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The Long Road Back: Existential Themes of Injury Recovery

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THE LONG ROAD BACK:  
EXISTENTIAL THEMES OF INJURY RECOVERY  
BY  
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To the Dean of the School of Human Performance and Leisure Sciences:

I am submitting herewith a thesis written by Christopher Muñoz entitled "The Long Road Back: Athletes' experience of recovery from a serious injury." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science with a major in Sport Psychology.

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Dr. Duncan Simpson, Thesis Committee Chair

We, members of the thesis committee,  
have examined this thesis  
and recommend its acceptance:

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Accepted:

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Chair, Department of Sport and Exercise Sciences

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Performance and Leisure  
Sciences

### Abstract

Failure to properly address the psychological component of injury recovery can directly undermine the rehabilitation process (Cupal, 1998). There is a notable lack of research regarding the experience of recovery from a serious injury. In order to design appropriate intervention strategies to address psychological factors in injury rehabilitation, one must first understand the experience of injury recovery process. Therefore, the purpose of this study was to understand the experience of recovery from a serious injury from the perspective of the athlete. This study involved 11 collegiate or professional athletes who participated in phenomenological interviews. The interviews were then transcribed, analyzed, and analyzed for suitable meaning units. From the meaning units a thematic structure was constructed detailing the themes as they relate to the overall experience of the injured athlete. An athlete's athletic identity was found to be the greatest predictor for the psychological reaction to the injury. Frustration was found to be the most complex theme experienced in the recovery process, and fear was the most persistent. Social support seemed to be the strongest tool for mitigating and potentially eradicating the negative themes of frustration and fear.

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## CHAPTER 1

### **Introduction**

The toughest moment during my career was when I injured my wrist in 2009. You know, every player suffers injuries, it's football. But I'm sitting there at home watching the game and I'm thinking, 'Man, I wish I was out there right now with those guys,' but I couldn't. I was on IR, so I couldn't play. That was that. I kind of felt helpless at times. The team had to move on without me. That's football. I wanted to be out there running around with them, but there was nothing I could do about it. - Brian Urlacher, NFL linebacker

Injuries are an inevitable part of participation in sports. According to the National Collegiate Athletic Association's (NCAA) Injury Surveillance System (ISS), over 200,000 injuries were reported from 1988 through 2004. During the same time period, the ISS also recorded 1,400,000 exposures i.e., practices or competitions where there was a risk of injury for the athletes. The rate of injury during this period was approximately 143 injuries per 1000 exposures. Some injuries are insignificant and may only require minimal medical attention, such as assistance from an athletic trainer or a first aid provider. However, serious injuries do occur that require surgery and months of rehabilitation, such as tearing the anterior cruciate ligament (ACL). Complete ACL tears require surgery and up to a year of physical rehabilitation (therapy) before the athlete is able to return to sport (Tripp, Stanish, Ebel-Lam, Brewer, & Birchard, 2011). Severe injuries that require physical rehabilitation and possibly surgery are feared by athletes and sports organizations alike. They can afflict muscles, bones, and in some cases, the

nervous system. Due to this, athletic trainers, doctors, and other medical personnel help athletes prepare themselves to prevent injuries and rehabilitate from them. However, there exists overwhelming evidence that psychological factors can affect not only the incident of serious injuries but also the prevention and complete recovery from them (Cox, 2007). As stated by Cupal (1998), "Injury exerts a direct impact on an athlete's psychological well-being, which in turn, directly influences health, performance, and the risk of further physical injury" (p.103).

For an athlete, belief in their abilities is paramount and severe injuries can erode an athlete's self-efficacy (Cox, 2007). When athletes experience trauma to their bodies, it compromises their primary source of confidence and identity (Ford & Gordon, 1999). Furthermore research has shown that athletes can become isolated from teammates, experience a sense of loss, and have various negative emotions such as fear, anxiety, and depression (Andersen, 2001; Ford & Gordon, 1999). Therefore, in order to help the athletes fully recover, psychological interventions may be required. The psychological reactions that take place because of injury relate to and affect behaviors, cognitions, and emotions of an athlete as they begin to cope with their injury (Brewer, 1998). Traditional medical personnel that help injured athletes (e.g., physical therapists and athletic trainers) have only basic education in how to help athletes with the psychological aspect of their injury recovery.

There is a vast amount of information available in terms of physical rehabilitation, such as how to use appropriate rest intervals, strength and balance training, as well as motor unit reactivation techniques. However, with many injured athletes attempting to make a holistic and complete recovery, more research is needed regarding the

psychological component of recovery. The current protocols of rehabilitation and prevention for injured athletes primarily focus on the physiological components of injury, which creates a void where psychological interventions should be present (Mainwaring, 1993). In fact, traditional mental health professionals are not usually part of most sports medicine team (Ray, Terrell, & Hough, 1999). Furthermore, there exists sufficient evidence that suggests true “recovery” is compromised because of a failure to address the psychological factors inherent with severe injuries (Cupal, 1998). If current practices can gain a better understanding of the athletes’ experience of recovery, this process can be vastly improved. To introduce psychological aspects to recovery programs effectively, it is imperative that research is conducted that can accurately convey the experience of recovery.

True recovery goes beyond physical rehabilitation in athletes. In an attempt to understand how injured athletes are mentally and emotionally as they progress through the injury experience, numerous qualitative studies have been conducted. Narratives (Brock & Kiebler, 1994; Sparkes, 1998), semi-structured interviews (Carson & Polman, 2009; Shelley, 1998), and grounded- theory (Ford & Gordon, 1999) articles make up the majority of the literature on the emotional and mental state of injured athletes. Shelley used semi-structured interviews at different stages of the rehabilitative process to identify common themes within the perceptions of the athletes that may impact the overall recovery experience. Sparkes (1998) described how several college athletes formed their lives’ narrative around sports. For those who identify with sport, their sense of self is mostly tied to their ability to play and perform the sport they love. When the positive experiences associated with competing and playing come to an uncertain end,



psychological disruptions may develop, especially in individuals with a strong athletic identity (Ford & Gordon, 1999; Smith, Scott, & Wiese, 1990). Athletes with a strong athletic identity tend to derive most of their self-validation from performance and goal attainment. The inability to complete these tasks may lead to a “biographical disruption” (Bury, 1982; Sparkes, 1998). In some research, athletes were found to no longer identify with their own narrative or sense of self, which can elicit a wide array of negative emotional responses including depression, frustration, confusion, anger, and fear (Sparkes, 1998). While a strong athletic identity can be an athlete’s greatest strength, it also can be his or her biggest weakness, particularly in cases of injury. Once an injury occurs, the athlete must embark on a long journey of recovery; therefore, this study aims to investigate the experience of the injury recovery process.

Further available literature on the subject discusses the factors that can increase the chances of injury (Andersen & Williams, 1988; Hobfall, 1988), the reaction to injury (Peretz, 1970; Sparkes, 1998), the adherence to rehabilitation programs (Maehr & Braskamp, 1986; Brewer, 1998), and the likeliness of a successful return (Podlog & Eklund, 2006). Still, scant research has been conducted that explores the whole process of recovery. Taylor & Taylor (1997) developed the “Stages of Return to Sport” model which predicts athletes follow certain stages in terms of their mental state as they live through the injury experience. In order to investigate the experience of the whole recovery process phenomenological interviews will be used.

**Purpose**

There is a notable absence of literature that clarifies the experience of existing as an injured athlete from an existential phenomenological perspective. Therefore, the purpose of this study was to use existential phenomenology interviews to investigate the experience of the rehabilitation process. If health professionals can understand the experience of recovery, they will be better able to develop treatment protocols.

**Assumptions**

For this study, the main assumption was that the presently healthy athletes interviewed could honestly and openly recall their experience of rehabilitation to the best of their ability from the moment of injury to the moment they “felt” as though they had returned to their sport. In addition, it was assumed that the participants could efficiently and accurately communicate their responses to the researcher.

**Delimitations**

For this study, the population was delimited to adult athletes who had recovered from a serious injury, from onset to return (minimum of three months). Both male and female athletes were chosen to prevent a gender bias. Professional, semi-professional, and collegiate athletes from any NCAA level were selected as previous research (Brewer, 2001, Loberg, 2008) has suggested that the higher the standard of competitive level, the more traumatic the injury experience can be.

## CHAPTER 2

### **Literature Review**

Taylor & Taylor's (1997) model of psychological progression presents stages which athletes are predicted to follow during their full rehabilitation. Thus, the following review of literature will discuss research centered on the stages of return to sport. The following sections are (a) Psychological Antecedents; (b) Psychological Responses; (c) Rehabilitation and Coping; and (d) Psychology of Return. Psychological Antecedents are factors that may contribute to the eventual response upon injury onset. Some research suggests that psychological antecedents can increase stress, which physiologically affects the body and increases the risk of injury (Andersen & Williams, 1999; Hansen, McCullagh, & Tonymon, 1992). Thus, the section of Psychological Antecedents will focus on the theories and research that attempt to explain how said factors predispose injured athletes to a particular response or risk of injury. The section regarding Psychological Responses will examine the different reactions athletes have to severe injuries and the mitigating factors that justify the reaction. Rehabilitation and Coping literature puts forth the most emphasis on emotional states and the change in emotions from negative to positive as rehabilitation continues. The section will also explain how rehabilitation can be affected by inappropriate coping mechanisms. The Psychology of Return to sport or activity is often marked by specific emotions and anxiety. The purpose of this area is to identify what circumstances elicit successful returns and how unsuccessful or incomplete recoveries transpire.

While the literature review will be based on Taylor & Taylor's (1997) "Stages of Return to Sport Model" the model is not without its critics as Eklund and Bianco (2004) claim the individualism is removed when recovery is applied to such a broad model as it pertains to speed of progression. However, by removing a specific timetable from the model, it becomes more applicable. In addition, Gould, Udry, Bridges, & Beck (1997a) and Podlog & Eklund (2007) questioned when the "return" to sport takes place and how to qualify it as successful or not. If the individual is back to playing his or her sport but is still suffering psychologically, are the individuals truly recovered? The psychological issues surrounding the "return" will be addressed later in this chapter.

### **Psychological Antecedents**

According to Andersen & Williams (1999) personality, history of stressors, and coping resources, interact to possibly increase the likeliness of injury occurring. This section will focus on the factors that may predispose the athlete to injury and particular psychological responses.

**Personality.** Personality is important because it determines what stimuli are labeled as stressful as well as the susceptibility of the individual to stress (Andersen & Williams, 1999; Wiese-Bjornstal & Shaffer, 1999). As an example, introverted athletes may be more stressed by playing in front of a crowded stadium as opposed to an extrovert. Essentially, personality factors play a role in how much stress an athlete feels. This is important because research has shown that athletes suffering from higher levels of stress are more likely to suffer an injury (Wiese-Bjornstal & Shaffer, 1999).

One component related to personality is that of athletic identity. According to Sparkes (1998), "Athletic Identity is the degree to which an individual identifies with the

athlete role” (p.645). Brewer (1994) claimed that injured athletes primarily experience loss through some aspect of self, such as identity. Thus, the more an athlete derives his/her identity from sports, the more potential there is for psychological pathology or disruption if he/she is injured. Brewer, Van Raalte, & Linder (1993) suggested individuals with a strong athletic identity are more vulnerable and at a high risk for emotional disturbance with the onset of an injury. With a strong athletic identity often comes a strict adherence to the “sport ethic.”

The sport ethic is a series of behaviors and beliefs that may contribute to creating a risky sporting environment for athletes (Cox, 2007; Schaffer & Wiese-Bjornstal, 1999). Common practices such as playing through pain, not showing weakness, not letting the team down, and refusing to come out of the game when hurt, may increase the likelihood of a serious injury occurring (Wiese-Bjornstal & Schaffer, 1999). Particularly for males, the sport ethic can help form their masculine identity, which adds to their stress level if seriously injured (Schaffer & Wiese-Bjornstal, 1999). The following is from National Football League (NFL) linebacker Patrick Willis, who broke his hand in 2010 and continued to play with his hand in a cast. Eventually, the injury became too serious, and he was forced to miss the final game of the season:

Honestly, it would have been one time last year at the end of the season, after I had surgery. I played two games with a broken fourth metacarpal, whatever they call them bones, and it shifted so bad that the doc was like, “I can't let you play. If you play, you have a chance of breaking it even more and we would have to do this, have to do that, blah, blah, and you'd be out way longer”. That was tough for me because for the first time in my NFL career, the game was being taken from

me. I have had injuries and broken bones and times when you don't know how you could play, but I still went out there and played. For him to tell me that "we can't let you go," I just felt like they took something from me that I love so much. That is my passion; that is my heart. That was tough.

Willis clearly expresses a sense of loss, as though the game was being forcibly taken from him. Thus, demonstrating what is perhaps a strong athletic identity.

Brewer (1999) believed that there were both positive and negative consequences for acquiring a strong identification with sports. Brewer, Van Raalte, & Linder (1993) and Pepitas (1987) agree that sport participation, which leads to the development of an athletic identity, development athletic skills, opportunities for social interaction, measure their abilities, and build confidence along with a "salient self-identity, or sense of self" (p.239). Individuals, who lack another source of self-worth and self-identification, are at the most risk for emotional difficulties. When injuries occur, a biographical disruption occurs or a disruption in the narrative of an individual (Sparkes, 1998). For individuals who strongly identify with their role as an athlete, injuries can disrupt their life's narrative, which is troubling for them, especially if their narrative contains a history of injury.

**History of stressors.** Frequency of injury and stress are positively correlated (Wiese-Bjornstal & Shaffer, 1999, Williams & Roepke, 1993). The existence of chronic daily stress, such as interpersonal arguments with teammates or financial troubles, can begin to wear down an athlete and increase their level of stress over a long period of time (Wiese-Bjornstal & Shaffer, 1999). Major life stress, such as a death in the family or the birth of a child, can increase the amount of stress, good or bad, on an athlete. These

stressors may significantly influence the athlete's ability to focus on performance, thereby increasing the possibility of injury (Hansen, McCullagh, & Tonymon, 1992).

For athletes who have never had an injury before, the injury experience will be new to them, possibly making it more difficult to react appropriately (Podlog & Eklund, 2007). A recurrent injury may elicit a negative response, particularly frustration and anger unless the athlete has a positive disposition and personality. The history of these stressors may compound to manifest physiological responses; only coping mechanisms can help to reduce the effects of the stress. If the athlete cannot cope with these stressors, injury is more likely to occur (Hansen, McCullagh, & Tonymon, 1992; Hobfall, Andersen & Williams, 1998; Podlog & Eklund, 2007).

**Coping resources.** According to Andersen & Williams (1988), the physiological and somatic responses from stress may mediate the relationship between psychological stress and injury. For example, one response triggered by stress is the narrowing of the visual field, which affects the attentional focus of the athlete and may inhibit his/her ability to respond properly to relevant cues, thus, making injury more likely (Hansen, et al, 1992). Psychological stress may also cause an increase in muscle tension, which over the course of competition may increase the rate of fatigue and negatively impact coordination, further enhancing the possibility of an injury occurring. If an athlete has the resources to cope with the requirements of the perceived amount of stress, injuries may be avoided altogether. When there are no coping strategies in place, the stress may manifest itself physically, behaviorally, emotionally, and cognitively, which can affect the performance of an athlete (Andersen & Williams, 1999).

