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Female athletes' and certified athletic trainers' psychological support

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FEMALE ATHLETES' AND CERTIFIED ATHLETIC TRAINERS'
PSYCHOLOGICAL SUPPORT

A Thesis

Presented to

The Faculty of the Department of Kinesiology

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Masters of Arts

By

Holly L. Brown

August 2006

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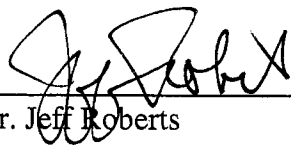
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ABSTRACT

FEMALE ATHLETES' AND CERTIFIED ATHLETIC TRAINERS' PSYCHOLOGICAL SUPPORT

by Holly L. Brown

Athletes experience various emotions when an athletic injury occurs, but they do not always have access to a sport psychologist for support. Previous research states that certified athletic trainers are in the best position to provide psychological support because of the already established athlete-athletic trainer relationship. Therefore, the purpose of this study was to qualitatively examine female college athletes' experiences of working with an ATC throughout injury and rehabilitation. Twelve college female athletes participated in in-depth, semi-structured interviews. Inductive analysis yielded several central themes, including athletic factors, response to injury, social factors, and role of the ATC. These themes are discussed in terms of relevance to the emotions experienced during injury and rehabilitation, and the role of the ATC in facilitating a more positive rehabilitation experience.

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Chapter 1

INTRODUCTION

The number of female athletes participating in collegiate sports has increased over 200 % since 1981 (Klossner, 2004). As the number of female collegiate athletes increased, the incidence of athletic injury increased as well. Athletic injuries affect the athlete both physically and psychologically, and thus there has been an increasing amount of research on emotions experienced during injury (Evans & Hardy, 1995; Ford & Gordon, 1998; Hardy & Crace, 1993; Schuer & Dietrich, 1997; Tracey, 2003). In general, studies have outlined the various theories related to the psychology of athletic injury (Ford & Gordon, 1998; Schuer & Dietrich, 1997), and athletic trainers' perceptions of the psychological aspects of athletic injury (Larson, Starkey, & Zaichkowsky, 1996). When athletes suffer their injuries, the certified athletic trainer (ATC) is typically the first to respond, and they are often heavily involved with the athletes during the rehabilitation process. Many researchers have suggested that the ATC is, perhaps, in the best position to provide psychological support because of the ATC – athlete relationship (Cramer, Roh, & Perna, 2000; Danish, 1986; Fisher & Hoisinger, 1993; Moulton, Molstad, & Turner, 1997; Tuffey, 1991).

The emotional response associated with athletic injuries was initially compared to the grief response developed by Kubler-Ross (1969). Evans and Hardy (1995) reviewed the grief response and grief process, and agreed that athletes may experience emotions similar to the grief response; however, Kubler-Ross's grief response model may be too narrow for the wide variety of emotional responses experienced by injured athletes.

Following the works of Evans and Hardy (1995), Tracey (2003) later connected the emotional response which athletes experience to an integrated model of emotional responses first adopted by Wiese-Bjornstal, Smith, and LaMott (1995). Tracey studied male and female college athletes through open-ended surveys and interviews. The athletes discussed emotions felt during the injury and rehabilitation processes through a series of three interviews. Tracey identified that the athletes experienced many emotions, and that the athletes struggled to remain positive through the rehabilitation process. Athletes focused more on overcoming the injury, rather than dwelling on their fears of re-injury or more time lost from sport. In addition, injured athletes generally viewed the medical staff, rather than a coach, as an important source of social support (Tracey, 2003).

While Tracey (2003) studied the emotional responses, Bianco (2001) examined the social support needs of athletes during recovery from serious injury. Along with the social support needs, Bianco also investigated the key sources of the social support athletes received, and the impact of that support on the athletes' recovery. The study determined that the amount of support needed varied on the amount of injury-related stress the individual athlete experienced, and that the physicians and physiotherapists were important sources of the emotional support (Bianco, 2001).

Previous studies support the importance of the ATCs' ability to recognize and understand the psychological aspects of athletic injury (Brewer, Van Raalte, & Linder, 1991; Cramer Roh & Perna, 2000; Henderson & Carroll, 1993; Kolt, 2000; Moulton, Molstad, & Turner, 1997; Tuffey, 1991). Wiese, Weiss, and Yukelson (1991) surveyed

ATCs and determined that ATCs had some understanding of the psychological aspects of injury, and the importance of addressing both the physical and psychological aspects of injuries. Larson, Starkey, and Zaichkowsky (1996) also surveyed ATCs to determine how injuries affect athletes, as perceived by the ATCs who worked with these injured athletes. ATCs observed a wide variety of psychological and emotional responses to athletic injury, which supports Wiese, Weiss, and Yukelson's (1991) findings that ATCs believed the athletic injury rehabilitation should include both physical and psychological support. However, little research has documented how much psychological support the injured athlete receives from the ATC, and how much psychological support is expected from the ATC.

Two studies assessed athletes' experiences of their interactions with ATCs. Barefield and McCallister (1997) surveyed both male and female college athletes, and found that the athletes received mostly listening support and task appreciation from ATCs. Of particular relevance to this study is the finding that the athletes strongly believed they needed their ATCs to take the time and listen to them. A study by Unruh (1998) qualitatively assessed both male and female college athletes and their satisfaction of care from the athletic training staff. Unruh sub-grouped the athletes according to sport, and whether they were high-profile (football, baseball, and basketball) or low-profile (volleyball, softball, and cross-country track), determined by the amount of media coverage and generated revenue produced. The results indicated that athletes in low-profile sports did not have a high satisfaction of the athletic training services, suggesting that the athletes in high-profile sports received better care, more time, and more support

from the athletic trainers (Unruh, 1998). Despite the two aforementioned studies, however, research is lacking in the area of college female athletes' psychological support needs and level of satisfaction with respect to their interactions with certified athletic trainers.

The lack of research on female athletes' injury and rehabilitation experiences, as well as on their expectations for psychological support from certified athletic trainers, is important because previous literature supports the existence of gender differences between male and female athletes in stress responses and coping mechanisms (Anshel, Jamieson, & Raviv, 2001; Hammermeister & Burton, 2004; Ptacek, Smith, & Zanas, 1992; Schuer & Dietrich, 1997; Stone & Neal, 1984), suggesting the importance of studying female and male athletes separately. Hammermeister and Burton (2004) determined that female athletes are more likely to seek out emotional and social support during injury than male athletes.

Female college gymnasts have been used as the primary subjects for two quantitative psychological studies. The first of these two studies is Petrie's (1992) study of the psychosocial antecedents of athletic injury. Petrie investigated the moderating effects of social support on the life-stress injury relationship. Using the Life Events Survey for Collegiate Athletes, the Social and Athletic Readjustment Rating Scale, and the Social Support Questionnaire, Petrie identified athletes experiencing higher levels of stress indicated a higher incidence of athletic injury. Petrie also found that social support moderated the effects of life stress, and possibly decreased the incidence of injury. Kolt and Kirkby (1996) also studied female competitive gymnasts and athletic injury. Using

four inventories, the Life Events Record, the Sport Competition Anxiety Test for Children, the Coopersmith Self-Esteem Inventory, and the Children's Nowicky-Strickland Internal-External Control Scale, the researchers drew similar conclusions to Petrie (1992).

The conclusions by Petrie (1992) and Kolt and Kirkby (1996) can be relevant to other sports; however, no literature has studied a wider variety of college female athletes. Further, despite Pitney and Parker's (2001) call for the increased, and appropriate, use of rigorous qualitative work in athletic training, no research has qualitatively examined the psychological support expectations that college female athletes have of athletic training staff.

Purpose of Study

The purpose of this study is to qualitatively examine college female athletes' expectations of certified athletic trainers' psychological support.

Definition of Terms

1. Certified athletic trainer: A certified athletic trainer will be defined as an allied health professional, certified by the Board of Certification, who prevents, treats, and rehabilitates athletic injuries.
2. College female athlete: A college female athlete will be defined as a female athlete participating in a university sponsored varsity sport.
3. Coping: Regulatory efforts used to maintain a desirable level of personal functioning in the face of demands on one's resources (Folkman & Lazarus, 1985).

4. Emotional support: Support provided through comfort and caring and indicating that s/he is on the support recipient's side (Richman, Rosenfeld, & Hardy, 1989).
5. Listening support: Listening without giving advice or judgement (Richman, Rosenfeld, & Hardy, 1989).
6. Long-term injury: An athletic injury that does not allow the athlete to participate in any team practice or competition for a period of two months or longer (Lawrence, 2003).
7. Physiotherapist: A physiotherapist is defined as an allied health professional that see human movement as central to the health and well being of individuals.

Physiotherapists specialize in preventative healthcare, treatment, and rehabilitation ("Allied Health," n.d.).
8. Psychological support: Support encompassing emotional support, listening support, reality confirmation, social support, and task appreciation
9. Reality confirmation: Another person who is similar to the support recipient and views the situation the same way the support recipient does, is helping to confirm the support recipient's side (Richman, Rosenfeld, & Hardy, 1989).
10. Social support: Information from others that one is loved and cared for, esteemed and valued, and a part of a network of communication and mutual obligations (Taylor, 1986).
11. Task appreciation: Acknowledging the support recipient's efforts and expressing appreciation for the work she or he does (Richman, Rosenfeld, & Hardy, 1989).

Assumptions of Study

The following are assumptions for the study of female college athletes and their expectations of ATCs' psychological support:

1. Analysis of semi-structured interviews allowed ATCs to have a better understanding of the psychological needs and expectations of female college athletes.
2. Analysis of semi-structured interviews provided insight into how ATCs can provide positive psychological support to the injured athletes, and what forms of social support are most beneficial as perceived by the athlete.
3. The college female athletes were as truthful and honest as possible when discussing their emotional responses to athletic injuries, psychological needs, and psychological support expectations.

Delimitations

This study's participants were limited to college female athletes at selected universities. All participants were 18 years of age or older. The study was also delimited to the following instruments:

1. Demographic questionnaire
2. Interview guide

Limitations

Possible limitations of this study are:

1. The athletes may have been too shy or embarrassed to discuss sensitive issues regarding psychological needs and psychological support expectations.
2. The results of this study may have also been affected by the participants' willingness to be truthful with the researcher due to a previously established relationship between the participant and researcher.
3. Because the study was conducted with athletes from two universities, the athletes' expectations of ATCs' psychological support may be specific to the athletic training staff involved with each participant. Therefore, although qualitative research does not seek to provide universally applicable results, the results of this study may not be generalizable to a wider athletic training population.

Significance of Study

The significance of the present study is to provide insight into college female athletes' psychological support needs and expectations during the injury and rehabilitation process. Qualitatively examining the experiences of college female athletes from a wider representation of sports, and gaining an in-depth, nuanced understanding of their athletic lives, will yield much needed data regarding what college female athletes generally expect from their athletic training staff. The focus on women athletes is particularly important, given that previous studies have focused on both male and female college athletes, and with a few exceptions, have not generally examined any potential gender differences (Barefield & McCallister, 1997; Unruh, 1998).

ATCs should have an understanding of the needs of their athletes, so that they may more effectively help the athletes recover from an athletic injury. This recovery must include both physical and psychological support, and for the treatment to be effective, the body and mind must work together (Lynch, 1988). Previous studies have discussed the emotional response to injury, but little research exists on the expectations of injured athletes for psychological support, and more generally on how ATCs work with injured women athletes to help them cope with injury. With a deeper understanding of the psychological needs of college female athletes, ATCs may be better equipped to provide a higher standard of care for the college female athletes by anticipating what the athlete may be experiencing, and what they expect during the often stressful injury and rehabilitation period.

