Student-Athletes Perceived and Appreciated Support Providers who established a Sense of Belonging during their Recovery Process
    - Code: Emotion- Frustration
    - Code: Emotion- Loneliness
    - Code: Reflection

- Theme Three: Injured Student-Athletes Perceived and Valued Support Providers who offered forms of Positive Encouragement during their Recovery Process
    - Code: Emotion- Content
    - Code: Emotion- Doubt

- Theme Four: Injured Student-Athletes perceived their Teammates as the most Beneficial Providers of Social Support
    - Code: Age
    - Code: Class Year
    - Code: Experience Playing
    - Code: Major
    - Code: Playing Time
    - Code: Teammate relationship during injury
    - Code: Teammate Support

RQ 2: How do injured, division I, male, collegiate student-athletes express the need for social support from teammates, coaches, and athletic trainers?

- Theme Five: Injured Student-Athletes Limited their Communication as an attempt to Play through the Pain
    - Code: Communication
    - Code: Play thru pain

- Theme Six: Injured Student-Athletes were Reluctant to Speak about their Support Needs
    - Code: Emotion- Independence
    - Code: Negative Behavior
    - Code: Head vs. Asst. Coach

- Theme Seven: Injured Student-Athletes utilized Non-Athletic Support Providers
    - Code: Other Support
    - Code: Injury Length
    - Code: Injury Type
    - Code: Unique

RQ 3: What expectations for social support do division I, male collegiate student-athletes have of their teammates, coaches, and athletic trainers during periods of athletic-injury?

- Theme Eight: Injured Student-Athletes expected Assistance with Reestablishing Control and Security
    - Code: AT Expectation
    - Code: Emotion- Relief
    - Code: Emotion- Stress
    - Code: Financial

- Theme Nine: Injured Student-Athletes Expected Support Providers to Maintain the Status Quo and Treat Them like the Injury did not Occur
    - Code: Coach Expectation
    - Code: Coach relationship w/o injury
    - Code: Teammate Expectations
    - Code: Teammate relationship w/o injury

- Theme Ten: Injured Student-Athletes Lowered their Expectations of Support Providers and Internalized the Recovery Process
    - Code: Coach relationship during injury
    - Code: Identity