Hobfoll (1988) proposed a model that essentially states the consequences and the effects of injury are correlated to the available resources an individual has access to that promote well-being and stress reduction. Lazarus & Folkman (1984) stated that stress is the result when a person lacks or perceives they are lacking the resources necessary to meet the demands of stimuli. Lazarus and Folkman believed that stress would only manifest when a person perceived themselves as unable to cope with stimuli. Hobfoll's "Conservation of Resources" theory (COR) states that individuals who lose or lack the appropriate resources to manage stress may be at a higher risk for psychological disturbances, which may bring about debilitating functioning, resulting in injury. Essentially, those who become injured may already be afflicted with psychological stressors. According to the model, all humans strive to build and hold on to valued resources that protect us from psychological maladies. Ford & Gordon (1999) consider resources to be "objects, personal characteristics, conditions, or energies" (p.244) that allow individuals to create an environment where they feel "protected, comfortable, loved, and esteemed" (p.244). The loss or lack of resources contributes to the athlete's susceptibility to stress-related psychological afflictions. Hobfoll's COR model clearly addresses how the availability of coping resources predisposes an athlete to particular physiological responses to stress, which in turn increases the possibility of injury.

Coping resources (e.g., social support) and personal coping skills (e.g., arousal control, cognitive restructuring, etc.) are far more involved in the actual response and long-term prognosis for recovery. Therefore, these components will be discussed later in this chapter.



## **Psychological Responses**

Psychological responses to injury manifest as cognitive, behavioral, and emotional changes in the athlete (Brewer, 2001; Ford & Gordon, 1999). The cognitive responses relate to the conscious thought processes of the athlete. When injuries occur, athletes will begin to appraise the severity of the injury. According to Cox (2007), some factors that associate with cognitive appraisal include estimation of recovery time, evaluation of self-confidence, and sense of loss.

Podlog & Eklund (2007) claimed that severely injured athletes may “also experience psychological disruptions due to the severity of the injury, the associated period of rehabilitation and the perceived chances of recovery” (p.540). Researchers have attempted to identify the root causes of the psychological disruptions that may arise from injury. Peretz’s (1970) model posits that injury causes an athlete to experience loss through four distinct possible avenues: (a) loss of significant loved one or valued person, (b) loss of some aspect of self, (c) loss of external objects, and (d) developmental loss. As an example, an athlete whose injury causes him to miss a minimal amount of competitive opportunities and skill may not be as adversely affected as an athlete who tears an ACL and misses many months of competing. The ACL injured athlete may experience loss through two of Peretz’ avenues: (b) loss of some aspect of self (athletic identity) and (d) developmental loss (strength, ability, and skill). The idea of “loss” seems to be a critical component of the psychological response and appraisal of injury.

Still, several other personal and situational factors will influence the manner in which an athlete responds to an injury. Wiese-Bjornstal, Smith, Shaffer, & Morrey’s (1998) model of psychological response to sport injury lists several situational and

personal factors, as well as cognitive appraisals that help to predict the appropriate psychological response. Situational factors such as social influences/support play a crucial role in how the injury is cognitively appraised (Loberg, 2009). Athletes who receive social support (resources) will cognitively appraise the situation more positively, and will thereby have a better chance for recovery (Wiese-Bjornstal & Shaffer, 1999; Williams & Andersen, 1998,). Other situational factors including environmental factors/resources, and the location of the injury will also influence the appraisal (Loberg, 2009). Athletes who perceive they have adequate environmental resources (e.g., rehabilitation facility, competent physician, transportation) may appraise the situation favorably (Wiese-Bjornstal, Smith, Shaffer, & Morrey, 1998). Still, the ability to react appropriately and positively to injury relies heavily on personal factors.

**Personal factors.** Wiese-Bjornstal & Shaffer, (1999) subdivided “Personal Factors” into two distinct subgroups that address the injury itself and the individual. Regarding injuries, personal factors include the type of injury, severity of the injury, history of similar injury, the recovery prognosis, and the perceived cause of injury. For example, soccer players rely primarily on their legs to perform, and so an injury to their shoulder (type) may not be perceived to be as negative as it would be to a tennis player. If a soccer player tears a knee ligament, that is serious (severity) and more significant because of the physical demands of soccer. A player who has a history of tearing knee ligaments may be more susceptible to emotions of frustration (history), particularly if the prognosis for recovery and an eventual return is not positive. Sustaining an injury as a result of foul play could elicit an angrier psychological response as compared to an injury resulting from an accident (perceived cause).

The individual differences inherent in all athletes do have a strong impact on their psychological responses to stress. Wiese-Bjornstal et al. (1998) identified several psychological components that help predict our response to injury. Personality, self-perceptions and motivations, motivational orientation (extrinsic/intrinsic), pain tolerance, athletic identity, coping skills, psychological skills, history of stressors, and mood states are all psychological factors that differ from person to person. A volleyball player who is energetic, outgoing, willful, confident, properly motivated and mentally equipped to handle stress is unlikely to have the same reaction to a serious injury as a person who is arrogant, uncertain, and introverted. Therefore, an athlete's positive disposition may serve them well when recovering from an injury (Grove, 1993).

The athletic identity of an individual is only one of several personal factors described by Wiese-Bjornstal, et al., (1998) that can affect the eventual psychological response to injury. Self-efficacy, pain tolerance, and coping skills combine to determine how the athlete will perceive the injury, thereby directly affecting the response (Wiese-Bjornstal & Shaffer, 1999). Grove (1993) examined three different personality variables (pessimism, optimism, and hardiness) and found that they correlated with post-injury mood states. Mood state is a way of contextually explaining and assessing the emotions experienced by athletes when injury occurs. Grove found that pessimism, optimism, and hardiness, provided a context to explain how personality type may influence the psychological response to injury. An athletes' cognitive ability to appraise the situation is also a very important aspect related to their personality. Pessimistic individuals will only be able to focus on the negative factors surround the injury. Athletes who are optimistic

and hardy will be more likely to maintain a positive attitude and put forth the effort needed to rehabilitate and recover.

The demographics of the injured athlete are also important to consider when investigating the psychological response to injury. Factors including gender, age, ethnicity, socioeconomic status, and prior sport experience are the demographics of concern (Wiese-Bjornstal & Shaffer, 1999). Mountcastle, Posner, Kragh, and Taylor (2007) conducted a longitudinal study over 10 years to identify any discrepancy in the rate of injuries (ACL) between males and females and found that women had a higher rate of injury to their ACLs when compared to males. The age of the athlete is also of importance, as it becomes harder to heal properly as one begins to get older (Kletsas et al., 2000). Ethnicity and socioeconomic status are often indivisible and can determine the available resources for purchasing equipment (mouth guards, cleats, etc.) required for safe participation in sports. Soccer, basketball, and rugby require less equipment to safely participate in comparison to baseball, American football, and hockey. Participation in collision sports, such as American football, may be more economically challenging than participation in basketball due to the difference in equipment needs (cleats and mouth guard vs. cleats, mouth guard, pants, protective cup, gloves, and pads). Without such important safety equipment it is logical to suggest that the possibility of injury increases for those economically challenged groups. Proper equipment may help to maintain the health of an athlete.

Overall physical health is invaluable information when attempting to assess the risk for an inappropriate reaction to injury. Athletes who have a history of health problems may or may not be better prepared to handle a new medical issue; it all depends

on the other personal factors of the athlete. However, personal factors are not the only components of a psychological response as other situational factors surrounding the injured athlete may have a notable effect as well.

**Situational factors.** Wiese-Bjornstal & Shaffer (1999) deconstructed “Situational Factors” into three distinct categories: “Sport”, “Social”, and “Environmental” (p.34). Situational factors provide a context where the personal factors surrounding the injury can be applied.

*Sport.* Sport factors include level of competition, type, time in season, playing status, practice vs. game, and scholarship status. Pearson & Jones (1992), found athletic involvement (level of competition) as a top situational factor influencing the injury response; as professional athletes were found to exhibit high levels of negative mood state after being injured compared to recreational-level athletes. As possible reason for this increase stress is that professional athletes rely on their health to make a living, where recreational athletes may not necessarily be as completely invested in sport. Collision sports such as American football and rugby come with a higher incidence of injuries as opposed to non-contact sports (Mountcastle, et al., 2007), which makes athletes more prepared and less surprised when injuries occur. A track & field sprinter may be more surprised and shocked to suffer a concussion than a rugby player, simply because the type of sport they participate in does not inherently bring a high risk of head injury. For athletes in season, it is preferable to have injuries occur early in the season to allow for a chance of recovery for the post-season. High-level athletes in team sports tend to worry less about losing playing time or their starting position when compared to role players who can be replaced more easily. Scholarship athletes may not react as negatively

to injury compared to walk-on athletes who are trying to earn a scholarship, as their role on the team is secure (Andersen, 2001; Podlog & Eklund, 2007).

***Social.*** Social situational factors include influences from coaches and teammates, family dynamics, sports medicine team influences, social support provision, and the sport ethic (Schaffer & Wiese-Bjornstal, 1999). Teammates, coaches, and family members heavily influence how athletes perceive injuries (Wiese-Bjornstal & Shaffer, 1999). Adherence and belief in the sport ethic, similar to the athletic identity, can be detrimental as it promotes ideals of sacrifice and dependence (Schaffer & Wiese-Bjornstal, 1999). The injured athlete can no longer sacrifice for his teammates or coaches and, conversely, they can no longer depend on the athlete. When the injury strikes, social support is critical to the athlete (Schaffer & Wiese-Bjornstal, 1999). Athletes who see overly negative reactions from the people who surround them will have their negative mood state amplified. The provision of social support is important to mitigate negative mood state and provide optimism immediately post-injury (Pepitas & Danish, 1995; Shaffer & Wiese-Bjornstal, 1999). Allowing the athlete to feel as though they are still a member of the team may prevent their identity from completely eroding as they will still be able to identify themselves as an athlete.

***Environmental.*** Environmentally, the injured requires an appropriate location to rehabilitate, and they must be aware of their access to such a facility. A sense of helplessness follows after injuries, and not knowing where one can begin rehabilitating will only add to the negative mood state of the injured athlete (Brewer, 2007; McDonald & Hardy, 1990). The knowledge that assistance is available will aid the athlete in making a proper cognitive appraisal of the situation.

**Cognitive appraisal.** Injuries pose a threat to an athlete's self-efficacy, particularly in terms of their confidence in their ability to perform and their general self-esteem (Brewer, 1993; Cox, 2007). Cognitive appraisals will influence the emotional and behavioral responses of the athlete. As stated by Lazarus & Folkman (1984), cognitive appraisal of an injury is a "process of categorizing an encounter and its various facets with respect to its significance for well-being" (p.31). An injury appraised to be less disastrous should result in less drastic emotional and behavioral responses.

Self-esteem and self-efficacy is generally lower in injured athletes compared to non-injured athletes (Brewer, 1993), possibly because of the athletic identity antecedent. Generally, negative mood state is strongest when the injury first occurs and dissipates as recovery progresses, eventually replaced by positive mood state (McDonald & Hardy, 1990). Prior research identified common emotions exhibited directly after injury occurrence including frustration, anxiety, fear, anger, and depression (Brewer, 2001; Mainwaring, 1999; McDonald & Hardy, 1990). McDonald & Hardy (1990) discovered that the rate of mood state turnover from negative to positive strongly correlated with the perceived rate of physical recovery. Their study involved five NCAA Division I athletes which they followed for four weeks starting 24 hours post-injury. Two times per week, the athletes would come in and fill out a "Profile of Mood States" (POMS) questionnaire. McDonald & Hardy (1990) found a positive correlation between mood state improvement and rehabilitation progression.

As an athlete begins to recover physically, his/her cognitive appraisal of the situation may change as well. If the athlete perceives the situation to be more manageable and believes he/she has the coping skills to manage the injury, they may believe they can

make a complete recovery and fear is replaced by hope. McDonald & Hardy (1990) stated “the degree to which an athlete maintains negative affect, such as anger, determines the transition from incapacitation to rehabilitation” (p.262). Athletes experiencing prolonged bouts of negative mood state after the injury occurrence are only prolonging their progression to full recovery.

Interestingly, LaMott (1994) and Morrey (1997) conducted longitudinal studies on athletes who had their ACL’s surgically repaired. While they did progress from negative mood states to more positive ones, they eventually returned to a more negative mood state as their return to sport neared. This phenomenon will be analyzed further in a following section, which details the psychology of return. Still, negative mood state does seem to have a detrimental effect on the athlete, and serious bouts of negative emotions will make it difficult to begin the coping and rehabilitation process. Depression is a serious possibility when injury occurs to an athlete. Brewer, Petitpas, Van Raalte, Sklar, & Ditmar (1995) found that approximately 10 to 19% of severely injured athletes develop either serious or clinical depression. Sports medicine professionals ought to be vigilant in identifying the symptoms of depression in their patients in order to get them the most appropriate treatment from the most qualified personnel.

The emotional response to injury is a dynamic component of the psychological response, as it is influenced by cognition and it influences behavior. When emotion is harnessed and controlled the athlete is finally able to begin coping and understanding the limitations of the injury (McDonald & Hardy, 1990). Until then, behavior is dictated by emotion, which can be a detriment to a rehabilitation program (Wiese-Bjornstal, 1999).



## **Rehabilitation and Coping**

The rehabilitative process can only begin when the athlete has accepted the situation and successfully navigated the initial cognitive and emotional responses. If they have not, undesirable behaviors will continue to manifest. Regardless of the sort of non-desirable behavior, Cupal (1998) found that “recovery is compromised because of failure to address psychological factors” (p.104). Tripp, Stanish, Ebel-Lam, Brewer, & Birchard (2011) applied Vlaeyen, Kole-Snijders, Boeren, & van Eek’s (1995) cognitive-behavioral model to postoperative ACL patients and found that they eventually fell into one of two possible recovery pathways: avoidance or confrontation. Unresolved psychological issues will force the athlete down the avoidance pathway, which will delay and ultimately diminish the complete recovery. Confrontation, by contrast, is a pathway in which athletes have already appraised their situation to be temporary and manageable, motivating them to confront and conquer the pain and the situation (Tripp, et al., 2011).

In sports medicine literature, the primary behavior of interest is adherence to the rehabilitation program as the reliability of protocols may be affected by non-adherence and athletes who adhere to the rehabilitative program are far more likely to make a complete physical recovery when compared to those who do not (Ray & Wiese-Bjornstal, 1999). Non-adherence does not inherently mean a lack of effort or interest in the program; on some occasions it can also refer to overzealousness to work past the set limits. Behaviors considered to be non-adherent can come from lack of trust in the program or the therapist, anxiety, or weakened confidence (Tripp, Stanish, Ebel-Lam, Brewer, & Birchard, 2011). The behaviors these emotions elicit are all conducive for non-adherence to the prescribed rehabilitative program.