Chapter 2

REVIEW OF LITERATURE

This chapter reviews the quantitative and qualitative literature pertaining to the psychological aspects of athletic injuries. First, the research on athletes' emotional responses to athletic injuries is presented. Next, research related to the role of certified athletic trainers (ATC) in providing psychological support are discussed in this chapter. The purpose of this study was to qualitatively examine college female athletes' expectations of ATCs' psychological support.

Emotional Response to Athletic Injury

A wide variety of emotions are documented in athletes when they sustained an injury (Evans & Hardy, 1995; Udry, Gould, Bridges, & Beck, 1997). Grief, identity loss, fear, frustration, anxiety, loss of confidence, and disbelief, are some of the emotions experienced by athletes when they sustain an athletic injury (Buceta, 1985; Evans & Hardy, 1995; Williams, Rotella & Scherzer, 2001; Wiese & Troxel, 1986; Wiese-Bjornstal et al., 1998). Danish (1986) summarized the impact of an injury to an athlete by stating:

In sum, the athlete's life becomes uncertain, the sense of control over oneself, so necessary for outstanding performance, is gone. S/he questions the reasons for the injury and how to prevent reoccurrence. Being injured threatens not only an athletes physical well-being, but acts as a threat to the athletes self-concept, belief system, social and occupational functioning, values, commitments and emotional equilibrium. (p.346)

Evans and Hardy (1995) reviewed literature on sports injury and grief responses. The research discussed the concept of grief, the types of loss and grief, the grief response, and how the grief response relates to athletic injury. Grief is defined as “both an experience of loss and the process of recovering from that loss” (Karl, 1987, p.641). Evans and Hardy (1995) used this definition and suggested the athlete may be able to take action to influence response and recovery. Higher-level athletes, such as athletes at the collegiate and professional levels, feel more anxiety about the loss and have a grief response because of how much time and emotion invested in their sport. Grief occurs because the athlete identifies the sport as their natural environment and source of satisfaction, so when the sport is eliminated due to the injury, the injured athlete is likely to experience grief. When the injured athlete becomes the spectator, rather than having the power to contribute to the team, the athlete feels a certain degree of powerlessness (Ermler & Thomas, 1990) in addition to the other aforementioned emotions. Evans and Hardy (1995) also discussed the various models of the stages of grief. Evans and Hardy included a summary of the grief models adopted by Averill (1968), Bugen (1977), and Karl (1987). However, the model proposed by Kubler-Ross (1969) is most frequently seen in sport psychology literature (Udry, Gould, Bridges, & Beck, 1997).

Kubler-Ross (1969) proposed a five-stage model of grief response including denial, anger, bargaining, depression, and acceptance. The five stages of grief may be experienced sequentially or randomly. Many individuals do not necessarily experience all five stages or emotions. As Kubler-Ross (1969) stated:

These stages provide a useful guide to understanding the different phases that dying patients may go through. They are not absolute; not everyone goes through every stage, in this exact sequence, at some predictable pace. But this paradigm can, if used in a flexible, insight-producing way, be a valuable tool in understanding why a patient may be behaving as he does. (Kubler-Ross, 1969, p. 10)

Despite its usefulness, however, Evans and Hardy (1995) argued that the Kubler-Ross (1969) grief response is too narrow to apply to injured athletes. Smith, Scott, O'Fallon, and Young (1990) suggested that athletes do not experience the Kubler-Ross (1969) stages of grief and that the Kubler-Ross model was derived from a different patient population other than athletes. The injured athletes may feel the depression, anger, and tension, and many other emotions simultaneously. The emotions also varied depending on the athlete's perception of the severity of injury and the perception of the recovery time (Smith et al., 1990). Evans and Hardy (1995) also proposed that more recent grief models are more applicable to athletes. Two of these more recent models include Pederson (1986) and Weiss and Troxel (1986). Pederson (1986) proposed one of the first models for grief response specifically for an athletic injury. He proposed a three-stage model including shock/denial, preoccupation, and reorganization and attempted to incorporate the many emotions felt by an injured athlete. Later, Weiss and Troxel (1986) agreed with the three stages of emotional response proposed by Pederson (1986), but also included a fourth step. Their four-step process begins with the initial stress of the injury occurring, the cognitive appraisal of the injury and resources surrounding the stressor, the

actual emotional response of the injured athlete, and the consequences of the injury. These emotions can lead to other, often more serious, problems such as: muscle tension, insomnia, depression, decreased cognitive abilities, and non-adherence to rehabilitation if the athlete does not receive the proper support. Non-adherence to rehabilitation can also lead to possible further health complications, and possibly increase the severity of the athletic injury or bringing about new physical injuries (Udry, 1997).

Pearson and Jones (1992) attempted to better understand the emotional response to injury quantitatively and qualitatively. Pearson and Jones studied 61 athletes through the use of questionnaires and 6 athletes through in-depth interviews. This two-part study, allowed the researchers to collect both statistical and descriptive data. An emerging theme was frustration at the time of the initial interview due to the occurrence of the athletic injury. Frustration was followed by a range of emotions throughout injury rehabilitation based on the injured athletes' perceived pain and perceived success of the rehabilitation. The researchers documented not only the various emotions these athletes experienced, but also that the athletes were in agreement that help from a professional (sports psychologist, physiotherapist, etc.) was beneficial throughout the injury and rehabilitation process. Four of the six athletes that were interviewed believed that sports medicine professionals did indeed affect their emotional status and rehabilitation adherence.

Udry, Gould, Bridges, and Beck (1997) specifically looked at the emotional responses associated with a season ending athletic injury. Twenty-one elite athletes were qualitatively studied over a five-year period. Udry et al. described the injured athletes'

responses in four different themes. These four specific themes were: injury processing, emotional upheaval/reaction, positive outlooks/coping attempts, and other. The injury processing differed from other relevant literature, and identified that the athlete begins to process the injury and the severity at the first feeling of pain. The emotional upheaval/reaction lead to six higher-order themes including emotional agitation, vacillation of emotions, emotional depletion, isolation/disconnection, shock/disbelief, and self-pity. These higher order themes emerging from this study supports that an emotional response to an athletic injury will vary from athlete to athlete. Some athletes may experience positive outlooks/coping attempts when the athletes are able to focus on future goals within their sport. By arranging the responses in this manner, Udry et al. also concluded that their results supported only the denial stage of the Kubler-Ross (1969) grief model. Udry et al. (1997) also addressed the relevance that previous literature supporting the Kubler-Ross (1969) response of denial and bargaining, appeared more frequently in literature that surveyed sports physiotherapists and clinician evaluations, rather than literature including the athletes' self account of the athletic injury.

More recently, Tracey (2003) investigated athletes' emotional response to injury and rehabilitation. Tracey interviewed 10 NCAA Division III college athletes who sustained an athletic injury at the time of injury, 1-week post-injury, and 3 weeks post-injury. Each injured athlete described the experience through a semi-structured interview with the researcher. Based on the data collected, Tracey concluded that the initial thoughts of injured athletes and the cognitive appraisal of an athletic injury greatly influenced the overall emotional response to the injury. All the emotions leave the

injured athlete confused because of how much they identify themselves as an athlete. The injured athlete, who contributed to the team prior to the injury, is left to question their role on the team and struggle with the confusion of whether they can and/or should celebrate and commiserate as a part of the team (Ermler & Thomas, 1990).

Need for Psychological Support and Interventions

Since it is reported by the previously discussed literature that there is an emotional response to an athletic injury, it makes sense that research supports the need for athletes to have psychological support throughout the rehabilitation process. Research supports that injured individuals are more mentally and physically healthy when they have a strong support system (Hardy & Crace, 1990; Shumaker & Brownell, 1984). Psychological and more specifically, some forms of social support, are important in the injury stress and coping throughout the rehabilitation process (Udry, 1997). Ievleva and Orlick (1991) stated, "it is theorized that those who have proper support through stress, can enhance their recovery" (p.27). Psychological interventions such as goal setting, positive self-talk, mental imagery, and belief can contribute to a faster recovery, personal well-being, and enhanced healing. From the athletes' responses to surveys and open-ended questions, Ievleva and Orlick concluded athletes heal faster when they took an active role in their psychological recovery by way of goal setting, positive self-talk, and mental imagery. Further research by Fischer and Hoisington (1993) and Granito Jr. (2001) also supported Ievleva and Orlick (1991) and found that psychological interventions such as goal-setting, enhanced athletic injury recovery.

Other studies suggest that injured athletes also experienced more severe emotional responses, which may lead to depression (Brewer & Petrie, 1995), further supporting the need for psychological support throughout the injury experience. Brewer, Van Raalte, and Linder (1991) stated goal-setting techniques further motivate injured athletes to utilize their energy to work toward return to participation (p.184). Brewer et al. studied physicians, rather than athletes, to determine how the athletes' psychological needs were identified and treated. The data collected from the physicians led to the conclusion that, because of the problems exhibited by athletes during injury, such as depression, anxiety, and even substance abuse, psychological interventions were necessary throughout the rehabilitation process.

In a study of ATCs, Wiese, Weiss, and Yukelson (1991) concluded that ATCs believed the psychological needs of injured athletes must be met in order to facilitate a complete rehabilitation program. ATCs completed a three-part survey to identify the characteristics displayed by athletes who successfully coped with injury rehabilitation, the intervention techniques used to facilitate coping with the injury, and what intervention strategies ATCs should know about. This study gives more insight how to facilitate successful athletic injury rehabilitation by showing awareness of the psychological needs of the injured athletes and knowing what intervention strategies may work best to aid the athlete through the emotional response of an athletic injury. However, much of the research, which is focused about the need of psychological support and interventions stemmed from accounts made by the clinicians rather than the injured

athletes' accounts of their personal experiences and what the injured athletes' perceived as their needs.

Role of the Certified Athletic Trainer During Rehabilitation

In many cases, when an athlete sustains an injury, the injured athlete does not have direct access to a sport psychologist (Cramer Roh & Perna, 2000; Kolt, 2000; Moulton, Molstad, & Turner, 1997). Injured athletes may become confused about whom they should turn toward for support. At this time, the athlete's coach may not be the best source of support, since the coach may also be coping with athlete's injury and trying to determine the role they play in the injury and in which direction to take the team without this athlete (Ermler & Thomas, 1990). Coaches studied by Rosenfeld, Richman, and Hardy (1989), felt it inappropriate to provide the psychological support to the injured athlete due to the time spent with the single athlete. The coaches' primary concern was that the time spent with the injured athlete would be unfair to the rest of the team. The injured athlete may also feel uncomfortable talking with teammates who do not comprehend athletic injury or would not be able to empathize with the injured athlete's situation. Robbins and Rosenfeld (2001) reported that social support from those the athletes work closely with has a positive effect on the stress the athlete experiences with the athletic injury.

Wiese-Bjornstal et al. (1995) stated that the sports medicine staff has the potential to greatly influence the moods of athletes during rehabilitation. Many sources cite that the certified athletic trainer providing care for the injured athlete is in the key role to counsel the athlete throughout the rehabilitation process (Barefield & McCallister, 1997;

Cramer- Roh & Perna, 2000; Ermler & Thomas, 1990; Ford & Gordon, 1998; Henderson & Carroll, 1993; Kolt, 2000; Moulton, Molstad, & Turner, 1997; Sachs, Sitler & Schiville, 1993; Tuffey, 1991). Wiese-Bjornstal and Smith (1993) stated ATCs have the primary responsibility to clearly communicate with the athlete and emphasize realistic goals and expectations of the athletic injury rehabilitation process. Most recently, Vaughan, King, and Cottrell (2004) stated “a collegiate athletic trainer’s primary responsibility is to assist athletes in maintaining optimal health” (p. 71). The athletic trainer can provide psychological support by various psychological interventions and even by simply listening to the injured athletes express their emotions and concerns (Hedgepeth & Sowa, 1998).