Generally, non-adherence is a behavior that relates to the avoidance pathway. Catastrophizing, fear of movement/reinjury, also known as “Kinesiophobia” (Kori, Miller, & Todd, 1990), and general avoidance are psychological reactions that correlate to disability and depression, which force the athlete into a cyclical pattern (Tripp, et al., 2011). Bartholomew (1998) stated that catastrophizing is composed of three distinct characteristics: (a) a tendency to ruminate about the negative aspects of their pain and the situation in which they are experiencing, (b) dwelling on pain related thoughts that amplify the distress experienced, and (c) dwelling on their inability to cope with pain. Sullivan, Rodgers, Wilson, et al. (2002) found that athletes high in catastrophizing were less likely to complete rehabilitative protocols if pain was experienced, thereby negatively affecting their rehabilitation progress. This pattern does not allow the athlete to adapt and recover from their injury. These “nonadaptive pain avoiders” are motivated by fear to avoid pain (Lethem, Slade, Troup, & Bentley, 1983). To refrain from entering the avoidance pathway, the athlete effectively must cope with the injury using all available resources, including psychological skills and social support (Tripp, et al., 2011). Mood states for athletes who follow the confrontation pathway are comparably more positive to those who avoid. These confrontation athletes are far more likely to follow their rehabilitation program and make a successful return to sport.

The ability of athletes to cope effectively and recover depends, much like Hobfall’s COR model, on the resources and skills they possess. Cupal (1998), working on research from Brewer (1994) found evidence that including imagery into a rehabilitation program improves the effectiveness of the program when compared to standard physical rehabilitation protocol. Rotella & Campbell (1983) used systematic desensitization to

reduce reinjury anxiety and improve self-confidence in a female basketball player. By incorporating desensitization into her injury rehabilitation program and obtaining favorable results, they were able to offer practical suggestions for future rehabilitation protocols. Nicol (1993) and Sthalekar (1993) used imagery, relaxation, and hypnosis techniques to improve mood state, increase range of motion, and reduce pain at the injury/postoperative site for a partially paralyzed water-skier and a female non-athlete suffering from a repetitive strain injury, respectively. Goal-setting and biofeedback are other common interventions and skills taught to athletes to aid in managing the injury response and experience cite. These psychological methods will help guide the injured athlete down the confrontational pathway (Fisher, 1999; Tripp, Stanish, Ebel-Lam, Brewer, & Birchard, 2011).

According to Andersen & Williams (1988), athletes have a usual method for coping with stress that they employ. Their personal strategy is developed throughout life and it is important that the sports medicine professional utilizes one of three main coping strategies that best fits the general coping style of the injured athlete. Problem-focused, emotion-focused coping strategies are commonly used, along with reappraisal-focused interventions. Problem-focused coping strategies are very logical and pragmatic in that they present the athlete with factual representations of the situation and goals are then set to help overcome the injury. By following the logical progression, the stress on the athlete is reduced as they begin to perceive the recovery process as manageable. Emotion-focused interventions are designed to reduce the negative emotional impact of the injury, removing the fear from the athlete and giving them newfound emotional strength to confront the injury. Reappraisal-focused strategies help the athlete reassess the

situation as manageable so that recovery is perceived to be feasible and possible. In summation, the goal of all three strategies, and any coping strategy, is to change the negative perception of the injury so that the athlete no longer sees the situation as unmanageable. According to Lazarus & Folkman (1984) and Hobfall (1988), if there is no perceived shortage of resources, then there is no stress. The athlete will then be able to follow the confrontational pathway of injury recovery.

Social support is also critical in helping the injured athlete through their rehabilitation program (Cox, 2007; Cupal, 1998). As stated earlier, injured athletes tend to feel isolated and helpless. Providing the athlete with support from teammates and loved ones is vital in helping them empowered and motivated (Brewer, 1998; Cox, 2007). Conversely, the attitudes of loved ones toward the concept of returning to sport may do harm to the recovery process. Family members who express fear of re-injury may pass that fear and anxiety on to the athlete, which may inhibit the eventual return to sport. It may also anger the athlete, causing them to rush their return to activity simply despite their naysayers. Cox (2007) states, "Coping skills possessed by the athlete, availability of social support, and cognitive-behavioral interventions are all effective in enhancing adherence to injury rehabilitation programs" (p.455). To ensure a safe and efficient recovery process, the athlete must first appraise the situation accurately and then confront the injury utilizing all skills and resources available to him or her. When the athlete meets those prerequisites, the rehabilitation program can effectively lead toward physical recovery. However, while physically an athlete may be deemed ready to return to their sport my medical personnel they may not be ready psychologically.

## **Psychology of Return**

As the return to sport approaches, a new set of issues must be dealt with to ensure the athlete successfully negotiates the final stage of the injury experience. Podlog & Eklund (2007) examined the available psychological literature and found recovering athletes may experience concerns regarding three primary areas: competency, autonomy, and relatedness. This section will examine the emotions and consequent behaviors associated with the three aforementioned components.

**Competency.** The most critical issue related to competency is the fear of re-injury. As the return date approaches, athletes may begin to question their health and abilities to return to pre-injury form. In fact, while working with elite skiers who had returned from injury, Bianco, Malo, & Orlick (1999) found that the fear of re-injury might persist for years after the return to sport. For athletes who have resumed competing and training, behaviors such as hesitation, heavy taping of body parts, and failure to give 100% effort and exertion, are all signs of a lack of confidence in their ability to stay healthy and perform (Johnston & Carrol, 1998b; Podlog & Eklund, 2007). Self-efficacy is of great importance at this stage of the injury experience, as it will aid in calming the fears of re-injury (Podlog & Eklund, 2007). As the athlete progresses in their recovery, they ideally become more confident in their abilities. This supports the research (Cox, 1997; LaMott, 1994, Morrey, 1997; McDonald & Hardy, 1990) that claims athletes move from a negative mood state to a more positive one as their rehabilitation continues, assuming there are no psychological or physical setbacks. However, if the athlete is unable to overcome the fear of re-injury, they will begin to engage in behaviors that delay the completion of recovery (Wiese-Bjornstal & Shaffer, 1999). Malingering is one of the

behaviors that must be identified, as it is indicative of psychological stress and involves faking symptoms or physical pain in order to avoid returning to sport (Wiese-Bjornstal & Shaffer, 1999). At its core, malingering is an avoidant behavior (Tripp, Stanish, Ebel-Lam, Brewer, & Birchard, 2011). Avoidance behaviors observed in the final phase of the injury experience serve to aid the athlete in managing their fears of re-injury (Tripp, et al., 2011). Avoidance behaviors may also play a role in preserving the athlete's impression of "athletic competency", a reputation they had built prior to the injury (Podlog & Eklund, 2006). Some athletes may be concerned or anxious about returning to sport with a lower proficiency, thus exposing themselves to negative comparisons in relation to rivals or teammates who were previously beneath them in the sport hierarchy.

As athletes engage in more competitions and training sessions, their self-efficacy (Bandura, 1998) and perception of competency will increase, eventually leading to an official "return" in the mind of the athlete; a return to where they were competitively and physically before the injury. Carrol's (1998) study found that sport involvement was the most effective mechanism for improving an athlete's sense of competency and removal of the fear of re-injury. Contact athletes, such as rugby players, make "testing" tackles during their initial return and gradually build their confidence until they can tackle the way they did prior injury.

**Autonomy.** Athletes often attempt to play through injury because of their "sport ethic." The sport ethic also provides customs for behavior, especially for team sports (Cox, 2007; Schaffer & Wiese-Bjornstal, 1999). The sport ethic often teaches sacrifice, challenging oneself, and that teammates depend on each other for success. Adherence to the sporting culture, in which sacrifice and playing through pain are customary, athletes

are often pressured to return to sport before they have completely recovered psychologically and physically. As stated previously, strong adherence to the sport ethic can be quite detrimental to the health of an athlete (Podlog & Eklund, 2007). Athletes who return before they ready often feel increased anxiety about re-injury. Due to this anxiety, they may not be able to focus on the relevant cues in the sport, thereby placing them at higher risk for re-injury (Andersen & Williams, 1998; Pepitas & Danish, 1995; Podlog & Eklund, 2007)

There are also instances where the opposite is true, and athletes malingering to avoid returning to sport because they in fact do not want to return (Podlog & Eklund, 2007; Wiese-Bjornstal & Shaffer, 1999). In these cases, the athletes may feel too much pressure to return from external factors such as coaches, teammates, and fans. Internalization of the sport ethic allows for external factors to influence the athlete, thereby removing their autonomy over their decisions (Podlog & Eklund, 2007). However, intrinsic motivations that are completely detached from external sources may also play a role in the decisions an athlete makes involving his/her return. Intrinsic motivations, such as pure enjoyment from playing, do come from the athlete but are derived from the sport ethic and athletic identity, consequently making it impossible for the athlete to have complete autonomy (Podlog & Eklund, 2007). An athlete who returns when he or she is psychologically and physically prepared is making decisions with complete autonomy, as opposed to allowing the sport ethic or external forces influence them.

**Relatedness.** In sports, particularly team sports, social functioning is paramount to achieving success. Relatedness, in the context of sport psychology, refers to the degree in which athletes feel connected to their teammates, coaches, and support staff (Cox,

2007). Athletes who are injured must spend time away from their team rehabilitating, thus preventing them from continuing the narrative of their social relationships (Podlog & Eklund, 2007). While the injured athlete is away, things may change on their team. Players may be promoted or demoted, coaches may change, schemes may evolve, and jokes between players happen. An athlete who misses out on these changes may feel a disconnection upon returning to the team.

During the recovery period it is common for athletes to feel isolated or alienated from their teammates because they actually are and long to rejoin them (Podlog & Eklund, 2007). Paradoxically, when athletes are able to return they may feel hesitant or afraid because they do not know if they will fit in to the new social dynamic of the team. Athletes may panic because of this concern, and attempt to keep from “missing out” by attempting to return early, setting unrealistic performance goals and expectations along the way. A negative cycle then begins and puts the athlete at risk for more setbacks, frustrations, time missed, and re-injury.

Literature states that it is imperative that injured athletes receive social support from coaches and teammates, along with physical therapists, to inoculate them from experiencing feelings of isolation and alienation (Bianco & Eklund, 2001). Athletes will not feel as though they are missing out and can approach their return with calm mind and slow pace. If feelings of isolation and alienation can be avoided, the complete return and immersion into the team dynamic can be expedited. In fact, if enough social support is made available, the athlete will never feel as though they were removed from the narrative. Relatedness then may become a non-issue, as the athlete will always feel connected to their social world during the injury experience.



## CHAPTER 3

### **Methods**

This qualitative study was designed to examine the experience of recovery from a serious injury. Phenomenological interviews will be conducted with current and former athletes who have completed the injury-return cycle in order to obtain in-depth perspective regarding their experiences. This chapter will be divided into two parts. Part One will feature a brief discussion on the basic tenants of the chosen methodologies. In Part Two, a description of the methods for participant selection, data collection, and data analysis is provided.

#### **Part One- Existential Phenomenology**

Existential phenomenology was chosen as the methodology for this research because combines major tenets of existentialism and phenomenology to obtain insight into the essence of the human experience (Thomas & Pollio, 2002).

**Existentialism.** Humans must exist before they can do anything else. However, merely existing does not necessarily constitute living. Meaning to one's life is not inherent; it must be made and authenticated (Frankl, 1984). The philosophy of existentialism is a vital component of Frankl's existential psychology and logotherapy as it focuses on the experience of life. Athletes who have a strong athletic identity and belief in the sport ethic give their lives meaning through sports and their accomplishments. Their bodies are the main tool for interacting and divulging the experiences to interested parties. In cases of recovery, which follow a linear progression within the context of time, the existential ground of time may be the most appropriate to utilize.

Sparkes & Smith (2003) stated, “There is no aspect of human reality that is without temporal dimension” (p.296). The life of an athlete can be broken into basic time stages; recreational/community sports, high school, college, and professional. Injuries are no different, as athletes can recall the time before the injury, when it occurred, and the time thereafter. Time is one of the grounds for existentialism. Grounds provide a context for interpreting existential accounts and data. Time is an ever-flowing framework for human existence, and the recanting of experiences must always be prefaced with a mention of time. Seymour (2002) explains why time is so important for understanding experiences, particularly when severe injury and disability is involved:

Disability disrupts life’s narratives and expectations, but the process of rehabilitation is not simply a rescheduling or reframing of personal goals but a much more thoroughgoing process of time with the body and the body in time. The future will involve the reconstruction of self in terms of past social roles and identities, but the concomitant process, the re-embodiment of time, is central to the process of the rehabilitation of the damaged body.

Sparkes & Smith (2003), in their qualitative study on paralyzed rugby union players, found that one of their participants would shift time tenses while discussing his injury. For this participant, “Harry”, “the Past is in the future, the Present is in the future, and the Future is in the past.” Essentially, Harry constantly relates time, and therefore his existence, to his injury. The past (injury) is in his future because it will affect the rest of his life; the present is in the future because he believes his situation will not change (due to the injury), and his future is tied to his past (the incident). For athletes who try to recover from serious injuries, they may do the same while describing their experiences to

the researcher. Time appears to be the contextual background for qualitative research involving injured athletes. However, the other existential grounds of World, Body, and Others may also be important in the experience. Existentialism was chosen because of its focus on the lived human experience and the themes that can be extracted from them. However, in order to obtain scientifically reliable and valid themes from the recollections of individuals, precise qualitative research guidelines from the area of phenomenology must be followed.

**Phenomenology.** Phenomenological studies are designed to uncover an underlying central phenomena, or theme, within a population by holding discussions with participants. Edmund Husserl and Martin Heidegger developed the phenomenological approach as an alternative to traditional qualitative research methods. Phenomenology is a laborious scientific method that provides a thorough description of human phenomena (Thomas & Pollio, 2002). Rather than focusing on a single narrative from one individual, “a phenomenological study describes the meaning for several individuals of their lived experiences of a concept or phenomenon” (Creswell, 2007, p.57). Due to this, phenomenology lends itself to existentialism quite well in that they both seek to understand the meaning within an experience of existing in a particular phenomenon.

Phenomenology differs from other methodologies in that its focus is on the personal experiences of the participants rather than just the descriptions of the event. In the field of phenomenology, “what” the participants experienced, as well as “how” they experienced it (Creswell, 2007) are of interest. Phenomenological studies rely on in-depth interviews with participants to find commonalities in the words of the participants. To do this, researchers give the participants the opportunity to describe their experiences freely

by not adhering to a strict interview template. Rather, these sessions are almost like casual conversations where participants feel free to share their experiences. This method of research attempts to uncover meaning in the words of the participant as they recount their experience, making the researcher an interpreter and mediator.

### **Part Two- Procedures**

This study followed the recommended procedures described by Thomas and Pollio (2003) for conducting existential phenomenological research. The recommended components of the research protocol include: Exploring Researcher Bias, Selection of Co-Participants, Data Collection, Data Analysis, and Developing/Confirming Thematic Structure.

**Exploring researcher bias.** Regardless of research type, be it qualitative or quantitative, proper research can only be conducted when inherent biases within the researchers are accounted for and remedied. When interview-based research methods are being utilized, “bracketing” is a process that explores the biases in the researcher. Bracketing is a form of Husserl’s “epoché”, which is Greek for “suspension.” Husserl believed to accurately deduce meanings and themes from another person’s experience; we must suspend our own beliefs and knowledge. Creswell (2007) claims that in order “to fully describe how participants view the phenomenon, researchers must bracket out, as much as possible, their own experiences” (p.61). For this study the primary researcher engaged in a bracketing interview conducted by a faculty member with experience in bracketing procedures. A research group then helped to analyze the bracketing interview in order to identify potential biases.

Field notes also play a significant role in the epoché of personal biases, and were

written immediately following each interview with participants and provide a reflection on the process from the primary researcher. Field notes provided details on verbal and nonverbal communication, the physical setting, and any reactions the researcher had to answers from the participant. When transcribing interviews during the data analysis stage, the researcher went back to the bracketing interview and accompanying field notes and searched for any suggestions of bias that may have affected the questioning or the interpretation of the data. Field notes from this project are in the Appendix of the finalized document. The bracketing interview revealed deep biases relating to the recovery experience in the context of Time. Additionally, the researcher was very much biased toward team sport athletes, expecting them to exhibit stronger negative emotions as it pertained to Others. The field notes revealed the researcher was initially very aware of his interviewing skills. However, his confidence in his ability to successfully interview participants grew as the research process moved forward.

**Selection of Participants.** Polkinghorne (1989) suggests 5 to 25 research participants who have experienced the phenomenon in question should be sufficient to achieve “saturation.” The invocation of the term “saturation” denotes that no new findings or themes are being identified in the data (Simpson, 2009). For this study, three criteria were selected to determine eligibility as a participant. First, the participant must have completed their journey from injury to return to sport. “Return to sport” in this context is defined as a return to active status at the respective competitive level prior to injury occurrence. The second criteria required participants to be of at least 18 years of age, making them legally able to sign statements of confidentiality and informed consent. The third and final criterion for inclusion required participants to have been injured while

a member of an athletic team or league with a competition level of amateur, semi-professional, and professional. Current athletic status at the time of the interview was not of importance for this study.

For the purposes of this study, “amateur” refers to collegiate or Olympic athletes (e.g., NCAA, National Association of Intercollegiate Athletics, United States Olympic Committee). “Semi-Professional” athletes are those who are paid to play but cannot make a complete living off of their athletic income and so are not full time athletes. “Professional” athletes are those whose income comes primarily from athletic endeavors and are considered to be full time athletes.

Recruitment of participants began with email messages being sent to the athletic training staff at Barry University, along with the head coaches of various collegiate and professional sports teams. Eventually, the researcher relied on personal contacts to obtain a sufficient number of eligible participants. Respondents from the initial recruitment process who participated also provided the researcher with the contact information of other injured athletes who were interested in participating.

**Data Collection.** The primary method of data collection for this study was in-person interviews documented with a digital audio recorder. After completing a demographic information form (Appendix A) all participants in this study were asked the following open ended question at the beginning of their respective interview sessions: “When you think about your experience of the injury rehabilitation process, what stands out for you?” Open-ended questions allow participants to answer without any imposed restrictions; the participants have the freedom to choose what and how they respond to the question. Thomas & polio (2002) stated “An ideal conversation occurs when an

interviewer's questions and/or clarifying statements provide an opening for a patient's lengthier and more detailed responses" (p.21). Clearly, this research does not consider its participants to be patients, but the sentiment of providing opportunity for elaboration is the fundamental key to data collection in this methodology. Unlike other forms of research, in phenomenology, the participant is the expert. Only they can describe, with absolute authority, their experience of the phenomenon.

Due to this, all conversation during the interview sessions was lead, primarily, by the participant. The role of the researcher was to guide the participant into "unfolding themes and details" (Thomas & Pollio, 2002, p.26). In *The Prose of the World* (1976), Maurice Merleau-Ponty describes his interview with a participant, stating "He is able to get across to me inasmuch as I also speech, that is, allowing myself to be led by the flow of talk toward a new state of knowledge" (p.143). The researcher is a passenger on the participant's journey through their memory. As stated before, the focus of existential phenomenology is not so much on the details of the journey in question, but on the experience itself. The researcher framed the questions in a format that helped participants report their experiences rather than report generic descriptions.

The interviews had no time constraints and lasted for as long as the participant was willing to continue. The audio files and information obtained during the interviews are kept confidential in a password locked computer. Upon completion of transcription, the audio files were destroyed along with all files containing the confidential information of the participants. All of the remaining information was kept confidential indefinitely. All names appearing in the text, with the exception of well-known entities, are randomly

assigned pseudonyms. The exception will only be allowed if the name or figure described augments and enhances the thematic development during data analysis.

**Data Analysis.** The interviews were transcribed verbatim by the researcher and were read extensively to obtain an in-depth and insightful view of the content. All participants were contacted and presented with their respective transcripts. At this point, they were able to approve the transcription or make suggestions and corrections that will improve clarity and accuracy. Five of the participants responded with feedback and approval of the transcripts. Following approval from the participants, the transcripts were taken to an interpretive research group at Barry University to assist in the analysis.

The interpretive research group consisted of individuals, including faculty and graduate students, that are familiar with phenomenological analysis, not necessarily the subject matter (Thomas & Pollio, 2002). A member of this group read aloud the transcripts with the researcher, the former reading the words of the participant and the latter reading as himself. Throughout the readings, the group occasionally paused to digest and discuss the themes manifesting from the dialogue transcript. A Professor of the University facilitated and guided the discussions. Members of the research group were provided with a copy of the readings and were encouraged to note comments and ideas on it. The copies were collected at the conclusion of the session for further analysis.

The idea behind the group is to provide different perspectives for data analysis, again safeguarding from any biases affecting the initial interpretations made by the researcher. According to Thomas & Pollio, "All proposed thematic interpretations are continuously challenged until group members agree that an interpretation is supported by text." (p.34) The rigor of the interpretive process and the validity of published themes are



thus buoyed by the use of an interpretive research group. Any interpretations or thematic patterns observed by the researcher should be apparent to the group members as well.

### **Developing/Confirming Thematic Structure**

The interpretive process is directed toward the construction of an overall thematic structure. As the text was transcribed, the themes were combined, or clustered, into meaning units that will help to relate the experience of the phenomenon to the reader. As Thomas & Pollio (2002) state, “Existential-phenomenological interpretation is rooted in a continuous process of relating a part of some text to the whole of the text, and any and all passages are always understood in terms of their relationship to the larger whole” (p.35).

The final thematic structure of the phenomenon was determined by the “commonality running through the many diverse appearances of the phenomenon” (Valle, King, & Halling, 1989, p.14). No rehabilitation experiences are alike; some athletes may never even successfully return to sport and some may forever be fixated on the trauma from the injury itself. Still, any commonalities found within the different existential descriptions of the participants contribute to the construction of the overall thematic structure.

The researcher clustered meaning units into sub-themes which formed major-themes that made up the thematic structure, which will be detailed in text as well as represented by a diagram to improve accessibility and understanding for interested parties not familiar with existential-phenomenological research. Prior to completing the analysis, the thematic structure was sent to five of the participants, who agreed with the represented themes. No alterations or suggestions were made in regards to the thematic structure.

## CHAPTER 4

**Results**

**Comment [t1]:** add the ages/means for your participants

Table 1

*Participant Demographics*

Pseudonym	Sport	Competitive Level at Time of Injury	Injury
Kyle	Baseball	Amateur; NCAA Division II	Spinal Fracture
Victor	Football	Amateur; NCAA Division III	Separated AC Joint
Barry	Soccer	Amateur; NCAA Division II	Torn Labrum
Clark	Football	Professional; Canadian Football League	Torn ACL
Oliver	Soccer	Amateur; NCAA Division II	Torn ACL
Wally	Soccer	Amateur; NCAA Division II	Torn ACL
Diana	Softball	Amateur; NCAA Division I	Torn Meniscus; Torn MCL; Plica Syndrome
Shiera	Softball	Amateur; NCAA Division I	Torn Hamstring
Kara	Softball	Amateur; NCAA Division I	Torn Rotator Cuff
Bruce	Baseball	Amateur; NCAA Division I	Torn Meniscus; Sprained MCL
Hal	Powerlifting	Amateur; USA Powerlifting	Elbow Tendonitis

The purpose of this study was to identify the prevalent themes experienced by athletes as they progressed through the injury recovery process. To accomplish this objective, a total of 11 in-depth phenomenological interviews were conducted with athletes who had completed their injury rehabilitation protocol and returned to their respective sports. In this chapter, a thematic structure is presented that demonstrates the common themes experienced by the athletes during the recovery period. Table 1 provides the relevant data regarding the participants.

## **Participants**

A total of 11 athletes participated in the research study. Nine of the 11 athletes were injured while members of NCAA sanctioned sports teams. Five sports were represented in the study along with nine different significant injuries. Clark, a professional football player in the Canadian Football League, tore his ACL during his first game as a starting running back. Victor was another running back who participated in this study. In his true freshman year in college, he separated his AC joint during his first game while returning a kick-off; it caused him to miss the rest of the season.

Oliver and Wally were the two other athletes in the study who suffered torn ACLs. Both were NCAA Division II soccer players, along with Barry. Oliver, a foreign student, was injured while still playing in his native country and was concerned he would lose his scholarship. Wally played at the same school as Oliver and Barry, but has since graduated. Barry is a goal keeper for his team, who still has issues diving for saves because of his history of shoulder dislocations. Barry has had surgery to repair his torn labrum, but his fears persist.

Diana injured her knee playing NCAA Division I softball, but she did not tear her ACL. Her injury was much more difficult, as she was diagnosed with both a torn MCL and a torn meniscus. In addition, it was discovered she was suffering from Plica Syndrome and was told she should stop playing softball, as a successful return was unlikely. Diana played with two other participants, Shiera and Kara. Shiera tore her hamstring during her junior year and had to undergo a very risky procedure to even have a chance at returning to competition. Kara, a pitcher who suffered from a torn rotator

cuff, tried to pitch through the injury in high school and during her first year in college, but eventually aggravated the injury and was forced to undergo surgery.

Bruce and Kyle are/were NCAA baseball players, Division I and II, respectively. Bruce was offered the option of trying to rehab his torn meniscus and sprained MCL or going straight for surgery; he opted for surgery believing it was the best option. Unfortunately, while he did return to playing, he never fully recovered physically or mentally. Kyle fractured his spine while running to first base on a base hit and spent months in a full-body immobilization brace.

Hal was the only individual sport athlete to participate in the study. Hal is a powerlifter who regularly competes in USA Powerlifting meets. Hal suffered from severe elbow tendonitis, and ended up almost tearing the tendon because he tried to train through the injury. All of the participants had a different story to tell, regardless of similarities in the sport played, the injury, or even gender. No two athletes will ever have the exact same experience of injury recovery, and it is important to understand the different contexts from which the meaning units were derived. By recognizing the differences between the narratives, one can appreciate the significance when commonalities in the themes present themselves.

### **Thematic Structure**

The thematic structure was modeled in a linear fashion, with the stages of Athletic Identity, Reaction, Rehabilitation, and Return and Reflection, as the remaining major themes.

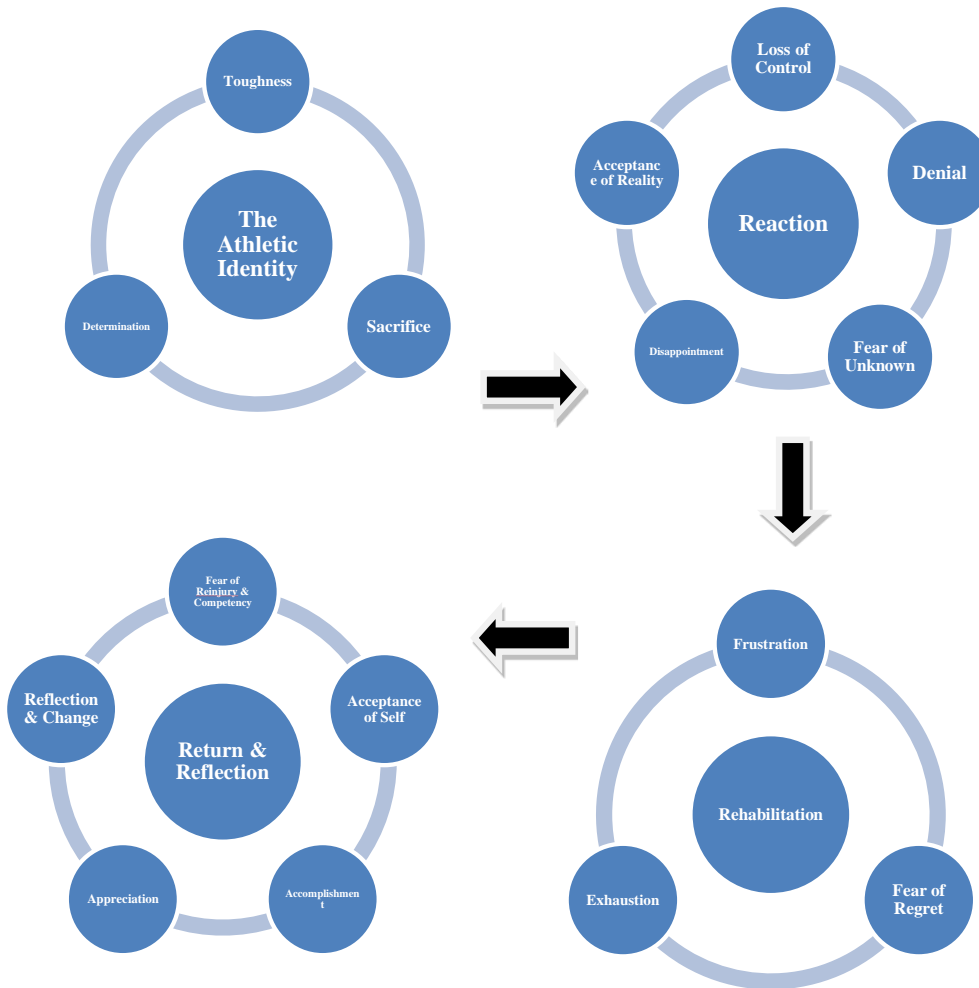


Figure 1. Thematic Structure

The sub-themes are all primarily tied to the existential ground of others. Body and time also play key roles in the way athletes perceive, recall, and relate their experiences, thus allowing for the linear design of the thematic map. The themes identified from the participants' accounts interconnect with the associated grounds to create a rich and complex experience that is difficult to capture and relay. In the coming sections, the main

themes will be individually dissected and analyzed, though it is important that one understands the interconnectedness these themes share to ensure full comprehension of the experience.

As an example, many athletes experienced fear which caused the athletes to reflect and adjust their behavior in regards to preparation and strength training as an attempt to prevent future injury or reinjury. While fear is generally regarded as a negative emotion, it is in this case directly responsible for eliciting a positive change in behavior. Whether the athletes felt compelled to change in an effort to avoid future body pain or to avoid letting down others, the existential grounds only enrich the connection.. The main themes, themes, sub-themes will be analyzed and supported with statements from the participants. Table 2 provides a detailed display of the main themes and their subsets delineated.

### **Athletic Identity**

Athletic Identity emerged as a main theme that influenced the athlete's injury experience. Athletic Identity refers to Sparkes' theory and "the sport ethic" referenced in Chapter 2. This major theme was composed of three sub-themes: Toughness, Sacrifice, and Determination. These sub-themes reflect the basic principles and mantras of the sport ethic and provide a context for the reactions and experiences of the athletes.