Barefield and McCallister (1997) determined that the ATC “is in a position to significantly affect the athlete’s psychological recovery from injury” (p. 333). The ATC fits into this role for many reasons. First, the certified ATC is often the first person to interact with the athlete when the injury occurs or directly after the injury and is most likely to hear the concerns of the injured athletes (Sachs, Sitler, & Schiville, 1993). Also, the relationship between the ATC and athlete allows the athlete to share information about both their physical and emotional concerns (Misasi, 1998). In addition, ATCs also display traits and skills necessary to successfully rehabilitate the athlete through an injury including: trust, confidentiality, non-judgemental listening, and empathy (Prentice, 2003; Misasi, 1998).

Some of the earlier literature regarding the role of the certified athletic trainer, by Tuffey (1991), reviewed previous literature to give more insight into why the

psychological aspects of injuries were so important and where exactly the ATC fit into to the holistic rehabilitation of an injured athlete. Tuffey stated the role of the ATC is to assist the injured athlete through a self-enhancing rehabilitation, so the injured athlete does not take on a negative perspective. The negative perspective and negative emotions the injured athlete experiences may impede the rehabilitation process, making the injured athlete less likely to adhere to the rehabilitation protocol. Tuffey clearly supported the role of an ATC is to become a part of the rehabilitation process in both the physical and psychological aspects.

In Pargman's *Psychological Bases of Sport Injury*, Henderson and Carroll (1993) discussed that ATCs recognize the importance of having an understanding for the psychological aspects of injuries as well as the physical. ATCs understand how important it is to realize that the athlete will suffer psychologically because of athletic injury and the ATC's role becomes one of a counselor to assist the athlete through the injury evaluation and rehabilitation process (Henderson & Carroll, 1993).

A study by Larson, Starkey, and Zaichkowsky (1996) used an adapted form of the Athletic Training and Sport Psychology Questionnaire for ATCs and determined the perceptions of ATCs and the application of various psychological interventions in athletic injury rehabilitation. ATCs believed the psychological factors of an athletic injury are important and utilized psychological interventions when working with their athletes. 47% of the ATCs felt that the athlete must be treated both physically and psychologically (Larson et al., 1996). ATCs observed negative response traits to athletic injury such as stress, anger, treatment compliance problems, and depression as some of the

psychological aspects of injury, which needed the most attention. At the time, only 54% percent of the respondents stated having taken a formal sport psychology class. Since then, the athletic training curriculums have changed to support the need for addressing the psychological aspects of an athletic injury. Larson et al. concluded that many athletic trainers are interested in sport psychology and the interventions they may use to facilitate positive athletic injury rehabilitations.

Moulton, Molstad, & Turner (1997) suggest that the large majority of ATCs, 79% believed that counseling student athletes was necessary and a requirement of their position. Most ATCs believed their position included the role of counselor and that the role was more than simply prevention and care of athletic injuries. However, of the ATCs surveyed, 86% felt more comfortable counseling in regards to an athletic injury, when compared to counseling athletes' personal problems. While most of the ATCs believed counseling was one of their unstated roles, only 36% felt they had adequate training to facilitate the counseling interventions. Since then, athletic training education programs have changed to include more diverse psychology and sport psychology requirements, as suggested by the National Athletic Trainers' Association.

Other studies have also addressed the concept of integrating athletic training and sport psychology by ATCs. Ford and Gordon (1998) further supports the study by Evans and Hardy (1995), in which athletes experience a variety of negative emotions and behaviors. Ford and Gordon also found that certified athletic trainers show an interest in gaining more knowledge on how to facilitate psychological interventions. The research stated: "trainers/therapists not only should anticipate such emotional and behavioral

responses but also should attempt to prevent these reactions from disrupting rehabilitation”, giving further support to the counseling role of an athletic trainer (p. 90).

The ATCs’ role becomes one not only to treat the athlete physically, but also psychologically. Therefore, it becomes important for the ATCs to become knowledgeable about both aspects of athletic injury (Hedgepeth & Sowa, 1998). The ATCs’ support becomes an integral and valuable part of a successful rehabilitation of an injured athlete. Characteristics such as attentiveness and motivation can be further nurtured and further developed by the ATC due to the relationship between the athletic trainer and athlete and the role of the ATC (Ford & Gordon, 1998).

Athletes’ Expectations of Certified Athletic Trainers During Rehabilitation

There is little research of what is expected of an ATC by athletes, especially during the time of an athletic injury and rehabilitation. A study by Barefield and McCallister (1997) attempted to identify athletes’ expectations of social support from their ATCs, and which types of social support the athletes actually received. The authors surveyed 84 NCAA Division I athletes with an instrument consisting of 24 5-point Likert scale questions. The instrument provided information about the 8 types of social support, first proposed by Richman, Rosenfeld, and Hardy (1993) followed by questions to the injured athlete regarding each of the eight types of social support. The eight types of social support include listening support, emotional support, emotional challenge, reality confirmation, task appreciation, task challenge, tangible assistance, and personal assistance. The definitions of each of the eight types of social support can be found on pages 5 and 6. Barefield and McCallister (1997) found that athletes received mostly

listening support and task appreciation and also that the athletes expected to receive these two types of social support (listening support and task appreciation) most from ATCs more than the other types of social support. Barefield and McCallister (1997) concluded by stating “the most important and applicable findings from this study relate to the athletes’ expectations, particularly when we consider that those expectations often arise from the athletes’ needs” (p. 336).

Unruh (1998) completed a study similar to Barefield and McCallister (1997); however, Unruh (1998) focused on the overall satisfaction of ATCs from their athletes, rather than only the psychological support aspects. A total 342 college athletes answered questions regarding their overall satisfaction of the services rendered in the athletic training room. Unruh found that the satisfaction of the athletic training services, relied heavily on whether the athletes were participating in a high-profile versus a low-profile sport, and he concluded that those athletes in the low-profile sports were less likely to be satisfied with the services they received. Meanwhile, the high-profile sport athletes showed satisfaction of the athletic training services provided in their athletic training room, suggesting that the care the athletes receive varied on which sports are seen as more important.

Robbins and Rosenfeld (2001) described athletes’ expectations of ATCs for social support. Athletes reportedly felt more satisfaction with support coming from their ATCs rather than coaches. The ATCs were seen by the athletes as the primary source of support and document the listening support, task challenge, task appreciation, and emotional challenge support as most influential and beneficial during the rehabilitation

process. However, a limitation to this study, as documented by the researchers is, the inconsistency of how much support each ATC provides.

Summary

The literature in the areas of emotional response to injury, need for psychological support and interventions, athletes' expectations, and the role of the ATC, have been researched comprehensively. The study of college female athletes' expectations of ATCs' psychological support is an attempt to unite the relevant areas of research. Because of the increased participation and injury incidence in sport, it is important for the ATC to understand the psychological impact of the injury, in addition to the physical components of the athletic injury. With a better understanding of the athlete's expectations, both the physical and psychological needs can be addressed and set a higher standard of care for the college female athletes.

Chapter 3

METHODS

The purpose of this study was to qualitatively examine college female athletes' expectations of certified athletic trainers' (ATC) psychological support. This chapter describes the participants who were included in the study, and outlines the interview methods that were used in the study. Finally, the data analysis procedures, and the criteria used to establish academic rigor in the study are discussed.

Participants

The participants for this study were recruited from two San Francisco Bay Area universities, and represented a variety of female varsity sports, including basketball, cross-country, track, gymnastics, softball, soccer, water polo, and volleyball. More specifically, participants included 12 athletes, 18 years of age or older, who had sustained an athletic injury within the past two years which precluded them from participating in their sports for two months or longer, and were recruited for participation in person. The athletes were selected to allow the researcher access to the participants for the interview portion of the data collection process.

All participants completed a consent form approved by San Jose State University's Human Subjects Institutional Review Board. After consenting to participate, the participants completed a brief demographics questionnaire (Appendix A) prior to the interview. Participants were told that the general purpose of the study was to gain a better understanding of their injury experiences, and what their expectations were in terms of psychological support from the ATC. The number of participants is consistent

with the previous qualitative research in sport and exercise psychology and athletic training (Ford & Gordon, 1998; Kimball & Freysinger, 2003; Pitney, Ilsley, & Rintala, 2002; Tracey, 2000). The final number was determined when saturation of information occurred (Lincoln & Guba, 1985; Seidman, 1998). Saturation, as defined by Lincoln and Guba (1985), is the point at which the researcher determines that no new, relevant information is emerging during the interview sessions.

Bracketing Interview

Prior to the first participant interview, an expert in qualitative research, who also has a familiarity with the research on athletic injury and sport psychology, conducted an in-depth bracketing interview with the researcher using the interview guide. The bracketing interview has several functions. First, it aids the researcher in determining his or her biases on the topic of study. While bias is inherent in qualitative research (Sparkes, 1998), the bracketing interview allows the researcher to account for it so that it does not drive the data analysis process. Bracketing interviews also help the researcher identify any sections of the interview guide that need to be adjusted. Finally, the bracketing interview allows the researcher to experience what participants might feel during the interview process, and thus be better prepared for potential emotional moments that might occur during the interview sessions (Dale, 1998). In the case of this study, the bracketing interview helped the researcher prepare for several sensitive issues that might, and in fact did, arise, such as difficulties coping with injuries, and negative feedback from significant others and coaches.

Participant Interviews

Semi-structured interviews were used to collect the data (McCracken, 1988). Each interview was conducted face to face with the researcher in a setting that was comfortable and convenient for the participant. The semi-structured interview was created by closely examining previous literature relevant to the topic of athletes and psychological support. The interviews lasted between 1.5 to 3 hours, allowing for the athlete to fully comment on their athletic injury experience and expectations of the ATC. In two cases, subsequent follow-up interviews were conducted based on additional questions that were raised during the interview process, and due to sensitive issues that were raised, but not fully discussed, during the initial interview.

All of the interviews were tape recorded using standard audio recording equipment, and transcribed verbatim immediately following the interview. After the interviews were transcribed, member checks were conducted, which involved sending a copy of the interview to each participant to review and to add any additional comments they may have. This process also allowed the participants to verify the accuracy of the transcription and any observations made by the researcher (e.g., body language, etc.) As Sparkes (1998) noted, member checks are the most crucial technique for determining credibility within qualitative research because they help ensure credibility by assuring accuracy of the data collected. Rose and Jevne (1992) also stated that that member checks were crucial because “participants can give feedback as to whether the data, or the emerging theory was congruent with their experience” (p. 317). As previously stated, the questions for the semi-structured interview guide (Appendix B) were drawn from

previous literature relevant to the topic of athletes and psychological support (Barefield and McCallister, 1997; Richman, Rosenfeld, & Hardy, 1993). The semi-structured interviews included open-ended questions, as well as follow up probes that were also used to further investigate the topic and allow participants to elaborate on any areas that became salient during the interview (McCracken, 1988). During the interviews, each participant was asked to retrospectively reflect on their athletic injury, their relationship with the ATC, and their overall psychological experience of the athletic injury and rehabilitation. Participants were also asked questions about the kind of support received during the injury and the rehabilitation process, and more specifically, if the psychological support given by the ATC met their perceived needs and expectations.