Table 2

*Delineated Themes of Athletic Identity*

Major Themes	Themes	Sub-Themes	Representative Meaning Units
Athletic Identity	Toughness		Thought I could push through it
			Whatever, I'll be alright, okay?
	Sacrifice		Being injured is part of the game
			Supposed to give everything
Determination		I'm going to go a little bit more	
		It's all in the head and the heart	

**Toughness.** One participant, Victor, was particularly enveloped in the sport ethic, even years after his retirement from collegiate American football. The sport ethic often pushes athletes to play through pain, to exhibit toughness, and one of the most popular clichés that captures this belief was offered by Victor during the phenomenological interview:

Because, like Jason Taylor said, “Be a player, not a patient.” Okay? You don’t want to be seen as the guy who’s in the training room all the time, “Oh this hurts, oh that hurts, oh I can’t practice, oh I can practice but I can’t practice full speed...no, I’m fine.” You don’t want to be seen by the coaching staff or by the people you that you got to line up against as the guy whose soft and there’s always something wrong. You got to be seen as dependable.

Athletes do not want to be seen by others as “soft.” They want to be seen as dependable; that they can perform at their peak potential regardless of the circumstances. Hal , a participant who competes in the sport of Weightlifting, attempted to “push through” an

elbow injury because an important competition was only a few weeks away. Bruce did the same, stating athletes “just play through it [pain].” Victor tried to play with a separated AC joint for a variety of reasons that will be addressed in the coming pages. Unfortunately, these athletes are human and toughness has its limits. The theme of toughness is prevalent in those with strong athletic identities, and plays a role in how the athlete will react to an injury, if they even admit to having one. Athletes try to put basic biology aside in the name of victory. However, in order to accomplish that, they need more than toughness; they will need to make sacrifices.

**Sacrifice.** Sacrifice is such a compelling component of the sport ethic and athletic identity, so much so that athletes will often risk further injury to play when they are already ailing if they believe that their participation will help them succeed. Shiera, while injured with a completely torn hamstring, mentioned that she is “supposed to give everything” to her teammates. “Everything” could be interpreted as her effort and her body, whether that be in an actual game or during the rehabilitation process. The notion that one must continue to participate even in the face of injury, is exclusive to the sport ethic ideal. Clark, a professional football player, stated that “being injured is part of the game...I understood that this was the game.” The ability to sacrifice one’s health for the greater good of the team, and the tenacity one must have to demonstrate the toughness necessary to adhere to the sport ethic, is only made possible through the presence of determination. Consider this quote from Victor, detailing his desire to play even with a separated shoulder:

When you’re hurt you’re just in pain, you go out there, you suck it up, you play like everybody else does. When you’re injured, in my mind, injury is something



that is so debilitating that you physically can't go out there and perform. And I thought that with that week and treatment, with the special pad they put underneath my shoulder pads, "Man, I'm good. I can go out here and play." You know, you just suck it up and find a way to get it done. But, no, they weren't having it. But I thought I was simply hurting, and if it's just pain, that I can deal with.

The willingness to sacrifice one's body for the greater good can severely impact the experience of recovery, if only because they are no longer in a position to make sacrifices while they are injured. Instead, athletes are forced to follow a prescribed protocol that does not allow them to push past certain limits.

**Determination.** The athletic identity leads athletes to believe that pain is a mental construct and with enough "heart" and mental strength, the human body can overcome any physical obstacle. Clark goes on to say, "It's all in the head and the heart", meaning that physical limitations are nothing if one can focus on the will to overcome, or as Diana put it, "It's just mind over matter." Mental strength is the core of determination, as it allows the athletes to choose to focus on the activity, whether it be competition or rehabilitation, instead of the pain. If one is going to identify as an athlete, they must be determined to play and be able to use that determination to push through pain and injury, thereby sacrificing themselves in order to achieve success. Kara, in her narrative, described her mindset while pitching with a torn labrum, "I kind of tried to ignore the pain cause they wanted me out there. I was successful in the games I pitched but I knew it wasn't right." Furthermore, consider this quote from Clark:

“I wasn’t 100% but I was in my option year of being a free agent so I had to play (at) I would say like 80%. I still went out there with a bang. I still basically proved to them I could still do it. Even though it’s hurting me, they know it, but at the same time am I complaining about it? No. That’s what they want to see. It’s not all about him being hurt; they want to see if he still has the mental part and is he capable of doing it.

In summation, the mindset of the athlete is, “Whatever, I’ll be alright. Okay?”

Determination is a component of athletic identity that enables athletes to fight through challenges on the field or in the training room. They will ignore pain if at all possible while trying to reach a goal, whether it be a victory or a successful recovery. However, a strong athletic identity is a double edged sword that potentially has a many dangers as it does benefits.

### **Reaction**

Negative stress was experienced universally by the participants during initial reaction to injury. Chapter 2 listed several factors that could potentially predispose athletes to negative reactions to injury and avoidant, maladaptive behaviors during rehabilitation. Still, the disruption of the biographical narrative is believed to be the root cause of negative reactions to injury. When the participants told their stories to the researcher, they almost always started with a feeling of surprise, as though the athletes were being jarred loose from their previous existence as, according to Hal, “invincible” humans. “It came out of left field” and “I didn’t see it coming” from Diana, “I was a bit surprised” from Oliver, and “I’d never been injured before” from Kyle, are meaning units

that paint a vivid picture of athletes coming to grips with the own mortality. One moment they are competing at a good level in their sport and the next thing they know, all of their plans and goals must be put on hold indefinitely. The one thing they always drew strength from, their body, had suddenly failed them.

Table 3

*Delineated Themes of Injury Reaction*

Major Themes	Themes	Sub-Themes	Representative Meaning Units	
Reaction	Loss of Control		Why is this happening to me? She wanted control over me	
	Denial		I thought it was just an acute injury Didn't think I was that injured	
	Fear of the Unknown		Hoping it would heal Could have been my opportunity	
	Disappointment	Anger		I didn't have a good trainer Why am I going through this?!
		Depression		Broke my spirit You're kind of depressed
Acceptance of Reality			It is what it is Start to move forward	

**Loss of Control.** “Why is this happening to me?” Athletes feel empowered when they train their bodies to perform a certain way. The more in control they are of their bodies, the better athletes can perform. Therefore, the loss of control can be foreign and upsetting to some. Diana described her situation as “Everything was crumbling around me” and “Ripped away from me.” Victor was upset about being kept from competing and having to “Watch others who aren't as good at the job.” Perhaps the most disturbing realization that comes from a loss of control is the sobering reality that athletes are never really in control, and that at any moment another injury can strike. Accepting that reality can be difficult and some athlete's may initially deny the seriousness of their injury.

**Denial.** Of all the individuals who participate in this study, only two mentioned ever having ever been in denial of their injury. Victor, who separated his shoulder playing American football, told this story:

I really didn't think that I was that injured. I got hurt the first game my freshman season. It was the last kickoff, it was in the 4<sup>th</sup> quarter, separated shoulder, and the next week I didn't travel with the team. I sat home, did the whole treatment thing. Getting the stim, getting the ultrasound, getting the ice and all that stuff. Next week [I] was feeling a little bit better and so I just assumed I was ready to go and get back there to return kickoffs and what not. I just jumped out there like I normally would, with the first return group, and then I got pulled off and I didn't know what was going on, what the deal was.

He briefly mentions that his shoulder was separated, barely glancing over that major detail in the narrative and never using the word "injured." When asked what stood out in his mind about the overall experience, the first word that came to mind was "denial." To this day, he still won't admit he was actually injured. When asked, in retrospect, whether he was hurt or injured, he replied "I think I was somewhere in between." Victor, in keeping with the sport ethic and his athletic identity, believed he was only hurt and tried to play through the torn ligament in his shoulder. Hal followed Victor's lead, stating, "I thought it was just an acute injury...I thought I could push through it." While Hal was at least able to admit he was injured, he did not want to accept the seriousness of the injury. These cases are perfect examples of how the sport ethic and a strong athletic identity can be a detriment to the health of athletes. Attempting to continue competing through serious injury may lead to further, irreparable damage. Accepting the fact that one is injured

disrupts the biographical narrative and puts the athlete in a state of uncertainty, a place where they do not know what will become of them. Quite possibly, this is the first time athletes will experience fear in their athletic careers.

**Fear of the Unknown.** Clark provided a statement that perfectly captures the essence of the fear of the unknown: “Could have been my opportunity.” When he was injured, Clark had just been promoted to the starting running back for his team. His injury robbed him of the opportunity to prove to himself, the coaching staff, and his teammates that he could carry that load and thrive. The fear of “what if” can haunt athletes both during and after the rehabilitation process. One can see how “what if” can turn into regret if an athlete does not feel they did all they could to make the most of their time in sport. Still the fear of the unknown is all too real during an athlete’s injury recovery experience. Clark stated both “You may not be the same” and “This may be my last time playing football”, indicating a sense of uncertainty and a fear of not being able to resume his career. Even though his injury was not considered career threatening, Clark is still afraid of his future because he does not know what it has in store for him. Other statements from participants echo these fears, such as “Hoping it would heal” from Shiera, “Didn’t know what was going on” and “I never really know if I’m going to have a good day with my shoulder or not” from Kara, and “Never really knew when I was going to be fully fit” from Oliver, all capture a sense of fear and anxiety as it relates to the athlete’s future. The air of uncertainty around the injury is a critical factor in the overall experience of the injured athlete. Oliver, upon injuring his ACL, was concerned about his scholarship to an American university, saying “I was sort of panicking that that was in jeopardy.” But the

fear of the unknown is not limited to potentially missed opportunities or squandered chances.

There are no guarantees in medicine and the fear of “what will be” can be quite troubling as well. Physical rehabilitation is not an exact science, and no doctor is in the position to claim with absolute certainty that they can return an athlete to their original form. Consider this quote from Kara:

It was kind of scary though cause you go to the doctor and they can't promise you that you're going to have this golden arm after you come out of surgery, so the decision making process was a difficult one because you see not everybody recovers differently and there's no set, “You're going to be back in this amount of time”, it's however your body heals and you just have to stay on top of it and have a good trainer and trust in the process. So, it was scary. I didn't know what to expect, I never had a surgery before.

Yet, athletes still search and yearn for that certainty because it can alleviate the fear of the unknown. When asked about her decision to undergo a “dangerous” operation on her hamstring, Shiera replied:

It was a guy who said he could fix it and said he could get me back and it was somebody I've had surgery with before and he was a great man and a great family friend, turned out to be, just because he'd done so many of my rehab and different things back home. He said he could get me back and I had full trust in him and I thought at one point, “One more year”. So I took my fifth year opportunity to do that; I have no regrets about it.

This quote accurately portrays how fear can manifest in many forms for injured athletes. Shiera wanted a guarantee that she could return to competition, and she got it. She knew by doing the surgery, she would not have any regrets about her efforts. Shiera also wanted to feel competent in her skills upon return, and the doctor said he could fix it. Bruce, a college baseball player, was not so lucky, and even though he was eventually cleared to play from a physical standpoint, he never truly recovered from his torn meniscus and sprained MCL:

I went with the surgery cause I figured it was the better option, which I regret now because I still have trouble with it today. After the injury, I never, even with all the rehab and getting back to “100%”, I was never what I was before. I don’t know if it was the doctor or the athletic staff that was helping me or we did something wrong, but I was just never the same.

The truth is that sometimes fear is warranted, especially when dealing with one’s body. Bruce was never able to return to his preinjury form, and now his regret is not a fear, it is a reality. Fear of regret will be addressed in a later section. Bruce had the option to rehab instead of having surgery, but he wanted to be as fit as possible for competition, and the decision backfired on him.

**Disappointment.** The theme of disappointment was grouped into two clusters: anger and depression.

**Anger.** From the data, anger seems to play a role in the experience of the athlete when the injury occurs. Since this study included participants who had already “recovered” from injury, their overall anger may have dissipated over time. This will be

addressed in the following chapter. However, some anger meaning units were identified in the data, including “What?! God, this stinks”, “I didn’t have a good trainer”, and “Why am I going through this!” The data suggests that anger seems to be directed at others and at the feeling of a loss of control. Diana was angry at her coach for releasing her from her scholarship. Today, she claims “we’re on better terms now, I still talk to her but at that time I wanted nothing to do with the program at all.”

***Depression.*** Depression is a common negative reaction when injury strikes, but as seen with Bruce, it is not exclusive to the onset period. The inability to participate in one’s identified role as an athlete is very troubling for the injured. Perhaps no other statements are as moving as Diana’s: “Broke my spirit”, “Crushed my dreams”, and “Completely heartbreaking.” Other comments, such as “Feeling like a freaking bum” and “When you can’t play, it stinks” from Victor, along with “It was sad” from Kyle and “I was a bit down” from Oliver, all encompass the depressive emotional state of the injured athlete. Still, Kyle’s efficient meaning unit “You’re kind of depressed” succinctly sends the message. Depression seems to correlate strongly with the loss of control and in some cases, boredom. Consider this quote from Kyle, “I’m depressed. I can’t do anything. I can’t go out, I can’t go fishing, I can’t do anything.” Diana’s melancholy tone during her interview certainly got the point across:

Well, being sat down and told in a room that your college career is ending, you’re probably going to lose your scholarship, you’re going to be taken from something you’ve grown to love your whole life, it just kind of...I just saw everything I had in my future just completely breaking down... Being told you’re never going to be able to play the sport you love again is... it killed me.



Depression is a negative mood state that is stressful to experience. However, athletes trend towards a more positive mood state as they improve and progress in their recovery. The support staff around the athlete should be mindful of this process and help the athlete focus on the positive growth rather than the negative state. In order to begin the process of recovery, athletes must accept the reality of the situation and decide to confront it.

**Acceptance of Reality.** An athlete can only begin the recovery process when they accept the fact that they are injured and require time to heal. The athlete must accept the circumstances and decide to take on the challenge, as Hal did:

So, I basically had to tell myself, “You can be as frustrated as you want”, but having that negative emotion is not going to help me progress in the future... I had a more positive approach to training and rehabilitation. I was looking forward to it as, “Alright, now I’m getting better. I’ve accepted the fact I’m injured. There’s no point in being negative about it. So, I’m going to approach this in a positive way that way I could look forward to the rehabilitation exercises”; all the annoying band work I had to do and I just accepted it. As soon as I accepted it, it became more of a, “Okay, now I’m progressing; now I’m getting closer to being healed and getting right back on track.” I’m not just going in there and being worse off and being in pain and all that.

Languishing in a negative mood state filled with denial and other maladaptive emotions is counterproductive for the purposes of rehabilitation and recovery and athletes may be best served to accept the reality. Hal’s statement sums it up nicely: “It is what it is.” Once an athlete arrives at this conclusion, the rehabilitation process can begin.

## Rehabilitation

Acceptance of reality does not automatically remove all negative themes from the existence of the athlete; it simply moves them into another stage of recovery that is filled with its own challenges. Frustration, Fear of Regret, and Exhaustion are all themes related to the main theme of Rehabilitation.