Data Analysis

The interview data was transcribed, coded, and analyzed following an overarching process of inductive reasoning (Berg, 2003; Lincoln & Guba, 1985) and thematic analysis. Each taped interview was transcribed verbatim, and once a member check was performed, the researcher carefully read each interview to become more familiar with the data collected (Berg, 2003). Each of the transcribed interviews was coded line-by-line. Small statements, called meaning units, were highlighted which led to the emergence of the raw data themes. The raw data themes were grouped using Microsoft Word software, by cutting and pasting to organize the materials. Each of the raw data themes was a separate Word document. After reviewing the raw data themes, the data was organized into separate files to group together the higher order themes.

Establishing Academic Rigor

Aside from the aforementioned bracketing interview and member checks, other measures were used to ensure academic rigor of this study, including several peer review sessions and a reflective journal (Sparks, 1998). The peer review consists of an experienced qualitative researcher reading the transcribed interview to provide feedback to the researcher (Sparks, 1998). The peer review consisted of nine hour-long meetings to help guide the researcher with the interviews. In this case, the peer reviewer has also read through all of the participant transcripts, and provided regular feedback to the researcher via track changes on the transcripts. During the sessions, the peer reviewer commented on the emerging findings, and helped identify any discrepancies and/or biases throughout the data analysis procedure (Merriam, 1988). Further, the peer reviewer prompted the researcher to identify any negative cases in the data. In other words, the researcher attempted to identify any meaning units that did not fit into the preliminary thematic structure.

The researcher also kept a reflective journal from the time of the bracketing interview throughout the data collection and analysis process. The reflective journal allowed the researcher to identify any themes that emerged, and more generally, document thoughts and thematic decisions that occurred throughout the course of the study. The reflective journal also served as a further space within which to actively search for negative cases, and constantly engage the interview transcripts and the existing theoretical and empirical research related to college athletes, injury and rehabilitation, and certified athletic trainers. All of the functions of the reflective journal helped to

establish academic rigor in the study by adding to the overall audit trail (Lincoln & Guba, 1985), or the tangible trail of decisions that brought the data from a large collection of small meaning units to the final overall thematic structure (Sparkes, 1998). The above methods discussed should satisfy criteria for academic rigor.

Chapter 4

RESULTS AND DISCUSSION

The purpose of this study was to qualitatively examine college female athletes' expectations of certified athletic trainers' (ATC) psychological support. This chapter begins with a presentation of brief biographical profiles of each of the twelve participants. Participants' names, and any other information that would directly threaten confidentiality, were changed. Following the profiles, the central themes, as well as several smaller sub-themes, that emerged from the inductive data analysis procedure are described in detail.

Participant Profiles:

Ali. Ali is a 20-year-old basketball player. Ali's only experience with athletic injury prior to entering college was a less severe back injury. In college, however, the injury became worse, and after receiving some treatments and exercises, she attempted to keep participating at an increased level of play of collegiate sports. Eventually, the back injury worsened into a herniated disc and she was forced to stop participating. After seeing many doctors and working with the ATCs, she saw no improvement and stopped participating with the team altogether. Not being a part of the team, with whom she had developed a 'sense of family', led her to feel alone and isolated. She is afraid that even if she recovers, she will no longer be a part of the team.

Amy. Amy is a 22-year-old starting water polo player in her final season. She sustained a labral tear in her right shoulder mid-season of her junior year. She chose to rehabilitate the shoulder and play the remainder of the season rather than have surgery.

Amy had no previous injuries before this, and felt that she would not have been able to get through the psychological aspects of injury if it had not been for another teammate, who was also coping with an athletic injury at the time.

Ann. Ann, a 20-year-old basketball player, just finished her second year of participation. Her current injury, a herniated disc, is the most severe injury that she has sustained in her sport. During her freshman year, she experienced some back pain but ignored it until it affected her daily activities. She went through rehabilitation with a physical therapist and attempted to return to sport in her second season, but again, the pain was intolerable and she went back to rehabilitation with the physical therapist. For Ann, being a part of the team, but not playing, has been the most difficult aspect of coping with the injury. She plans on continuing to rehabilitate the injury and return to play basketball next year.

Kelly. Kelly is a gymnast in her third year. She is 19 years old, and has participated in the sport since age 5. Kelly dislocated her patella in a tumbling pass on the floor exercise in pre-season of her sophomore year. She managed to rehabilitate the knee and compete on bars for the last two competitions of the season, including the conference meet. Then, in the pre-season of her junior year, while practicing on the balance beam, her patella dislocated once again. This time, she chose to go home to have surgery immediately. Being injured, Kelly felt ignored and alienated by her coach, and described that feeling as one of the most difficult aspects of the injury to overcome. She continues to rehabilitate, however, and is planning on competing in all four events next season.

Kristen. Kristen is 22 years old, and no longer participates in softball. She chose to stop playing her sport so that she could further pursue her academics, and also to prevent further damage to her shoulder. Kristen's situation was unusual, because not only was she a collegiate athlete, but also an athletic training major. She discussed that she sometimes felt ignored by the ATCs, perhaps because they believed that she had enough athletic training knowledge to help and rehabilitate herself. She is graduating and is eligible to take the Board of Certification Exam.

Kristi. Kristi is a 21-year-old gymnast who suffered two major back injuries. First, she suffered two spondylolysis' (vertebral fractures), only to return to her sport and fall from the uneven parallel bars, resulting in another serious athletic injury. Again, she returned to her sport to participate on both the uneven parallel bars and vault during the same season as she had endured the injuries. Having another injured teammate, with whom she was able to commiserate, who helped her cope through both of her injuries, especially with her feelings of isolation from the team.

Lisa. Lisa is a 23-year-old, fifth year senior who no longer has collegiate athletic eligibility, but who continues to play basketball at a higher-level. Lisa was a starting point guard on the basketball team and suffered from numerous injuries and ailments, including a dislocated finger, a cartilage injury in her knee, and a serious staph infection. Lisa felt frustration associated with the injuries, but had a positive outlook on the situation and a desire to use the time to learn more about the game. With her ATCs, and a hard work ethic, she was able to rehabilitate and return to her sport her senior year.

Mary. Mary is 22 years old, and no longer has collegiate athletic eligibility with her sport, volleyball. A dislocated, and fractured thumb, as well as mononucleosis, ended her participation in her junior year. She attempted to attend as many practices and games as she could, however, and she watched her role on the team change from a possible starting player to more of a managerial role. She eventually finished her rehabilitation and successfully competed her senior year.

Samantha. Samantha, a 21-year-old water polo player, starts at the 2-meter position. She strongly identifies herself as a water polo player, and struggled psychologically with three major injuries in her collegiate career. Her injuries include two hand fractures, one of which required surgery, and a torn anterior cruciate ligament in her knee. Samantha isolated herself from her teammates because she felt that the uninjured players were not able to empathize with her injury. Her visits to the athletic training room helped her cope with her injuries through conversations with the ATC, and another athlete who was also recovering from knee surgery. She is currently playing water polo as a fifth-year senior.

Stephanie. Stephanie, a 20-year-old track athlete and cross-country runner, has participated in track since elementary school. After choosing her college for education rather than sports, she learned that her school would be adding a varsity track program. Filled with excitement, she began training with the cross-country team until suffering from a severe case of Achilles tendonitis. She had never sustained such a debilitating injury, but coped with help from her ATC, who maintained a positive relationship and outlook through the rehabilitation. She is now competing this track season, pain-free.

Tiffany. Tiffany is a gymnast. She is 21 years old and is participating in her senior year. Tiffany was highly influenced in her gymnastics career by her parents, and felt even more pressure from her coach. She sustained a cartilage injury in her knee during warm-ups in a mid-season meet. She was able to finish that season, but she then had surgery. Due to the intense feelings of sport-related stress, as well as general life-stress, Tiffany used bulimia as a way to cope. Even though the ATC was unaware of the illness, she depended heavily on the psychological support she received from the ATC inside and outside of the athletic training room. She has been through counseling, and now has control of the bulimia and stress in her life. She is currently back competing with the team.

Thematic Analysis

The thematic analysis included the analysis and organization of data into raw data themes, higher order themes, and general categories. The themes and categories are the basis for results and conclusion. The *raw data themes*, which emerged from the interviews, were organized into *higher order themes*. The higher order themes were then organized into four general *thematic categories*.

Raw Data Themes, Higher Order Themes, and General Categories

The *higher order themes* included: 1) athletic factors, 2) response to athletic injury, 3) social factors, 4) role of the certified athletic trainer. Within Table 1, the number in parentheses next to each raw data theme specifies how many athletes were represented within that theme.

Table 1

Themes and Categories

Raw Data Themes	Higher Order Themes	General Categories
Enjoyment (12)	Desire to Play	Athletic Factors
Family influence (8)		
Competition/winning (6)		
Improvement in skills (5)		
Socialize (1)		
Unable to explain (1)		
Athletic identity (4)	Athletic Identity	
Physical descriptions (12)	Physical Description	Response to Injury
Frustration (12)	Psychological Response to Injury	
Depression (3)		
Feeling helpless (6)		
Letting down (3)		
Avoidance (8)	Coping	
Empathy (9)		
Desired conversation (3)		
Self-motivation (10)		
Sources of social support (12)	Social Support	
Similar situations (7)		
Support that helped (12)		
Feels like a job (5)	Components of College Athletics	Social Factors
Increased training (8)		
Fear of loss of status (1)		
Fear of loss of scholarship (1)		
Sense of family (2)		
Feeling of Isolation (5)	Perception of Coaches' Response	
Negative parental reactions (2)	Parental Response	
Positive parental reactions (5)		
Social comparison (12)	Social Components	
Perceived role on team (6)		
Past experiences (3)	Past Experiences	Role of ATC
Lack of specified ATC (1)		
ATC and knowledge (7)	Role of ATC	
ATC as counselor (6)		
ATC as friend (4)		
Perceived effort by ATC (8)	Perceived effort	
Lack of effort by ATC (6)		
Showing concern (12)	Expectations of ATC	
Demonstrating knowledge and skills (4)		
Injury as mediator for expectations (3)		

In the following sections, general thematic categories are presented, as are the minor sub-themes. In qualitative research, there is usually some level of relationship among themes, regardless of what phenomenon is being investigated. Further, although the purpose of this study was to examine college female athletes' expectations of psychological support from ATCs, their injury and rehabilitation narratives invariably included references to many other factors as well.

Athletic Factors

The first category of athletic factors refers to how the athlete began participating in their sport and what drives them to continue, even when they are forced to deal with injuries. Two higher order themes emerged including: 1) desire to play and 2) athletic identity.

Desire to play. The higher order theme of desire to play represents the myriad of reasons why the athletes participated, or desired to participate, in their sport, including the times in their lives when they sustained injuries. Whether the athlete began participating because of a parents' or friend's influence, all of the athletes discussed that they felt a sense of enjoyment or fun in participating in the selected sport. Coakley (2004) states the primary motivation for kids playing sport is fun, and the participants in this study were no different. However, the participants did have other motivations. Six of the athletes considered themselves strong competitors and noted that they really enjoyed winning, while five of the athletes described how they noticed an improvement in their skills and eventually decided to continue participating to further their talents.

Kristen further elaborated that her sport allowed her to spend time with friends, sport provided a safe place to socialize when she was younger. In contrast, although Tiffany was motivated only by her enjoyment of the sport, she also viewed her sport participation as a means of attaining a college education. Ann was unsure of how to explain why she played or what kept her motivated to play, and she shared her reasoning for wanting to play basketball, even during an injury:

There's just something inside me. I want to play. I don't want to say that I don't feel like a whole person, which is not true for me because I can focus on other things and be fine, but when I watch my team play something just burns inside me to get out there again. I really want to play. I don't know how to explain it, it's just hard to explain but I just really want to play.