Table 4

### *Delineated Themes of Injury Rehabilitation*

Major Themes	Themes	Sub-Themes	Representative Meaning Units
Rehabilitation	Frustration	Disconnection	Sit around and couldn't join in Didn't command the same respect and authority I probably deserved
		Guilt	I don't want to let my family down Feel like you're letting teammates down
		Distrust	They told my coach I wasn't trying It didn't seem like he cared after I got hurt
		Rehabilitation Progress	Getting back into shape took a while Things just weren't getting better
		Career Disruption	I just took a huge step back I was so close to where I wanted to be
	Fear of Regret	I'd rather be safe than sorry At least now I know I did everything I could to have a shot	
	Exhaustion		Mentally draining Long road back

**Frustration.** Frustration was composed of four sub-themes: Disconnection, Guilt, Distrust, Rehabilitation Progress, and Career Disruption.

**Disconnection.** Athletes have been known to report feelings of isolation when removed from the team setting and forced to complete a rehabilitation program. The time

they spend away from their teammates and coaches can be very stressful, particularly because they cannot contribute or participate in team activities. Kyle, a baseball player, stated that it was “it was not cool not being able to be out there with the guys. Kara echoed that sentiment, claiming it “sucks to have to sit out and watch your team.” The inability to partake in competition alongside one’s teammates or contemporaries is very influential in the perceived experience and development of one’s personal narrative as it relates to their role on team. Oliver detailed his thoughts about his inability to contribute in the manner he was accustomed to as a team leader because of the limitations of his injury:

From a team point of view, it was hard because when I’m playing I feel like I’m a very influential part of the team. But being injured, it’s sort of hard to tell people what to do cause you sort of don’t command the same respect and authority as if you were playing. So, again, maybe that’s another thing that I found frustrating, that I couldn’t quite contribute to the team as much as I wanted.

Oliver views himself as a team leader; that is part of his narrative and a defining characteristic of his athletic identity. The inability to play that role caused him to feel frustration and guilt, among other negative emotions, because of the cessation of his athletic identity.

**Guilt.** Athletes thrive on support from teammates, family, coaches, and fans. All of those supporters put their faith in athletes for different reasons: love, job security, happiness, emulation, inspiration, etc. Athletes will often feel an obligation to live up to the expectations of others and provide to them what they are looking for. Clark

understands that his coaching staff relies on him for their jobs, and that his teammates need him to perform so that they can benefit. With that comes the potential for guilt when an athlete cannot meet those demands, and often injury is the reason. “You feel like your letting coaches down, you feel like you’re letting your teammates down”, opined Victor. Almost twenty years later, Victor can still recall the morning of the game that he would get injured in:

I can remember walking up to the stadium, next to one of the upper classmen who made a comment about getting off to a good start because a young guy is going to take the opening kickoff back for a touchdown. And I was walking right next to him, lot of pride about that.” Victor still feels a sense of guilt about not being able to fulfill his teammate’s prediction. Even though he was injured, he still feels responsible.

Clark believed that by letting the injury end his career, he would be violating the trust and faith put in him by others, “I never once thought ‘Hey, I’m going to quit.’ I don’t want to let me down, I don’t want to let Jimmy down, I didn’t want to let my family down.” The concept of “letting down” implies disappointing those who put their faith in the athlete. The disconnection between an athlete and his social environment, as well as the disconnection between their self and their narrative, is quite troubling for them. As the disconnection grows, so does a sense of distrust.

***Distrust.*** As the gap between the athlete and their athletic environment widens, a sense of distrust of others may begin to set in. Any perceived sleight or disrespectful action could place the athlete in a counterproductive mindset where everyone is

potentially an enemy and a roadblock impeding their progress for their return. The medical staff and coaches, from the research collected in this study, seem to be the primary targets of social distrust.

The coaching staff is responsible for creating a healthy culture of support amongst teammates as well as in all interpersonal relationships with their athletes. The environment created by the coaching staff can have a major effect on team relationships, particularly for injured athletes. Throughout her long injury recovery process, Kara was in the unique position of having a brand new coaching staff come in while she was rehabilitating. She spent a good amount of time during the interview detailing the differences between the team cultures and how the wrong approach can create a negative culture:

My old coaches too...we have a new coach now, she's great, but when I first got the surgery the coaches would kind of write you off if you were injured, and they would literally forget about you and kind of yell at you to just go walk laps because you couldn't do anything else. So, just being able to be fully involved with the team, it's the greatest thing...The teammates and coaches I have now instill such great values in our team that it's not a problem. But when it was sophomore year and I didn't have very good teammates...the culture on that team was not a good one; it was a losing culture; it was just people get injured and the next pitcher gets excited cause she gets to throw more. With the old coaches I would say "neglected", just like you're not really part of the team anymore, you're of no use, useless. The new coaches, I would say...I don't know, there's really no difference (between being injured or fit). You're equally accountable

and they still expect you to do everything you can. So, more like “irreplaceable” than “neglected.”

Clearly, the sense of distrust can be easily avoided, at least between the athlete and the coaches as long as care is taken to cultivate a healthy and positive environment. Kara mentioned distrust amongst teammates as well, which she attributes to a “losing culture.” The new coaching staff eradicated that culture and installed a new and far more nurturing environment for their athletes. One would assume that no coach wants to be viewed as one who promoted discord and distrust amongst their charges. Still, Oliver had a coaching staff that “took a real interest and wanted me part of the team” yet he still felt a sense of distrust with teammates when he stated “they didn’t see the hard work I was doing.” Oliver was trying to point out that his teammates, because of the disconnect, didn’t see how hard he was working and as a result, real or imagined, he felt as though he could not trust them enough to let him lead from the sideline. The coaching staff eliminated the feeling of disconnect with Oliver, and so he never came to distrust them, which cannot be said for his teammates. Coaches are not always as supportive as Oliver’s were, particularly when money comes into the equation.

At a certain competitive level, sports become “a business.” Elite and high level athletes understand this, but it does not make the harsh reality any easier to live with. Even collegiately, finances play a significant role in the way sports are handled. Clark, a professional football player, laments that “they [coaches] don’t know if they can invest in you...Coach may not trust you.” The reality is that winning is the only source of job security in professional and high level athletics, so coaches have to invest in athletes that they believe will give them the best chance to be successful. Injured athletes cannot

contribute and they know this, which can be a major contributor to social distrust because they may feel as though the coaching staff is going to release them at any moment. Interestingly, this goes both ways, as coaches may become hesitant to rely on injured athletes.

The medical staff seems to be a large source of social distrust for injured athletes. Recall that trust in the competence and strength of the rehabilitation program is paramount for athletes to follow a positive and confrontational path towards recovery. If the athlete perceives the rehabilitation program, or in this case the provider, to be incompetent, then distrust is likely to occur. Statements such as “she [the trainer] wasn’t fully committed to the process”, “she [the trainer] doesn’t really pay attention”, “she [the trainer] was more interested in being my friend than being my trainer”, and “the doctor got into my coaches head.” Shiera had such a bad experience with her first trainer that she actually had to leave school to find a different physical therapist to help her recover.

For Shiera, the interpersonal relationship went a long way towards helping her find comfort and trust in the rehabilitation program, and in her interview, the tone shifts from frustration to overwhelming positivity once she finds her new physical therapist, “She gave me options versus just ‘Get over it.’ It made me realize that she is looking out for the best of me and it’s not her way or the highway...That trust, the time she took for that really made a difference in my recovery, I believe.” The distrust that comes with the medical staff certainly plays into another notable source of frustration: rehabilitation progress.

**Rehabilitation progress.** At best, the rehabilitation process for a serious injury is a long and uneventful journey. At worst, it is long and filled with negative events. Wally, a college soccer player, made the comment “It’s almost as if you’re learning to walk again, but it’s something that has to be done if you want to get to the quality you were at” underscores the importance of mental strength that comes with a strong athletic identity. The rehabilitation process requires athletes to be patient and mentally strong. As Clark stated, “If you’re not mentally strong, you’re not going to get where you want to be.” Kyle described the process several times within the existential ground of Time, claiming “It was a long road back” and “It was a long process.” Oliver mentioned how he “had to be very patient” and that “it was a very frustrating time.” Barry, a soccer goal keeper who had surgery to completely reconstruct his shoulder, mention how the experience was frustrating because of the length of the process and what he learned from it, “I am a really impatient person and being through this situation, I had to learn how to deal with my frustration and my lack of patience because if I didn’t have the patience to do the proper recovery, I would hurt myself again.”

Still, time was not the only existential ground apparent within this sub-theme. Rehabilitation frustrations with one’s own body, the philosophy, and the protocol itself were mentioned. For the body, statements such as “Getting back into shape took a while” from Kyle and “Things just weren’t getting better” from Wally were made. Rehabilitation philosophy also frustrated the athletes, as evidenced by statements such as “It didn’t seem like enough” from Kara, and “They took it slow” from Victor. Even the exercises, such as the “annoying band work” Hal was forced to do, were pointed out. However, no other



quote captures the frustration with the rehabilitation process in the way this one from Shiera does:

I've done everything I possibly can, I've never missed a day of rehab, everyday that I've been to rehab I did everything I was told to do, I worked as hard as I could, and then you get the news that it's not healing, or you get the news that the MRI was done wrong, so now we have to wait again. It was a hurry up and wait game, and then it was a, "Alright, well it's not healing, let's try PRP shots, let's try Cortisone shots, had a ton of those and they just seemed to... It's really taxing because you're going, "I'm doing everything in my power, but it's not getting better." So, that's the frustration, I guess, that knowing you're doing all the right things and it's still not paying off.

Putting in hours of effort and dealing with untold amounts of pain and struggle with no results would frustrate anyone, let alone an elite athlete who is desperate to return to competition. Setbacks are common in the rehabilitation process, but for athletes, the routine of making a bit of progress and then having a setback becomes very frustrating. As Shiera stated, "get a little bit and now pump the brakes really fast." The whole process becomes a "hurry up and wait game." The pay off only comes after months of rehabilitation and sacrifice, and it is important that athletes know the challenges that lie ahead so that they can prepare themselves mentally, otherwise they risk getting frustrated to the point where "there's times you want to quit." From the data, quitting does not seem to be a common result of injury rehabilitation. However, career disruption, in general, is.

*Career disruption.* Athletes live off of borrowed time. They cannot physically meet the demands of their sport forever, and so any pause in their career interrupts the narrative of their life, potentially causing severe psychological distress, especially if the pause is permanent. Diana was faced with the prospect of having her career come to an end prematurely, and was obviously frustrated, among other things, by the news:

I remember thinking that it was never going to get better, that I was never ever going to be able to play again. And, seeing the progress, it wasn't going anywhere; it just kept going to a standstill position. So, I felt like it wasn't going to help and I kind of, like, as much as I was putting in the effort, like in the back of my mind I always felt like this was never going to happen for me again... I didn't think I was going to be able to play softball again, and especially after getting that ripped away from me, I didn't think it was going to happen for me... It was definitely frustrating, that's probably the best word to describe it. Because, I mean, being told something and you want to work hard on it, it's not happening for you, it's completely frustrating.

Diana's career was coming to an end, and she was not prepared for it. She eventually was able to return to competition, but the career stoppage was frustrating for her because she knew she could do it, she knew she wanted to work for it, but the injury and the circumstances around her were not enabling her to progress.

During his ACL rehabilitation, Oliver did not want to "fall behind" his peers in his development and his career. Shiera was aware "she only had two years left to play" and Hal had to shut down his elbow just before a "pretty big" power-lifting competition.

Hal was “right on track to making those goals.” Hal stated, “I was so close to where I wanted to be, and then I just took a huge step back from those goals.” Hal, like so many other injured athletes, worked so hard to get to a high level in his chosen sport and ended up forced to put that career on hold to heal. While one is healing, stimulation is hard to come by. Athletes are forced to sit on the sideline and watch practice or review film while teammates or peers train and engage in the sport they love. If athletes are in the training room, they are usually isolated and relegated to doing, as Hal stated, “annoying band work” and exercises of that nature. Essentially, the rehabilitation process can be quite boring.

Athletes may be willing to accept some sort of interaction with the team, because being injured can be quite boring. Boredom, and the frustration that comes with it, seems to be important in the recovery process. Athletes are accustomed to competition and surges of adrenaline and testosterone. The mundane actions of physical therapy and the bodily limitations inherent with injuries are the antithesis of that lifestyle. Victor was particularly affected by boredom, as he said:

Practice was the most boring experience I’ve had as an athlete, cause I wasn’t allowed to do anything. They weren’t sending me to the scout team to run against the first team because I was being red shirted. But it was a medical red shirt and they didn’t want me to get beat up cause they wanted me for the future. But I couldn’t get in any of the drills so I wasn’t going to play on Saturday cause I was with the travel squad practicing, so I stood there with my hands on my shoulder pads like this (gesture). (Sigh) from flex to conditioning, all got to do was condition. You know, got to do a couple of ball handling drills but that was it and

it was boring, awful... It actually stunk because they made me travel with the team, had to go to all the away games, had to go to all the meetings and its almost a tease and torture to have to stay on the sideline. Cause you're going to take me, you're going to bake me a cake and you're going to sit it there in front of me and tell me I can't eat it...and I love cake, a lot.

The inability to compete is one issue, but to have to attend practice and watch others play and perform is something else entirely. Other participants also echoed Victor's sentiments about boredom, including statements from Oliver, "You're standing on the sidelines not doing anything", Kyle, "I couldn't do anything at all", and Kara, "Sit out and not be able to practice. When sitting out, all athletes often think about returning, which can lead to fear.

**Fear of Regret.** Fear was found to be the only theme that could be found in each of the stages of recovery. Fear may permeate the psyche of the injured athlete in three distinct ways, although they are not bound to any particular stage. As mentioned above, fear of the unknown tends to strike an athlete during the initial injury reaction, but it could persist well past the rehabilitation stage into the return stage. While frustration is the most complex theme from derived from the data, fear seems to be the most consistent. Along with the unknown, fear of regret and reinjury & competency were the most prevalent in the data. The fear of regret was strongest during the rehabilitation stage of recovery.

"I'd rather be safe than sorry." Those words, from Diana, resonate loudly and are very representative of a significant theme experienced by many of the participants.

Athletes may go to great lengths during the rehabilitation stage to avoid the possibility of being injured again. Should they sustain another injury or reinjure themselves, the athletes want to put themselves in a position where they can look back and know they did all they could to return and stay healthy. Essentially, the athlete fears one day regretting that he/she did not do enough to properly rehabilitate from their injury. The injury experience seems to have made the athletes more aware of their vulnerability and that it could happen again. Accepting an injury inherently forces an athlete to recognize that they are not immune to injury. Hal admitted to feeling “invincible” prior to the injury:

I could just basically do anything, I felt invincible. But now I'm a little more cautious with exercise selection... I was pretty reckless. It felt pretty good, people always telling me, “Oh, when you're older you'll start feeling things more.” I never felt that and when I got that injury, that whole sense of invincibility went away. I was more cautious, I wouldn't just randomly try to do muscle-ups cold and I now I warm-up a lot more, do a lot more mobility, stretching, prehabilitation exercises. So that whole sense of being invincible with my joints and ligaments and tendons, that kind of left me and now I'm a lot more cautious with what I do... that change of thought, from being invincible to being proactive, I'm glad it hit me now than when I was older and then it'd take a lot longer to recover, so now I'm a little more proactive when it comes to preventing injury.

Hal is far more cautious now with his body. He is far more proactive in preventing injury because of the fear that he may injure himself again one day and will regret not taking this opportunity to change his preparation and overall approach to training. He is aware

that as he ages, recovery will take longer and the odds of achieving his pre-injury level of strength will be slimmer.