The strong desire to participate in sport and the will to return to play after injury, both as adolescents and, more recently, college athletes, what most of the athletes expressed is consistent with research by Podlog and Ecklund (2006). Podlog and Ecklund interviewed athletes about their motives for returning to sport, and found that most of the athletes loved the sport, enjoyed the competition, and wanted to improve their skills to become even better.

Athletic Identity. For the women athletes in this study, college athletics have played a central role in their lives, regardless of why they were participating. Sport was often the athletes' primary interest, and at times consumed their lives, leaving no room for other activities. Samantha simply stated that she saw herself as a water polo player, and not 'Samantha,' an identification that caused her a great deal of emotional distress when she was injured. Tiffany also discussed how the sport dominated her life and her self-identity, and stated, "It was totally it! I would sleep, walk, and talk gymnastics."

Another gymnast, Kelly, shared her thoughts about how important gymnastics is to her, and how that has made it difficult to quit, even after her numerous serious injuries:

I think about it all the time, about quitting, but how can I quit? After all, I've invested so much into this and I've done it for so long, that I just can't stop doing it. I don't know how to (quit). What would I do if I didn't have gym, you know? I don't know who I'd be without it.

As discussed by Brewer, Van Raalte, and Linder (1993), athletic identity is a unique concept of one's self. Heil and Fine (1993) state, "an individual's identity is contingent upon his or her role as an athlete," (p.38) and the athlete experiences a major crisis when that identity is threatened or removed because of an athletic injury. The athlete is left feeling defenseless and experiences a decrease in self-esteem (Heil & Fine, 1993). For the participants in this study, the relationship between a strong self-identification as an athlete and emotional stress during periods of injury and rehabilitation was clear. Once the athletes sustained an injury and were unable to participate, their athletic identity and role on the team transformed.

Response to Injury

The thematic category of response to injury includes factors related athletes' experiences of being injured and going through the rehabilitation process, as well as their use of coping methods and social support. Four higher order themes emerged from the interviews, including: 1) physical descriptions, 2) psychological response to injury, 3) coping, and 4) social support.

Physical descriptions. Physical description refers to the athlete's description of their athletic injury. The first step in treating an athlete holistically is to understand both aspects of the injury; the physical and psychological. Often the injured athlete first must

treat the physical aspects first, before addressing the psychological issues related to an injury. Each of the interviewed athletes described their physical injury. Samantha described how her injury occurred:

I was running and my foot and my knee just hyper-extended and my foot planted and I hit the floor and my knee felt huge. I knew something was wrong but I got up to get out of the way anyway, but just collapsed again. Then that was the final blow to my knee. I felt a pop and it was gone.

Although all of the athletes described their injuries differently, and ranged from calm to highly agitated and emotional when talking about the injuries, they all discussed their awareness of being injured. In other words, all of the participants discussed the phenomenological aspects of the injury experience. For instance, Mary not only felt that there was something wrong with her thumb, but could also see the deformity of her thumb. While there was not visible deformity, Amy, Ann, Stephanie, Lisa, Emily, Tiffany, and Kristi all “knew that something was wrong,” or described the injured body part as “not feeling right.” Lisa described how her knee felt leading her to visit the certified athletic trainer:

My knee started locking up and so I'd be dribbling and going to shoot a jump shot and my knee would just buckle and I would not be able to jump off the ground...I stood there on one leg and I held onto the side of the table and I bent down and you could totally see when my knee would just give out at a certain point.

The physical description of the athletic injuries only describes part of the injury experience. Rose and Jevne (1993) supported addressing the physical aspects of injury, but also noted the need to recognize the psychological aspects as well. Daily treatments and rehabilitation can be physically challenging, but most of the athletes agreed that the psychological aspect of injury was the hardest part of the athletic injury to overcome.

Wiese, Weiss, and Yukelson (1991), expressed that ATCs did indeed believe that the physical aspects of injury must be taken care of but that also psychological support should be intertwined with the physical treatments.

Psychological responses to injury. Psychological responses to injury include descriptions by the interviewed athletes about what they thought and felt during the time the injury occurred, and/or throughout the rehabilitation process. As Wiese, Weiss, and Yukelson (1991) note, the psychological response to injury is intimately related to the rehabilitation process, and by extension, the athletic training staff. Frustration was most commonly used by all of the twelve interviewed athletes to describe both what the athlete felt at the time of injury and during rehabilitation. Reasons why the athletes said that they felt frustration included wanting to be able to participate in the sport and accomplish the goals which they had worked towards for so many years, and simply, the physical limitations due to the athletic injury. Amy and Samantha felt frustration when attending practices but not participating. Uniquely, they both described the experience of sitting out of sport as “having a plate of food in front of you, but not being allowed to eat.” Finally, several athletes expressed feeling frustration when the injury was not easily, or correctly, diagnosed. This finding is particularly relevant to this study, as will become apparent in the section dealing with athletes’ recommendations for ATCs.

The athletes also discussed that besides frustration, they also experienced anger, sadness, and depression. Anger included feeling anger toward themselves for being injured, and toward the pressure or reaction from their coach and teammates. Frustration also led to sadness and depression. Three of the participants shared that they often felt so

frustrated that they were not getting better and were saddened to think that they would not be able to return to sport.

Other emotional experiences of athletic injury included feeling helpless and let down. Six of the females shared a common theme of feeling helpless during the injury. While discussing sitting out of practices and competitions, Kristi and Tiffany shared that watching their teammates compete and not scoring as well as what they could, led them to feel helpless as at times their teams struggled. Ann felt that even though she was attending practices and games, and using her time wisely to rehabilitate her injury, her lack of contribution to the team during a game, made her feel helpless. Samantha stated:

All of a sudden, I couldn't (play water polo)...I felt totally hopeless...knowing that if I was in, I would have definitely been helping my team. I didn't care if we'd win or lose, but I'd be helping my team.

Feeling helpless and not contributing to their sport led to feeling as though the injured athletes were letting down other people. Letting down, or not meeting the expectations placed upon them, included letting down the coach, teammates, parents, and themselves. Stephanie experienced her injury at the time when her roommate and also teammate was running her first cross country race, without Stephanie. Stephanie stated:

She and I talked a lot because she knew I had been training hard and we were talking all summer about our training, what we had been doing and what we were feeling and I had been feeling healthy until I got there for pre-season, and we were running together on our runs and we were a twosome...when I was hurt, it was like I was leaving here there in the dust and I felt like I was leaving her and not only letting her down but the team down.

Samantha had a similar experience and stated, "I felt like I was letting my team down. That was a huge disappointment to me."

The emotions reported by the twelve athletes are consistent with the research by Tracey (2003) on the injury experiences of skiers. Tracey noted that athletes most commonly experienced frustration, sadness, anger, and depression during an athletic injury and throughout the rehabilitation process. She stated the experience of simply watching team practices leads to the perception that the injured athlete is unable to contribute, and letting down teammates. Although the results of this study are similar to Tracey's findings, it is important to remember that just as each athlete is an individual, so is their response to an injury.

With all of the varied emotions experienced, the athletes were left to cope with their injuries. The sub-theme of coping included times when participants expressed how they dealt with the physical and psychological aspects of injury.

Coping. Coping refers to the general and nuanced ways that injured athletes dealt with the physical and psychological aspects of injury. Within this higher order theme, the athletes discussed coping mechanisms including; avoidance, empathy, desired conversation, and self-motivation, as well as similar situations and support that helped.

For some of the athletes, it seemed better to simply avoid the injury, coach, and team altogether. The strategy of avoidance relates to previous sport psychology research by Anshel, Raviv, and Jamieson (2001), who discussed avoidance coping as turning away from the stressor, in this case, the injury, teammates, or coaches. Eight of the athletes described how it felt better to simply avoid talking about the injury with anyone. They expressed that even though the coach and teammates showed concern, they had grown tired of being questioned about the injury by coaches and teammates, and having to give

the same answer because the injury was not improving, on a daily basis. Kristen and Samantha attempted to ignore people when they asked how she was doing and even began to spend more time with friends outside of her sport. Similarly to Kristen, Samantha also started to spend more time with friends outside of water polo. Samantha stated:

I stopped associating myself with the girls on my team...I really pulled myself away because no one understood. It's the hardest thing I had to go through because I was just pushing people away...I didn't want to deal with it. I didn't want anyone to help me anymore. No one could cheer me up and I didn't want to moping around people and be a downer. So, I just avoided it and isolated myself and it just made it worse.

Stephanie had a similar experience, except rather than avoiding teammates and the coach, she felt she needed to avoid her parents. She talked at length about how difficult the injury was when no one, her parents in particular, seemed to show understanding:

They weren't too concerned about my athletic career in college and it was hard to try and talk to them because they would try and persuade me to almost give it up. They didn't want to see me hurt and endangering my future of activity levels and so I almost wouldn't want to talk to them ever because I knew I wasn't going to give it up [as they suggested]...that just wasn't an option for me. It was tough but it's getting better.

Empathy refers to injured athletes' desire for understanding is part of the larger category of emotional support. As defined by Rosenfeld, Richman, and Hardy (1989), emotional support is described as behaviors that comfort an individual, and indicate to the individual that people are on their side and willing to help take care of them. Many of the athletes felt that part of the difficulty in coping with injury was the lack of empathy and understanding from coaches, teammates, and even certified athletic trainers. Nine of the

athletes discussed that their coach lacked empathy. Kristi gave the most detailed explanation of how she felt when the coach lacked empathy:

I really wanted William to understand me and know what I was going through. He's been a gymnastics coach forever, and you would think that he would understand that being an athlete, you're going to get injured sometimes. Sometimes you take a week to get over it and sometimes it takes you out of sport. He knew from my freshman year how dedicated I was and how much I really wanted to compete and really enjoying finally being a part of the team...It was really sad and really frustrating when I got hurt and couldn't do it. I really thought William would understand but he didn't know how to deal with it all. Instead of dealing with the injury and working with me to get me back, it was 'I just don't want to talk to you and do whatever you have to do to get back.' I don't know what to do to get back. I needed people to work with me. That was really frustrating and he says that once you're injured, it's a business thing and he only has time to work with the people who are competing...I can understand that during the season and with competing but there's a difference between having priorities and just being flat out mean and making them feel unwanted.

Amy explained the frustration she felt when her teammates lacked empathy toward her injury:

I told a girl on my team that I really messed up my shoulder and that it really hurt but she didn't understand that it was really, really hurt and then you get the reply 'oh yea, my arm hurts too,' and I said 'no, you don't understand, it's not just sore' ...but it really wasn't addressed that much so I was like 'whatever' and just tried to play.

At a time when there is little understanding from teammates or coaches, the athlete is more likely to cope by self- motivation. Despite having various sources for psychological support, athletes often find themselves in circumstances where they must draw from within for motivation to continue participating or to return from an injury (Udry, Gould, Bridges, & Beck, 1997). Ten of the athletes discussed using self-talk to convince themselves to push through the experience. Lisa and Ann both stated that the ATC can attempt to push you physically, be aggressive with the physical aspects of

rehabilitation, and even provide encouragement to help facilitate a better rehabilitation. However, they admitted that many times, the athletes must still push themselves. Ann simply stated “the athletic trainer can’t do it for you.” Other athletes felt that talking to themselves, and reassuring themselves that they could get better and return to sport, was effective. Emily, Samantha, Amy, and Julie all used self-talk as a means of motivating themselves. More specifically, they felt they needed to prove that they would still be a contributing factor on the team after returning from rehab, and they motivated themselves to prove to their coach or to their team that they would be able to return to their full potential. This was more evident in Samantha, whose frustration with a perceived lack of support from her teammates drove her to motivate herself, and she anticipated playing again, saying, “I’ll prove to everyone, I’ll do it. I’ll do it.”