The athletes who are aware that this is an opportunity to learn, such as Hal, are more vulnerable to the fear of regret; an athlete can only fear regret if they are aware of the learning opportunity in front of them. If an athlete is not introspective enough to understand the situation, they cannot grow from it. By the same token, they are not susceptible to the fear of regret, because there is nothing to regret. This relationship is one of the strongest extracted from the data: fear of regret-appreciation of opportunity. Diana is well aware of her opportunity and is not taking it for granted:

I think physically I can totally handle it but mentally I'm always scared that my opportunity is going to be taken away, so I rather make sure that I take precautions. I want to take my precautions. I'd rather be safe than sorry so I'd rather push it in practice to make sure that anything that can happen in the game, that my knee is already prepared for it. Mentally, I feel like that's what I need, to go into the game feeling 100%.

Diana was given a second chance and she is making the best of it. Kara's statement "Not have any regrets because I didn't rehab enough" captures the essence behind the fear of the regret as it pertains to rehabilitation. Some athletes never get a second chance, especially after being released from a scholarship after an injury. Diana eventually earned a second chance, making her case very unique. Shiera was another athlete whose career was in doubt for a long time, and she wanted to make sure she made the best of her opportunity if she ever got another one; she wanted to leave her sport with no regrets.

During the interview, Shiera told the story of when she was told she was cleared to resume playing softball:

I'll never forget, coming home from the doctor when they told me that I was released and I called my parents first...So after that long period of will I be able to play, again, just period of are you ever going to get to play again, are you ever going to get to do these things. But, making those phone calls of knowing that I'm given a shot, so whether I was going to get to play, whether I was going to get to start, at least now I know I did everything I could to have a shot.

Athletes know their time is limited, and they know that the rehabilitation process is long and grueling. In order to leave their sport with a positive mindset, they have to believe that they did everything they could to reach their competitive goals, whether they achieved them or not. Clark said it best, "No regrets, no excuses." Still, while an athlete may do everything in their power to return to pre-injury form, there is never a guarantee that will happen, and the fear of the unknown is certainly troubling.

**Exhaustion.** Physical rehabilitation requires hours of work and untold amounts of patience. Shiera used the term "Exhausting", which really sums up the experience. Additional statements such as "Mentally draining" from Shiera, "Real stressing" and "It was a long journey back" from Kyle, and "It was a tough time" from Oliver, complete the representation of how mentally taxing the rehabilitation process must be for athletes. Combine the physical work with all of the mental and emotional strife, and one can see that "exhausting" is a very appropriate adjective.

Pain is the body's way of telling the mind something is wrong. Any sort of pain is not something that should be ignored, much less pain that is debilitating. While sometimes the body can be overly sensitive to it, it is always a good idea to at least listen to it and be in tune with yourself. Athletes are experts at listening to their bodies, and they are also very good at ignoring them. Meaning units such as "really painful", "really hurting", and "snap one more time" all exhibit how attuned to their bodies athletes really are. They can accurately and efficiently recognize and describe pain. In the collected data, the word "pain" appears, in one form or another, over 30 times. Barry details the struggle of living with a damaged shoulder, "But your shoulder is something that you use all the time, like, it's part of life. When you sleep, when you eat, when you run, when you walk, everything puts a lot of pressure on your shoulder." An injured body part is going to trigger a pain signal from the receptors of the peripheral nervous system, yet athletes will still try to push through the warning signs and keep performing.

### **Return and Reflection**

Upon clearance from the medical staff to return to activity, athletes are often thrown back into participation without completely recovering mentally and emotionally. Residuals from the experience of injury and the rehabilitation process may still be present in the psyche of the athlete. This may lead to fears surrounding reinjury and competency. If those fears are overcome and the athlete is able to truly recover, then a period of personal reflection ensues where the athlete accepts their self and their new limitations and identity. Athletes may also feel a great sense of accomplishment for succeeding in their endeavor. Additionally, a feeling of appreciation for their new found health and the



support that was provided to them is apparent. This reflection period leads to a change in the athlete that they will carry with them indefinitely.

Table 5

*Delineated Themes of Return and Reflection*

Major Themes	Themes	Sub-Themes	Representative Meaning Units
Return and Reflection	Fear of Reinjury and Competency		I am worried at times that at any moment it could happen again You don't want nobody to hurt your knee again
			I'm comfortable with where I'm at I just have to play without fear Teammates supported me any way they could
	Appreciation	Social Support	They were always there for me Don't want to take the opportunity for granted
		Opportunity	It was a good learning experience Prove to myself I could do it
	Accomplishment		It felt good that I stuck it out More positive approach to training and rehabilitation Made me a better player for going through that experience
	Reflection & Change		

**Fear of Reinjury and Competency.** Oliver, recounting his initial return to active competition, said “I wasn’t sure how strong my leg was until I’d actually played on it. To this day, Diana is “worried at times that at any moment it could happen again.” Every now and again, the fear of reinjury creeps into her mind. She consistently engages in rituals to “test the strength” and boost her confidence. Diana consistently pushes herself in practice because she believes it will make her “ready and more prepared for game time.”

For Hal, the fear of reinjury was so great that it has significantly altered his behavior and training program. He now regularly engages in exercises that are “more proactive when it comes to preventing injury.” Hal admits to allowing the fear to change his behavior. Luckily for him, the change is a positive one:

I’ll change an exercise right away if it starts to bother my elbow, I’ll just pick an alternative exercise cause, like you said, that whole fear, the fear of falling back into that injury. I just don’t want to have to go through that over again. So, it’s more about being proactive... There’s definitely that in the back of your head, that fear of getting injured all over again.

The fear of reinjury also altered Kara’s behavior, as she no longer bats during softball game:

After the surgery I still kind of didn’t feel like I was healed. I still felt...I think it was a little nervousness and I had to stop hitting because I couldn’t get that out of my head and every check swing I would take I just felt like I was going to lose my shoulder again. Unfortunately, I wasn’t able to hit anymore.

Clark, while recalling his return from ACL reconstruction, flatly stated “You’re scared. You don’t want no one to hurt your knee again.” Barry seemed to share that same experience, saying he was scared of “going through the whole process again.” According to the data, it appears that athletes are just as scared of the whole recovery process as they are of experiencing the injury itself, if not more. To avoid that, Hal “won’t take the risk” and as a result, he implores others to be “very careful with what you do”, because existing as an injured athlete is not fun and is certainly not easy.

The reality is that athletes are humans, and as such they are vulnerable to the wear and tear of life, if not more so. Clark was the only participant to show any sort of foresight, demonstrating with the statement “I need my legs if I’m going to have kids” how the fear of reinjury and competency was affecting his decision to continue playing because of the potential impact another injury could have on his future.

Still, athletes are commonly cleared to play before they are mentally prepared to do so, and managing the fear of reinjury with performance expectations becomes a delicate balancing act. According to Wally, “You’re afraid to go into tackles; you don’t want to redo it [injury]. At the same time, you don’t want it to affect your game.” The fear of reinjury could be coupled with the fear of regret for some athletes, especially if the athlete attempts to return too quickly and reinjures their self. However, once this fear is overcome and the injury is physically healed, the athlete will have completed his journey of recovery and can begin reflecting on the experience.

**Acceptance of Self.** Acceptance is not a construct that is exclusive to the onset of injury. Eventually, athletes must accept that the whole process really happened and that they cannot go back to their existence pre-injury. They must learn to accept that the injury is a part of them. Diana stated she just has to “play without fear” now. She understands that the injury has changed her body permanently, and all she can do is take advantage of the time she has left to play. Wally’s statement of “Like a new pair of shoes, you eventually break them in and they become yours” denotes a sense of ownership and acceptance of his new body and the identity that results from it. Kara’s statement of “I’m comfortable with where I’m at” and “I’m finally, finally satisfied” seem to indicate a

sense of closure with the experience, allowing the her to restart her biographical narrative.

**Accomplishment.** Those who successfully navigate their way through the recovery process seem to possess great pride and a very strong “sense of achievement.” These athletes are able to recognize the significance of what they were able to accomplish and they are very proud of themselves for never giving up. Kyle’s statement of “It felt good that I stuck it out”, along with Barry’s claim “I was able to overcome some difficult situations”, and “I wanted to prove to myself I could do it” from Clark, are all comments that accurately capture the feeling of pride these athletes have once they complete their recovery:

It was awesome. All the hard work finally had paid in, it just felt great. It felt great, it was a reward. Sometimes in life there are bumps, speed bumps, and you have to overcome those no matter what happens. This was just a speed bump I had to overcome. It felt good, it felt good that I stuck it out and was able to do what I was able to do.

The preceding quote from Kyle, along with statements from Shiera including “It was fun”, “Best day ever”, and “What a gift”, give the accomplishment theme a bright and positive tone. The opportunity to play again and recover was only made possible through a sizeable amount of hard work and sacrifice. Interestingly enough, the sense of accomplishment is strongly correlated to a deep feeling of gratitude. Athletes who complete this journey recognize they did not do it alone; they needed help.

**Appreciation.** Appreciation was overwhelmingly the most populous positive theme in the data. Athletes seemed to be most grateful in two sub-theme clusters: Social Support and Opportunity.

*Social support.* From the data, others included family, medical staff, coaches, and teammates. Those who the athlete perceived to be most influential and supportive were specifically named by the participants, and so only one or two of the aforementioned groups were ever identified by any one participant. Unfortunately, no athlete received support across the board, from their perspective. Shiera was very moved by the support from her teammates, medical staff (only some) and her family. This is an excerpt from her transcript detailing why she was so appreciative of the physical therapist that helped her through her rehabilitation:

And she took time to...she was great about the emotional side of it too. She was very understanding of an athlete. I think that's a problem sometimes of different trainers that you experience with. It's hard because you get a different one every year, so it's hard to develop that when trainers don't take the time to get to know an athlete and I think there were several times where we would sit in her office and she would just kind of, I mean not necessarily play psychologist but say, "What are your frustrations with your training right now?" and I would say, "Well, this doesn't seem to be working and I hate doing those three exercises out of those 10 and those are the three that it hurts more than it helps." She gave me options versus just, "Get over it." It made me realize that she is looking out for the best of me and it's not her way or the highway, it was, "Let's work something

out”, what’s the best for me. That trust, the time that she took for that really made a difference in my recovery, I believe.

Shiera now understands that her trainer was “looking out” for her best interests, and she was very appreciative of that. Shiera recognizes how much time and effort her physical therapist put in to establishing a good relationship and designing a proper training protocol. Her prior physical therapist was not portrayed in a good light. Continuing on, she begins to talk about how her teammates welcomed her home when she was cleared to play:

It’s funny, Carol, my roommate and Lois, our other roommate, threw me a Hamstring party when I finally got released. I came home from Tennessee and there were balloons, there were t-shirts, I mean, it was hilarious of all the stuff that they threw, cause they were excited for me. Just the support system with that and I think when it’s your senior year, your teammates want to do whatever they can for you, I had a lot of big support from roommates and teammates, definitely. I think that made a difference in my recovery too, when you have people you can talk to and vent to and trust them as well... But I had so much respect for the way that they treated me that I wasn’t just an injured player. That made me more successful cause I wanted to get back for them, more so than myself, I wanted to be part of that with them cause they’d done so much for me.

Shiera was certainly not the only athlete to have received support from others. Clark can vividly recall being told this from a teammate:

Clark, if you have doubts for yourself, I don't, because I know what you are. I know what kind of guy you are. I know what kind of training you do. I know what kind of supporters you have. I got your back.

Having teammates and supporters who put those positive messages in one's head can only be beneficial for injury recovery. Further research should be done to discover the significance of positive support and how much of a predictor it is for successful recovery. While others can help an athlete on the road to recovery, a second chance is never guaranteed, and the first chance is often overlooked.

**Opportunity.** "You never realize how much you take it for granted," said Oliver. Athletes often fail to realize how fortunate they are to be "blessed" to be able to perform and compete. A large percentage of Earth's human population is constantly battling disease and illness, and the select few who find themselves healthy and fit rarely recognize their circumstances until injury strikes. At that point, several of the participants spoke of "getting a second chance." They realized how "much you miss it" and how much they took their initial success for granted. Once they return to sport, they "don't want to take the opportunity for granted." They learn to appreciate and be thankful for the opportunity to play sports. In Diana's case the injury was so severe that a second chance was "something I never thought I'd get." In addition, athletes are able to reflect and recognize how the experience changed them, and come to see the injury itself as an opportunity. As Hal said, "It was a good learning experience."

**Reflection and Change.** Any time a person's will is tested, growth may result. Most of the participants in the study indicated that they were able to reflect on their

experience and have changed for the better because of it. For example, “You learn a little bit about yourself; you become more mature”, as Kara said, represents the notion of reflection within the newly recovered athlete. For change, the statement from Wally “It humbles you and makes you realize you are human. If you’re not careful, injuries like this can happen again” signifies the resulting change from the recovery experience. Kara detailed in her interview how the change has affected her, “I make sure since I’ve been injured in the past...I’ll see a teammate that’s injured and I take special interest cause I know how tough that is.” The experience really is “eye opening” for the athletes, according to Diana, and it forces them to take a personal inventory of themselves and their characteristics. They are able to relate to others in a more profound way, particularly athletes who are in the midst of the recovery process themselves.

The reflection also provides athletes with new personal maxims in which they can hold on to. These maxims are usually motivational and can serve them in the future, bolstering their coping resources for future stressors. They can also serve as motivational and support structures for other injured athletes that they are trying to help. Diana’s statement “Just mind over matter”, along with Clark’s comments “Come with a positive mindset every day”, and “Got to be mentally strong” are all maxims that can help an athlete cope with personal stressors as well as provide assistance to others.

In summary, existing as an injured athlete means experiencing a broad assortment of both positive and negative thoughts and emotions. As athlete’s progress through the experience, they must face mental and physical challenges, relying on their athletic identity to provide the tools required to move forward. The experience is not easy nor is it particularly enjoyable, but many of the participants believe they are better athletes and



better people for it. The opportunity to face a challenge such as an injury and all that one brings is rare in competition, because often, the biggest obstacle in an athlete's path for success is their self.

## CHAPTER 5

### **Discussion**

This study expounded upon previous literature relating to the psychological effects of injury on an athlete and provided existential themes that allow the reader to relate to the experience in a more profound manner. While previous research has identified predicted stages of recovery (Taylor & Taylor, 1997), reaction predictors, responses, and psychological constructs related to particular stages, no study had attempted to obtain existential themes via phenomenological methods that provide an access point for those unfamiliar with the experience itself. The researcher and participants engaged in one-on-one interviews in an attempt to uncover and identify an accurate description of the recovery experience. Merleau-Ponty stated that meaning is obtained through existence where individuals are in constant communication with the world. Kwant (1963) proposed that language is the primary tool for the expression of thought. This chapter is dedicated to discussing the findings of the study as well as its implications and applications for mankind, specifically for injured athletes attempting to holistically recover from serious injury.