Udry, Gould, Bridges, and Beck (1997) investigated how athletes coped with season-ending injuries, and discussed the determination and motivation of the injured athletes. Many of the athletes the researchers interviewed made statements similar to those made by the athletes interviewed for this study. In particular, the data from both Udry and colleagues’ study and this study revealed that there were many times when injured athletes report having to pull from within themselves, and use self-motivation to stay positive and recover, in addition to support given from outside sources.

Social support. Social support includes the discussion of the injured athletes’ primary sources for support, types of support the injured athletes received, and how the social support helped them throughout the injury and rehabilitation experience. Hardy and Crace (1993) highlighted the benefits of social support for injured athletes. They

found that the injured athletes seek support from others, including family, friends, teammates, coaches, and ATCs, to minimize the perception of loss. Social support enhances the treatment and rehabilitation process. Tracey (2003) gives further support to Hardy and Crace (1993), noting that athletes felt it helpful to talk about the emotions they were experiencing, regardless of who was doing the listening.

Seven of the athletes stated that they expected, and received, support from their teammates. Stephanie described her experience with her friends and teammates by stating, "My friends were good at counseling me and saying 'it's not your fault that you got injured...you can't blame yourself, it's not like you purposely did it.'" Four of those seven stated their teammates were also their roommates, which added support for the physical aspects of injury as well. Samantha stated, "My roommates were helping me a lot. Christine took me everywhere and helped me tremendously."

In addition to receiving support from friends and teammates, three athletes shared how their mothers helped them through their injuries. Mary, Kelly, and Kristi discussed how their mother visiting them at school or nurturing them helped throughout the injury. Kelly valued the time spent with her mom, doing 'mother/daughter' activities, while Mary appreciated the care packages that she received from her mother. In other cases, the athletes' boyfriends played a role in their recovery. Ali, Tiffany, Emily, and Kristen shared that their boyfriends helped by taking care of their physical injury but also showing empathy and listening to them discuss their frustration. Emily shared:

He would drive me everywhere and tell me that it was going to be okay and that I was going to get better and that I was going to get back. He had such high expectations of me to recover and that really kept me going because here's one person that thinks I'm going to recover...he encourages me all of the time to keep

going and he always says 'don't over do, don't over do it,' and I'm like 'leave me along, I know,' but it's nice to hear it.

Four of the athletes felt the ATC became their primary source of social support. By listening, encouraging the athlete, and having an understanding of what the injured athlete was experiencing, the athlete felt that it helped them cope with their emotions as well as the physical aspects of injury. Samantha expressed these thoughts:

One of the ATCs helped me out tremendously...I always felt like I could talk to her and even if I didn't want to talk about my knee, I could talk about other things and it was a good release. I was able to not worry about it. Even if water polo sucked I would keep going to the training room and just guss about anything and it helped. I think, when I got my mind off of my injury, it helped. I wasn't just going to the training room to do my exercises, I was going to the athletic training room because I could talk to someone, and I was able to work on my knee at the same time. She cared a lot and she took my mind off of it.

When discussing what type of support that helped, seven of the athletes felt it was beneficial when there was another athlete who shared a similar situation. The athletes took comfort in knowing that they could not only discuss their injury, but also that the other athlete could also empathize with their emotions. Six of the athletes had teammates who had sustained athletic injuries. Ann, took a lot of comfort knowing that another teammate, not only recovered from an athletic injury but also experienced the same injury:

She [teammate] went through the same thing that I did. She has a back injury, she had a herniated disk a couple years ago and had to take a medical red shirt the whole year and she's my best friend on the team. It was really beneficial to me because not only was I really close to her but, she's been through it. So it was someone I have an emotional connection with and I know she genuinely cares about how I'm doing and how I'm feeling.

Regardless of who provided the social support to the athlete, social support played a key role in coping with the athletic injury and returning to activity. Udry, Gould,

Bridges, and Beck (1997) cited in Folkman and Lazarus (1985) to say that coping, like the emotions experienced, are a “dynamic, complex process, involving varied and multiple strategies,” which is a reflection of this study, as the athletes reported many various and changing methods of coping with the injury

Social Factors

The thematic category of social factors includes a variety of responses to the athletes' injuries. The higher order themes that emerged from the interviews included the components of college athletics, perceptions of coaches' response, parental influence and response, social comparison, and perceived role on the team.

Components of college athletics. Once the athletes reached the goal of collegiate athletics, the perception of their sport changed. Five of the participants stated that once they started participating in college athletics, the sport was ‘more like a job’ to them because of the higher expectations, making sacrifices, training for more hours, being paid by scholarship, and the increased amount of pressure to perform to higher standards as set by the team and the coach. Tiffany described her perception of college gymnastics:

College gymnastics is more of a team sport (as compared to club gymnastics). Suddenly you're not just doing it for yourself, you're doing it for everyone else...You feel pressure from your teammates and your coaches to do well, and then you put pressure on yourself as well, a lot more stress and I'm in a lot more pain these days. It's not as fun as it used to be...Everything seems to take more energy...everyone's worried about lineups and being good.

Eight of the athletes discussed that the increased amount of training was very demanding both physically and mentally. Once they reached college athletics they were expected to train longer and all year round, lift weights, and have other commitments with the team, such as community service work.

Another component of collegiate athletics that emerged from the participants' interviews was the fear of losing their status and/or scholarship as a consequence of their injury. Mary explained that she was in line for a starting position on the volleyball team, but that she felt that it was no longer a possibility once she became injured. Status was not an important to Ali. Ali's concern was that she would lose her scholarship since she was unable to play. Without the scholarship, Ali could not afford to attend college:

I'm a medical redshirt and I don't want the head coach to have reason to pull my scholarship from me. I enjoy being in school and it's going to be hell to pay for school by myself without the scholarship. I don't think I would be in school if it weren't for the scholarship.

In relation to Ali's statement about losing her place and scholarship, Tracey (2003) mentioned this was the reason many athletes do not discuss their feelings with their coaches. As Tracey stated, "several remarked about thoughts of fear of losing their spot on the team or losing playing time and did not want to discuss the situation with their coaches for fear of being labeled as "damaged goods" (p.287).

On a more positive note, two of the athletes, Ann and Ali, shared that another component of college athletics included having a sense of family with their team. Both Ann and Ali attended college away from home and looked to their teammates and coaches for sources of social support. Ann stated "I came to school not knowing anyone so my teammates became my best friends and my family," while Ali looked to the coaches "they seemed like they wanted me to go them if I had questions...kind of like my parents away from home."

Coaches play a significant role in components of college athletics, as Ali discussed. The athletes sometimes view the coach as a parent, but this perception often changes when the athlete faces an injury.

Perception of coaches' response. Many of the athletes shared that they sensed a change in the coach once they sustained an injury. Ten of the athletes addressed the feeling of being isolated and cared for by their coach. Amy and Tiffany described the experience with the coach as feeling invisible, while Mary felt that the coach did not care about her injury because she was not a starter on the team. Kristi, who once felt that she was a coach's favorite suddenly, felt that the coach 'gave up' on her and alienated her from the team. Kristi went as far as feeling though the coach did not even want the other teammates to associate with her during her injury. She stated:

He didn't allow us (the injured teammates) to do a lot of the team stuff. He tried to isolate us from the team...a couple of the girls would listen to him and try not to talk to us, we had to make sure that outside of the gym, we were very involved with the girls, not on a gymnastics basis, but as a friends basis outside of the gym. They came around eventually.

Kristi's statement reflects the research findings of Ermler and Thomas (1990), who suggest that injury is a difficult time for the coach as well. The coach is also coping with the athlete's injury and determining what role that athlete will have, and how to adjust the team. In addition to what the athletes felt from their coaches, some of the athletes discussed their parental influences and responses to their injury.

Parental response. Generally, the parental influence on the athletes' sport participation was positive; however, in some cases once the athlete became injured, the relationship with the parents seemed to change. One of the gymnasts, Tiffany,

experienced a very negative reaction from her parents. She felt that anytime she sustained an injury, her mom would 'flip out' and not cope well with her injury. Her mother worried more about her role and status on the team, leaving Tiffany to feel an immense amount of pressure to push through and begin participating again before she was fully healed. Collins and Barber (2005) stated that the parents' perception of the importance of success in sport can cause an increase in stress, and in Tiffany's case, her parents' reactions when she was injured made recovering from her injury and her eating disorder more difficult. Ann also discussed how her parents played a large role in her participation in basketball, and further described that her general conversations with her parents changed once she became injured. As she stated:

It's not like they don't love me but it is a little different. I've been away from home for a couple years and that changes things anyway and then when basketball is taken away it changes things...I would call them and my mom and dad would only want to hear about how I did at practice that day...Our conversations revolved around basketball, so now when I call, we actually have to talk about stuff, real-life stuff instead of just basketball. So in a way, it's kind of made it better...it became a more mature relationship because I'm talking about real stuff like being injured and getting better and then just life. So I definitely think it's helped me to mature, as well as my parents.

While Tiffany and Ann struggled for support from their parents, Mary, Kristen, Kristi, Kelly, and Ali all found their parents' support to be very helpful during their injury and rehabilitation. Their mothers supported them not only psychologically, but also visited them to help them cope with the physical aspects of injury and other general activities of daily living. As the athletes coped with the injury, and the responses to their injury, they often compared themselves or their injury to those around them

Social comparison. Social comparison refers to how the injured athletes perceived themselves compared to the other athletes around them both on their team and other athletes in the athletic training room. The injured athletes became concerned with their amount of training as compared to their teammates, and the perception the teammates had of them and their injury. Stephanie shared her concerns about the teammates perceptions:

I knew that my best friend on the team was having hip problems really bad too. I couldn't allow myself not to run when I knew she was hurting just as bad. I was feeling a little frustrated after doing the temp because it made me think that they're really going to think I'm weak and I can't hold my own...I'm not really a cross-country runner and I'm already hurt.

While Stephanie worried about her teammates' perceptions, other athletes discussed their perceptions of other teammates' injuries. For example, Mary stated, "I think a lot of athletes tend to exaggerate their injuries. A lot of girls are going to come in and not fake it but exaggerate their injury." Emily shared her concern of injury in relation to work ethic, "I had second thoughts about working hard because I felt like I work my ass off but everyone else kind of didn't and that's why I got hurt and they didn't." Amy and Samantha made similar comments. Amy stated the injury was especially difficult when the other athletes "are out there and came back from knee injuries or a number of things, so they're like 'I came back, why can't you?' This comparison to their teammates leads to the discussion of their perceived role on the team and how it changed once they sustained an injury.

Perceived role on the team. All of the athletes coped not only with their athletic injury, but also the change in the role they played on the team once they injured. Six of

the athletes described how their injury affected their responsibilities and role on the team. Mary discussed that her injury occurred just as she was moving up the lineup for a starting position with the volleyball team. The injury quickly set her back and forced her to play 'manager' on the team, collecting up the team warm-ups, picking up the video tapes of the opponents, and providing moral support to the team during matches. Amy found herself coaching from the poolside when her injury first occurred, but as it became more evident that she would not be able to return to her potential, she slid into a managerial role on the team as well.

Kelly, voted one of the team captains after returning from her first injury, saw herself differently after her knee injury reoccurred. Her perceived lesser role left her feeling depressed and questioning whether she still had the desire to continue in her sport. Ann had similar feelings, but discussed that she felt less connected with the team. She shared this view when asked how her role has changed:

It's changed a lot. Obviously, it's a lot different when you're not with the team practicing, and you don't get to go on the road trips, you're not bonding with everyone the way everyone else has. So when they come back from a road trip, and they're talking about all the stuff that happened and they're talking about the game, everyone's talking about everything, and I can't really get on that because I don't really know what's going on. It's kind of like...you're still a part of the team, but you're really separated. You're not with them everyday and you're not experiencing everything together. I think that's a really hard part of it – feeling like you're not part of the team anymore.

The general category of social factors demonstrates how much stress an athlete experiences because of injury. The certified athletic trainer should be aware of the athlete experiences and identify when there is a need for psychological interventions.

Role of the Certified Athletic Trainer During Rehabilitation

The general thematic category of role of the ATC discusses many aspects of the ATC's role in the injured athlete's rehabilitation, including psychological support. Four higher order themes emerged, including 1) past experiences, 2) role of the ATC, 3) perceived effort, and 4) expectations of the ATC.

Past experiences. Some of the athletes who had previous injuries had significant interactions with an ATC, while others did not have a specified ATC for their sport. Ali talked extensively about working closely with many ATCs throughout her sport participation. She talked fondly of the relationships she built with the ATCs and in the athletic training room:

Those were the people I went to for a lot, for all of my aches and pains. They established really good relationships [with athletes] and they were there for me whenever I was down. I spent so much time in the training room due to my injuries and just trying to...prevent injuries from happening.

Stephanie mentioned felt that even though she had access to the athletic training room for most of her career, most of the time she did not have a ATC assigned specifically to her sport. This made her most recent injury different, because this time she had an ATC assigned to provide athletic training coverage to her sport. In the following quote, she describes the difference:

I was getting some treatment but we didn't really have an ATC at the time and a lot of people [her teammates] felt that they couldn't really go into the training room because we didn't really have someone to take care of us. So, I wasn't on a good treatment schedule like I am now that we have an ATC...It was just nice knowing that we had a person for our team and I didn't have to feel scared coming down [to the athletic training room] and I didn't have to feel stupid looking for someone to help me out because I had someone to go to and just explain the situation because I knew she would be there most of the time.

Regardless of the frequency and degree of interactions the participants had with a certified athletic trainer, all viewed the ATC as much more than just a caretaker of their physical injuries.

Role of the certified athletic trainer. A major theme that developed from the interviews was the role of the ATC. The athletes viewed the ATC not only as a knowledgeable professional that could help them with the physical aspects of injury, but also as a counselor who could, or should be able to, provide psychological support throughout the injury and rehabilitation process. Sub- themes that emerged included: ATC and knowledge, the ATC as counselor, and the ATC as friend.

According to seven of the participants, an ATC who demonstrates knowledge about their specific injury helps build more trust and rapport between the athlete and the ATC. Stephanie discussed the knowledge the ATC shared during her injury:

It made sense to me, what we were doing, warming it up and getting the inflammation down and I knew icing was key and everything that I had read independently was backed up by what she was telling me...so I had confidence in her knowledge of what to do to get better.

Two of the athletes felt the ATC demonstrated knowledge by how quickly the injury was assessed and the treatment goals were established. For instance, Emily worked with an ATC who was quick to identify injuries even when the doctors showed hesitation and uncertainty when assessing the injury. As she stated, "Even when the doctors didn't know, he knew." Kristi noted that her certified athletic trainer began establishing rehabilitation goals before she left the hospital, which assured her that she would recover and also established more trust in her ATC.

Participants also described more specifically how patient education related to the ATC and knowledge. While one athlete felt comforted that the ATC could competently explain the physical aspects of their injury, two athletes felt the ATC they interacted with failed to acknowledge their questions or and educate them on psychological aspects of injury such as the emotions they may experience or how to stay motivated throughout the injury. However, Stephanie shared that the when the ATC knowledgeably explained the injury to her, it made her explanation of her injury to her teammates more valid.

Ann and Emily also discussed their belief that education of the psychological aspects of injury could have prepared them for their experiences. Ann, for example, stated, “No one has ever said anything to me about that (the psychological aspects), which I think is almost a bigger part than the physical,” and Emily shared, “It would have been nice to know how hard it was going to be and that it would be emotional.”

Although the knowledge an ATC demonstrates is important, the athletes believed the ATC as a counselor played a larger role in their overall recovery. Stephanie clearly explained how her ATC took on the role of a counselor:

She was kind of my counselor, the only type of counselor I had. I felt pretty open with her and she as she giving me the ultrasound or massage, I would tell her that ‘this is so frustrating and I just want to run, and Tim (coach) isn’t making me feel any better about this all, and he’s making me feel stupid.’ It wasn’t my fault that it was dragging out as long as what it was, it’s just the type of injury that it was and she would definitely identify with my feelings and say ‘you’re right, it’s not your fault, and you shouldn’t feel guilty, and you’re doing everything you can.’ And having heard that from someone who knew what they were talking about definitely made me feel that my feelings were a lot more validated and that I wasn’t kind of out of my head thinking these things.

Samantha struggled with the psychological aspects of injury, and had trouble coping with the physical injury her inability to play her sport. She expressed the comfort she felt because of the ATC:

The ATC would always listen to me and she let me bitch and she let me complain and she let me get it out...Even if she was sick of hearing it, she just listened and it was such a sigh of relief...She knew how much I wanted to play, but at that point I couldn't play so I needed to deal with it. And it just felt like she was more concerned with how I was feeling even though she knew I needed the rehab, she was more concerned about what was going on in my life and how I was dealing with it.

In relation to Stephanie and Samantha's experiences, numerous sources state that the ATC is in the best position to provide the needed psychological support and to take on the role of a counselor (Barefield & McCallister, 1997; Cramer Roh & Perna, 2000; Ermler & Thomas, 1990; Ford & Gordon, 1998; Henderson & Carroll, 1993; Kolt, 2000; Moulton, Molstad, & Turner, 1997; Sachs, Sitler & Schiville, 1993; Tuffey, 1991). Moulton, Molstad, and Turner (1997) explained that the ATC is in the best position to interact with the athlete because the ATC is often the first to respond to the athlete's injury, and Misasi (1998) found that the relationship that exists between the ATC and athlete allows the athlete to communicate more openly about their concerns.

Moulton, Molstad, and Turner (1997) also describe the role of an ATC as a counselor. These researchers determined that ATCs do identify themselves as a counselor at times throughout an athlete's injury and stated:

The responsibilities of ATCs extend well beyond the care and prevention of athletic injuries. Counseling, one of the roles identified by the ATCs, was identified as a unique facet of the ATCs' responsibility (p. 149).

In addition to viewing the ATC as a counselor, four of the athletes described how they formed different types of friendships with their ATCs. In general, participants felt that the friendships were due largely to the amount of time spent with their ATC, and the fact that the lengthy period of their relationship helped them establish more trust and openness.

Ali stated that her ATC “became my best friend in a sense, like my closest girl pal because I could go in and just talk to them about anything.” Samantha also took comfort in knowing she could leave practice to get treatment and “guss about anything” with the ATC.

Perceived effort. The perceived effort of the ATCs was another sub-theme that emerged from the interview data. As the athletes saw how much effort they put forth, and how the effort was affected by their perceived status, rapport between the injured athlete and ATC was either strengthened or weakened. In other words, several athletes discussed how their status on their team, and their perceived importance, often related to how hard they felt the ATC worked with them.

Eight of the participants shared positive experiences of the times when their ATCs went beyond their expectations to help them recover. Kelly and Tiffany discussed that their certified athletic trainer took extra time beyond athletic training room hours to ensure their injuries were recovering properly. Other athletes discussed that their ATCs made extra efforts to actually drive them to doctors’ appointments and the hospital, or would take time away from paperwork to ensure the athlete was getting the appropriate attention. Extra efforts by the ATC strengthened the relationship between the injured athlete and ATC. As Kelly stated, “I felt comfortable and liked the time that was taken

outside of the gym, like going to an outside gym and working out so that I could do the specific strengthening that I needed to do.” Stephanie stated:

If you know they’re working for you just as much as you’re working for yourself...I know I can talk to her and come to her whenever, even if she’s extremely busy with paperwork, she’ll still see that I get the treatment I need.

However, six of the athletes felt that they experienced a lack of effort by an ATC, whether it was related to the amount of time taken to identify their injury, time constraints, or because of their status on the team. Lisa and Emily both expressed that they felt an ATC had dismissed their injury because they had complained about the injury for so long before it was referred to a physician or identified. Lisa stated, “I had been complaining about my knee for probably...since my sophomore year.” Emily discussed that the ATC continued to brush off the injury as a case of tendonitis until finally giving into the athlete’s request to see a physician. In addition, Ann shared that not only did she feel that there was a lack of effort by her ATC because of the amount of paperwork or how busy the athletic training room was, but also because of her perceived status. She stated, “Either they don’t care or you’re not a priority. I feel like obviously I’m not as important as other people.” Stephanie had a similar experience and stated, “I would see all of these big recruited scholarship athletes getting treatment and I wouldn’t want to take attention away from them.” These experiences led to a weakening of the trust that the athlete had for both the ATC and the athletic training room, in general.

Expectations of certified athletic trainers: Expectations of ATCs refer to the responses given by the interviewed athletes regarding what they expected the ATC to do for them, physically and psychologically. Three of the athletes discussed that their injury

experience led to the expectations they now have for ATCs. Since Stephanie did not have a specified ATC in the athletic training room for the first injury, her experience with her Achilles tendonitis developed her future expectations of an ATC. She stated:

I don't know if I really had any expectations because I hadn't really had an ATC before. I would hope she would know what she was talking about and not give me some treatment that wasn't going to do me any good...I definitely didn't have any expectations in what she could do psychologically because the year before I did not have any mental support from anyone in the training room and we were all basically afraid to come down here, whereas now, I feel like I can walk in here and be totally confident in finding my own ATC.

The athletes shared many varied responses as to what they expected from the ATCs. All of the interviewed athletes discussed how important it is for the ATC to show concern, not only for their injuries, but also on a personal level. All of the athletes shared that the relationship between the athlete and ATC can be built or strengthened by feeling cared for by the ATC. Tiffany stated, "I expect that when I go in, they ask how I'm doing in general and not just about my injury," and Kristen added, "I had a lot of expectations of them, like checking on up on me." On a psychological level, the participants expected the ATC to listen and talk to them. Each of the interviewed athletes had their own way of expressing the expectation of feeling cared for by the ATC.

Samantha best explains this expectation:

I expect someone to listen and talk to me and calm me down. Tell me what it could or couldn't be, or 'these are good signs, these are bad signs.' Prep me-tell me what to expect. Tell me it's going to hurt and then I'll do it but if you don't tell me and it hurts, then I'm going to shy away from it, but if you tell me then I'll be prepared for it.

Four of the athletes talked about their expectation of an ATC to be knowledgeable and demonstrate strong athletic training skills. As Ali phrased it, "I expect them to know the

injuries that could happen to a basketball player. I expect them to know how to tape well and just be knowledgeable of what they do.”

These expectations the interviewed athletes discussed relate directly to the findings by Barefield and McCallister (1997) and Robbins and Rosenfeld (2001). Barefield and McCallister identified that athletes expect to receive listening support from the ATCs and that the expectations often arise from their needs. Barefield and McCallister stated, “Injured athletes particularly need the ATC to take time to listen to them and they also need to know that the exercises and work they accomplish as part of their rehabilitation are appreciated” (p. 336). Further support for this study comes from Robbins and Rosenfeld. They found that athletes feel that the certified athletic trainer is in the best position to provide support and that are often the primary source of support throughout injury.