### **Major Findings**

Several major themes were revealed upon analysis of the data. Yet, of all the themes identified, frustration was the most complex and commonly experienced theme. Frustration was present in almost every stage of the recovery process in one form or another. The athletes seemed to be frustrated mainly within the existential grounds of time and others. From the data, it seems as though a sense of disconnection from the team

fosters the growth of distrust with others. There is a direct relationship between the length of time an athlete spends disconnected from the team and the amount of distrust present in the experience. The frustration surrounding the career pause allows the athlete an inordinate amount of time to think, and the negative emotions tied to injury provide an ideal catalyst for maladaptive feelings, such as distrust, to take hold in the psyche of the athlete (Sparkes, 1998). From the frustration stems fear, guilt, and disappointment. However, it should be noted that the themes of depression and anger were not as prevalent or as prevalent as one would assume or as the literature would lead one to believe. Depression and anger were only present during the initial reactive period of the injury recovery experience. According to previous literature, depression and anger are experienced until the athlete accepts the challenge and embarks on the confrontational pathway (Tripp, Stanish, Ebel-Lam, Brewer, & Birchard (2011). This could be due to the fact that all of the participants were able to return to athletic competition, and so perhaps their experience was more positive overall.

Additionally, there seems to be a very strong direct relationship between the fear of reinjury and a change in behavior. The fear of reinjury drives the athletes to completely change their approach to strength and conditioning and body maintenance. These athletes are so afraid of having to relive the experience that they dramatically alter their lifestyles post-recovery in an attempt to ward off injury in the future. Still, injuries cannot be completely eradicated and the chance of reinjury will always be very real. This also ties in to the mental stress that comes with a loss of control. Injury robs athletes of their control, and they crave to have that back. Upon completing recovery, they alter their behavior in an attempt to keep control over their bodies and over injury.

Fear seems to permeate the entire experience of recovery. From the initial reaction to the eventual return, athletes could potentially be forced to deal with fear as they progress from stage to stage (Andersen, 2001; Ford & Gordon, 1999). But fear is not necessarily a negative element. As seen with the fear of reinjury, fear can be a potent motivator. Athletes can use the fear of regret to attack the challenges of rehabilitation; a direct confrontation that is beneficial to the recovery process. When managed, fear can be a very useful tool instead of a negative stressor. For athletes who are attempting to recover from a significant injury, perception is reality.

The recovery experience changes the perspective of the athletes. This study has found that athletes become more compassionate towards other injured teammates and also tend to become a bit more introspective. Once they feel as though they have recovered, athletes become far more aware and appreciative of the opportunity and good fortune they have to even be participating in sports. Additionally, the participants were all very grateful for those who they perceived to be supportive of them during the process and they now go to great lengths to be a source of support for others.

### **Connections to Previous Research**

The athletes in this study all successfully returned to sport and in doing so chose the confrontational pathway described by Tripp, Stanish, Ebel-Lam, Brewer, & Birchard (2011). The recovery process did indeed progress in distinct stages, as first illustrated by Taylor & Taylor (1997). In accordance with the model proposed by McDonald & Hardy (1990) that predicts mood state improves over time during the recovery process, negative mood state transitioned to positive mood state as the athlete began to perceive

improvements in their physical state. In summation, as the injury healed, mood state improved. Another major force driving the transition from negative to positive mood state was social support, first identified by Pepitas & Danish (1995) and Shaffer & Wiese-Bjornstal (1999). Athletes in the study who received social support did experience a positive change in mood state, which allowed them to appraise the situation more positively, therefore allowing them to cope with the injury and improving their adherence to the rehabilitation process. The findings of this study collaborate with previous literature from Pepitas & Danish (1995) and Shaffer & Wiese-Bjornstal (1999) in that social support played a crucial role in the experience of the athlete. Additionally, a bit of negative mood state, specifically anxiety and nervousness, returned prior to their return to competition. This part of the experience was predicted by LaMott (1994) and Morrey (1997) and relates to the fear of return. Upon actual return however, the participants overwhelmingly echoed a feeling of excitement and happiness.

The strongest connection to previous literature comes with Sparkes' construct of the Athletic Identity. Sparkes' (1998) article on the subject of athletic identity is aptly titled "strength of Hercules or Achilles' heel", because mental strength and determination can be an athletes' greatest strength or biggest weakness. Sparkes believed that a strong athletic identity, and its inherent adherence to the sport ethic, could be an athlete's greatest strength because it drives the athlete to compete, to train, to sacrifice, and to display and unending determination towards achieving victory. However, this ideal can also be a weakness for an athlete, as it could cause bouts of frustration and impatience. Contemporary literature states that the disruption of one's biographical narrative may elicit negative psychological reactions (Bury, 1982; Sparkes, 1998). Indeed, Sparkes'

words were consistent with the data from the interviews. Athletes were able to overcome the challenges of the recovery process because of their toughness, determination, and sacrifice. But their invocation of the athletic identity was the source of every negative theme experienced, including non-adherence to the rehabilitation protocol. In the end, athletes with a strong athletic identity define themselves as competitors, and the inability to fulfill that role elicits feelings of fear, frustration, denial, disappointment, and anxiety.

Participants did in fact express fears over competency, autonomy, and relatedness as predicted by Podlog & Eklund (2007). The social disconnect and distrust associated with frustration completely fits within the construct of relatedness, much in the way fears of reinjury and ability relate to competency. The impairment of social functioning lead to frustrations which manifested into feelings of disconnection, guilt, and distrust aimed at those in the athlete's social environment. The loss of control experienced at the onset of injury certainly correlate with the construct of autonomy, as the suddenness of the injury takes control of the narrative from the athlete. The interplay of autonomy, relatedness, competency, athletic identity, and the sport ethic all effect the outcome and mood state of the athlete. Support seems to be the greatest form of intervention available to help athletes meet the mental challenges of recovery (Cox, 2007; Cupal,1998). Athletes in this study who felt as though they received adequate social support had a much smoother transition back into the team setting; almost as though they never left. Bianco & Eklund, (2001) first proposed the idea that social support can inoculate an athlete from certain negative themes and may even prevent the disruption of their social narrative, which makes the athlete more likely to remain patient and adhere to the rehabilitation protocol. Essentially, social support is the best intervention strategy for helping the injured athlete

through the recovery process. Previous literature, in collaboration with the findings of this study, has shown that social support can alter the perception of the injury and the initial reaction (Wiese-Bjornstal & Shaffer, 1999), suppress negative emotional and cognitive themes by helping the athlete cope (Brewer, 1998; Cox, 2007), protect the athlete from experiencing socially charged negative emotions (Bianco & Eklund, 2001), mitigate the disconnect from their social environment (Pepitas & Danish (1995), improve adherence to the rehabilitation protocol (Cox; 2007), and assist in their reintroduction to the social environment (Cox, 2007; Cupal,1998).

### **Practical Implications**

The analysis of the data collected during this study has lead to the identification of several practical implications for individuals who surround injured athletes, and for the athletes themselves. Athletes who become injured should focus on the positive circumstances surrounding their situation. Loss of control is an important theme that initially causes some mood disturbance within the athletes and the best method to combat this is to focus that which can be controlled once an injury strikes. Athletes must focus on the rehabilitation process, because they can control their effort and rate of progress (to a certain extent). They should also recognize that injuries can always be more severe, and that they have an opportunity to eventually continue their careers.

All of the individuals surrounding an injured athlete, including medical personnel, coaches, teammates, friends, and family, should all be as supportive as possible for the athlete. Only those who have been injured can truly know what the injury recovery experience is like, and even then every experience is unique, but this study provides the

most relatable data that allows outsiders to step into the shoes of injured athletes. The individuals, who surround athletes need to do exactly that, try to see the world from the eyes of the injured athlete and act accordingly in supporting them. An athlete's coping ability is reliant on the support system they perceive to have, and so it is imperative that they know they have strong, unconditional support.

The following lists provide strategies that should be followed and explored by athletes and their support system as they move through the stages of recovery.

During the reaction period:

- Athletes can focus on what is controllable within their situation
- Coaches can offer continuous words of encouragement
- Teammates can assist the athlete in adjusting to daily life with an injury
- Sport psychologists can frame the situation into a manageable circumstance
- Sport psychologists can guide the athlete into confronting and accepting the reality of situation
- Sport psychologists can open up dialogue specifically pertaining to the emotional and mental challenges the athlete is facing
- Sport psychologists can help the athlete recognize and utilize their coping resources to alleviate stress of injury
- Athletic training staff can make the athlete physically comfortable
- Athletic training staff can frame the prognosis as positive as possible



- Family and friends can help keep fears and doubts from entering the athlete's mind

During the rehabilitation period:

- Athletes can continue to support teammates
- Athletes can engage in dialogue with teammates, coaches, friends, and family
- Athletes can express frustrations with physical therapy to the training staff
- Coaches can make the athlete feel as included as possible
- Coaches can give the athlete activities or responsibilities to help manage boredom
- Coaches can offer reaffirmation to the athlete of their place on the team
- Teammates can spend time in the training room with the athlete
- Teammates can keep the athlete up to date with all the happenings amongst the team
- Teammates can let the athlete know they are still part of the team
- Family and friends can try to understand the importance of competition and sport to the athlete
- Sport psychologists can monitor the mental state of the athlete and curb any maladaptive emotions or thought patterns
- Medical personnel can take time to cultivate an open and trusting relationship with the athlete

- Medical personnel can constantly modify and adjust the rehabilitation protocol to the needs of the athlete
- Medical personnel can display signs of interest and investment in the rehabilitation of the athlete

During the return and reflection period:

- Athletes can learn to trust their body again
- Athletes can immerse themselves in their old routine again
- Athletes can reflect on the experience and its implications for the future in a positive manner
- Coaches can treat the athlete equally with other players
- Teammates can make the athlete feel as welcome as possible
- Sport psychologists can meet with the athlete to help manage any lingering fears or doubts
- Family and friends can support the return to competition

Ultimately, athletes should never be given reason to doubt that the people in their lives fully support their endeavor to return from injury. Athletes need to know that their support system is strong and unwavering. A lack of coping resources only exacerbates the negative reaction to injury and can greatly hinder the recovery process if not arresting it altogether. Empowering the athlete is the key to a successful physical and mental recovery.

**Limitations**

This study only included athletes who completed the injury recovery process and returned to sport. The sample size was limited to 11 participants, although several more were contacted during the recruitment period. Athletes who did not complete the recovery process or sustained career ending injuries were not included in the recruitment process. The chosen method of phenomenology brings an inherent challenge to the generalization of data. Phenomenology is designed to uncover deep rooted themes within the experience of the participant, and so its data is very personal. The injury recovery process is never the same for any two people, and so it is very difficult to generalize the available data. Additionally, this study only included one individual sport athlete and one professional athlete, so its validity within the professional population and the individual sport population is questionable.

**Future Directions**

Future studies should be directed at identifying methods and strategies for improving the interpersonal connection between the injured athlete and others. Psychological interventions should be researched in order to prepare those who care for injured athletes to handle the assortment of emotions and mental processes athletes experience during their recovery. Additional research should also be done with athletes who were never able to return to sport, and examine the role negative mood state played in the outcome as well as how it affects the athlete today, if at all. In this study, one collegiate athlete mentioned the fear of losing his scholarship and the professional athlete in the participant pool stated he played injured during an “option” year in his contract.

Along with athletic identity, the role of finances should be explored in how it relates to the reaction and the drive to recover from injury.

### **Conclusion**

Injuries are an inevitable part of sports, but they are certainly not the whole. Determination, sacrifice, and toughness, both physical and mental, play a major role in what attracts individuals to the athletic realm. When one identifies as an athlete, the expectations of said role drives the individual to behave in a manner consistent with their own personal narrative. Injuries disrupt the narrative, and leave the athletes in a state of confusion, one where their bodies are no longer their strength. They must then accept the reality and take on the challenge of recovering physically and mentally in order to restart their narrative and identify as athletes once again. Several factors play into how the athlete proceeds with recovery, but support from the environment can do much to make the experience both beneficial and life-changing.

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APPENDICES

Appendix A

Demographic Information

Name:

Current age:

Age when injured:

Rehabilitation duration:

Surgery required: Y/N

Competitive level when injured:    Amateur        Semi-Professional    Professional

Email and/or postal address:

Phone number:



## Appendix B

### **INTRODUCTION**

#### Informed Consent Statement

You are invited to participate in a research study I am conducting for my master's thesis at Barry University. The purpose of this study is to learn more about the experience of recovering from a serious injury.

### **INFORMATION ABOUT PARTICIPANTS' INVOLVEMENT IN THE STUDY**

Should you decide to participate in this study, you will be asked to participate in an interview at a time and location of your choosing. During the interview you will be asked to describe in as much detail as possible your experiences while recovering from injury. I may occasionally ask follow-up questions to gain further clarification on previous statements or to obtain additional details relevant to the topic.

The interview should last approximately 30-60 minutes depending on the depth of your responses. I will audio record the interview and then transcribe it (i.e., type it out on paper) for further analysis. I will then let you look at your transcript to be sure it accurately portrays what you were trying to say in your interview. You may choose to adjust or delete any part of the interview in order to provide a more accurate description of your experience.

Next, an interpretive group composed of Barry University faculty members and graduate students from a variety of academic disciplines will listen to and read the transcribed interviews to uncover elements that appear to be significant. All members of the interpretive group will sign a third party confidentiality form (Appendix B) prior to involvement. Also, the group will be able to assess whether my findings were substantiated or resulting from imposing biases or presuppositions. I will then work with the group to develop a thematic structure for the interview data.

This process will involve the identification of "meaning units," grouping the meaning units into sub-themes, and clustering sub-themes into major themes. The meaning units will then be applied to the defined stages of injury recovery to demonstrate the most prevalent emotions and thoughts experienced during each particular period. The final step will involve me presenting the thematic structure to you and the other participants so that you may critique whether the analysis reflects your personal experience with the phenomenon. The findings will then be presented and discussed in the final two chapters of the research document.

Participant's Initials

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## **RISKS**

You will be asked to select a pseudonym - a fake name - for this study, which I will substitute for your real name whenever you make comments that might identify you. This is done to help preserve the confidentiality of your responses. Furthermore, in an effort to preserve your confidentiality I will only share your interview with members of the research group assisting me in this study and with the faculty members on my dissertation committee.

## **BENEFITS**

Potential benefits from participation in this study include to the opportunity for you to: (a) add your perspective to the limited body of research concerning the psychological components of injury recovery (b) perhaps uncover a deeper meaning and understanding of your recovery experience. However, there will be no direct benefit to the participants.

## **CONFIDENTIALITY**

I will use the results of this research for my master's thesis. The results will be coded in such a way that participants' identity will not be revealed in any manuscript or publication resulting from this study. While individual participants' responses will remain confidential in written reports, aggregate data representing generalizations about all participants' responses will be discussed. All audio recordings and transcripts will be stored in a secure location and will be made available only to persons conducting the study unless you specifically give permission in writing to do otherwise. Upon completion of the study, all information that matches you with your answers, including audio tapes, will be destroyed.

## **CONTACT INFORMATION**

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Christopher Muñoz, at (954) 655-3467, my supervisor Dr. Simpson, at (305) 899-4890, or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020.

## **PARTICIPATION**

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed.

Participant's Initials

\_\_\_\_\_

**STATEMENT OF CONSENT**

I have read the above information and have had all my questions answered to my satisfaction. I agree to participate in this study and understand that I will be given a copy of this consent form.

Participant's signature \_\_\_\_\_ Date \_\_\_\_\_

Investigator's signature \_\_\_\_\_ Date \_\_\_\_\_