Summary

Through a qualitative investigation of college female athletes’ expectations of certified athletic trainers’ psychological support, four general categories emerged. Each of the general categories consisted of higher order themes and corresponding raw data themes. The presentation of these general categories further supported by ties to previous research on athletes’ injury experiences, ways of coping, and the expectations and the ATC.

The athletes discussed their emotions, and the ways they coped with those emotions, when faced with an athletic injury. In general, the athletes felt that their injuries were more difficult to handle psychologically than physically. Having trust and

confidence in the ATC helped them cope with the injury. Athletes' expectations of the ATC for psychological support included social support through listening, and taking on the role of counselor.

Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to qualitatively examine college female athletes' expectations of certified athletic trainers' (ATC) psychological support. From the interviews, four major themes emerged; athletic factors, response to injury, social factors, and role of the ATC. Even though the study was about the athletes' expectations of ATCs' psychological support, the expectations for psychological support were intimately woven into their overall experience. Many of the athletes discussed a variety of emotions that they experienced during the injury and rehabilitation process, the coping strategies used, and needs for psychological support. As noted throughout the results section, many of the participants' experiences coincided with previous quantitative and to some degree, qualitative research findings. The athletes discussed experiencing emotions such as frustration, anger, and depression. Coping strategies for these emotions ranged from avoiding discussion of the injury to seeking psychological support from the ATC. The athletes also made suggestions for ATCs about how to provide better psychological support.

ATCs should recognize how much the athletes valued the time and psychological support provided by the ATC. Whether the athlete had previous experiences with an ATC, and knew what they wanted going into the relationship, or whether it was the first injury serious enough to warrant a prolonged interaction with the athletic training staff, the athletes often looked to the ATC as a primary source of psychological and social

support. Many athletes expressed the importance of the social support from the ATC, especially when their teammates and coaches were not providing the social support.

Within the category of role of the ATC, particularly when athletes mentioned the counseling role, the importance of deep bonds and friendships was also evident. This finding is unique to this study, and has not been discussed at length in previous research regarding the counseling role of the ATC. There is an expected openness in the ATC-athlete relationship, but these four athletes stated they felt an actual friendship with their ATC. The athletes also referred to their ATC as 'one of your girlfriends,' and explained that they felt comfortable talking freely, even in regards to their personal lives. However, even when a strong relationship exists between the athlete and the ATC, an even deeper level of communication must be present to get to more serious issues, as seen with Tiffany and her struggle with bulimia. While recommendations for future research will be discussed in a subsequent section, it might be important to conduct further qualitative research on how ATCs view their own roles as counselors, and whether they are compelled to sometimes offer advice on issues that might be better addressed by clinical sport psychologists or other trained specialists.

Athletes' Recommendations for Certified Athletic Trainers

The athletes who participated in this study also had their own ideas of how ATCs could help the athlete cope through injury and rehabilitation. First, the athletes felt it was necessary to have trust in the ATC before the injury occurs. The ATC learning about the sport with which they are working, becoming familiar with the athletes' previous injury histories, and demonstrating general patience and understanding may facilitate better

understanding of the athlete and build a stronger rapport with the athletes. Kristi, for example, felt that it was important for the ATC to take an interest in the sport and also become familiar with the athletes' previous injury history. Kristen also felt that not only was it necessary for the ATC to become familiar with previous injury history, but it was also important to know the athlete before a new injury occurred. She realized that at times it is difficult to know all of the athletes, but by the ATC simply making an attempt, the athlete may feel more confident in the ATC, and more comfortable when approaching them with an injury and/or another issue requiring counseling.

Another suggestion from the interviewed athletes related to the issue of patient education. Many of the athletes believed the discussion of psychological aspects of injury would be very beneficial, and would have prepared them for how to cope with the emotions. Lisa shared her suggestion by saying:

I don't think a lot of athletes are prepared for that [the psychological impact of injury] and I don't think that they think it will affect them mentally. Then it hits them and they don't know how to react to it. It doesn't happen to everybody and everyone is completely different but sometimes I think athletes get freaked out and just lose it when they get injured. So...to let them know there just isn't the physical part of it, and that you'll go through stuff mentally also...that it may or may not be that easy for you.

Ann also talked about being educated on the psychological aspects of injury, especially at the time of the injury. She felt that becoming aware of the psychological aspects of injury would have made a huge difference in her injury experience, especially since she was a college freshman when the injury occurred and she had never experienced an injury of this severity.

Thus, the results of this study revealed that there is a gap between the knowledge about the psychology of injury that sport psychology professionals possess, and the knowledge of the rehabilitation process that certified athletic trainers possess. Whether sport psychology professionals are called upon more in injury situations, or whether certified athletic trainers are eventually required to take more coursework directly related to the psychology of injury, some change is obviously needed.

A final suggestion, which seemed to have the most importance throughout the entire rehabilitation process, was the athletes' desire for the ATC to show genuine concern for them as a person. The athletes shared that they were able to view their rehabilitation more positively when the ATC asked not only about their physical injury, but about how they were doing as a person. Showing genuine concern allowed for more open communication, and the athletes appreciated when this time that was taken to listen to their concerns, even when their concerns were not related to their injury. Samantha believed that just making an attempt to show care or concern along with listening, could possibly be the most important thing an ATC can do for the athlete psychologically. Samantha's belief is consistent with the research by Fisher and Hoisington (1993). Fisher and Hoisington found that 42% of the athletes they surveyed believed a 'caring athletic trainer attitude' to be one of the most successful rehabilitation strategies for the ATC (p.53).

Future Research

Although previous studies have quantitatively examined athletes' expectations of certified and athletic training students (Barefield & McCallister, 1997) and the overall

satisfaction with ATCs (Unruh, 1998), previous studies have not documented the athletes' voices in regards to their expectations for psychological support from the ATC. This study qualitatively studied 12 college female athletes and allowed them to speak about their experiences and expectations of the ATCs. As Glesne (1999) suggests, it is the power of reading the nuanced portraits of individual experiences that separates narrative-based qualitative research from other forms of research.

The results of this study clearly indicate that further research is needed in the area of ATCs and psychological support from both sport psychology and athletic training scholars. First, an interesting dynamic emerged during this study as one of the college female athletes discussed their experience of working with a male ATC, as compared to the rest of the athletes who primarily worked with a female ATC. The male ATC provided different types of social support as compared to the other athletes' experiences, such as challenging the injured athlete both physically and mentally, rather than simply providing listening support. Thus, there appears to be a need for further investigation into the potential differences in psychological support given by female versus male ATCs. Research about college male athletes' expectations of ATCs' psychological support could give insight on how ATCs may best meet the psychological needs of their athletes during time of injury and rehabilitation. Finally, as previously mentioned, further research is also warranted to ensure the ATCs have the education needed to properly counsel the athletes.

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Appendix A

Consent Form for Semi-Structured Interviews



San José State
UNIVERSITY

**College of Applied
Sciences and Arts**

Department of Kinesiology

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San José, CA 95192-0054
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The California State University:
Chancellor's Office
Bakersfield, Channel Islands, Chico,
Dominguez Hills, East Bay, Fresno,
Fullerton, Humboldt, Long Beach,
Los Angeles, Maritime Academy,
Monterey Bay, Northridge, Pomona,
Sacramento, San Bernardino, San Diego,
San Francisco, San José, San Luis Obispo,
San Marcos, Sonoma, Stanislaus

Agreement to Participate in Research

Responsible Investigator(s): Holly L. Brown

Title of Protocol: College female athletes' expectations of athletic trainers' psychological support

1. You have been asked to participate in a research study investigating college female athletes' expectations of athletic trainers' psychological support.
2. You will be asked to respond to one questionnaire. You will be asked several interview questions during a semi-structured interview session. The interviews will be audiotaped, and take place in a quiet neutral location. The interview time will be arranged at your convenience.
3. There are no anticipated risks associated with the participation in this study.
4. While there are no expected benefits associated with participation in this study, you may gain a better understanding of your expectations for athletic trainers' psychological support.
5. Although the results of this study may be published, no information that could identify you will be included. You will be referred to only by a code name of your choice.
6. There will be no compensation for participation in this study.
7. Questions about this research may be addressed to Holly Brown (408) 892-1406. Complaints about the research may be presented to Dr. Greg Payne, Chair of the Kinesiology Department at (408) 924-3028. Questions about research subjects' rights, or research-related injury may be presented to Pamela Stacks, PhD., Associate Vice President of Graduate Studies and Research, at (408) 924-2480.
8. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you choose to "not participate" in the study.
9. Your consent is being given voluntarily. You may refuse to participate in the entire study or in any part of the study. If you decide to participate in the study, you are free to withdraw at any time without any negative effect on your relations with San Jose State University or with any other participating institutions or agencies.
10. At the time that you sign this consent form, you will receive a copy of it for your records, signed and dated by the investigator.

Initial: _____



San José State
UNIVERSITY

**College of Applied
Sciences and Arts**

Department of Kinesiology

One Washington Square
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- ❖ The signature of a participant on this document indicates agreement to participate in the study.
- ❖ The signature of the researcher on this document indicates agreement to include the above named subject in the research and attestation that the subject has been fully informed of her rights.

Participant's Signature

Date

Investigator's Signature

Date

The California State University:
Chancellor's Office
Bakersfield, Channel Islands, Chico,
Dominguez Hills, East Bay, Fresno,
Fullerton, Humboldt, Long Beach,
Los Angeles, Maritime Academy,
Monterey Bay, Northridge, Pomona,
Sacramento, San Bernardino, San Diego,
San Francisco, San José, San Luis Obispo,
San Marcos, Sonoma, Stanislaus

Appendix B

Demographics Questionnaire:
Female athletes' and certified athletic trainers' psychological support**Sport:**

- Basketball
- Cross-Country
- Gymnastics
- Softball
- Volleyball
- Waterpolo

Year:

- Freshman
- Sophomore
- Junior
- Senior
- Fifth year

Age:

- 18
- 19
- 20
- 21
- 22
- 23

Appendix C
Semi-Structured Interview Guide:
Female athletes' and certified athletic trainers' psychological support

1. Tell me about your current participation in sport?
 - a. How long have you been participating?
 - b. How did you get involved?
 - c. Can you tell me what you get out of participating?
 - d. Can you tell me about any other injuries you had within your sport?
 - i. What was that like?
 - ii. How did you cope?
 - iii. Who did you talk to during that time?
2. Describe a specific experience with a certified athletic trainer before you sustained an injury.
 - a. Can you tell me about the first time you went into the athletic training room?
 - b. Describe for me the emotions you experienced when going into the training room before sustaining an injury.
3. Tell me about the athletic injury you sustained?
 - a. How did the athletic injury happen?
 - b. What was the injury experience like?
 - c. What did the certified athletic trainer do at the time of the injury?
4. Describe the emotions you experienced during the athletic injury and rehabilitation.
 - a. Describe the emotions you felt when going to the athletic training room with your injury.
 - b. Tell me about what the certified athletic trainer said to you regarding your injury.
5. Who did you expect to receive psychological support from during your athletic injury and rehabilitation?
 - a. Coaches?
 - b. Teammates?
 - c. Other? Family? Friends? Staff?
6. Tell me about your staff certified athletic trainers' role in your recovery?
 - a. What did you talk about with the staff certified athletic trainer?
7. Tell me about your expectations from your certified athletic trainer.
 - a. Only physical treatment?
 - b. Psychological support?

8. Tell me how your expectations of certified athletic trainers may have changed from the first time you worked with a certified athletic trainer.
9. How satisfied are you with the overall support given by your certified athletic trainer?
10. Is there anything else you would like to comment on regarding your athletic injury and your expectations of your staff certified athletic trainer?
11. Is there any advice you would like to give to certified athletic trainers about how to help athletes' cope with an athletic injury?