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Lived Experience of Collegiate Athletes with Season Ending Injuries

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LIVED EXPERIENCE OF COLLEGIATE ATHLETES WITH SEASON ENDING INJURIES

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DEDICATION

This thesis is dedicated to my parents
Dallas and Cindy Thomas
for their unwavering support.

ACKNOWLEDGMENTS

I would like to thank my thesis chair and professor, Dr. MaryEllen Thompson, for her guidance and patience. I would also like to thank the other committee members, Dr. Camille Skubik-Peplaski and Dr. Melba Custer, for their support and assistance over the past four years. I would like to express my thanks to my family, for their understanding and patience during those times when there was no light at the end of anything. You all saw me through, and I am so glad that you did.

Abstract

The purpose of this study is to examine the lived experience of collegiate athletes and their experience with a season ending injury. The individuals will have had an injury that has kept them from participating in their sport for the remainder of the season. Evidence shown gives the factors that impact recovery, supports for recovery, the model for response to sport injury, and coping mechanisms of the athletes impacted. However, there is a lack of research on the actual lived experience of the injury for collegiate athletes. Knowing this information could help change the way that we look at their recovery process. Semi structured interviews regarding their experiences with injury will be conducted with the participants. Interviews will be transcribed and coded and cross case analysis used to look for themes. Discussion includes any themes that arise out of the interviews.

Key words: habits, routines, collegiate athletes, season ending, injury

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Chapter 1

Introduction

Background & Need

This study examines the impact that season ending injuries have on collegiate athletes. The National Collegiate Athletic Association's (2016) mission is student-athlete success on the field, in the classroom, and for life. The question is, how does this road map to success change once an athlete has acquired an injury that will prevent them from finishing out the season in their chosen sport. Habits and routines impact how we go about our everyday lives. For these athletes, an injury could impact how their habits and routines are shaped. In order to understand how their lives have changed, we must examine their habits and routines before and after their injury. By understanding how their habits and routines have changed, we may be able to assist the student-athlete in being successful during their lives off of the field. Literature about this topic includes habits and routines, theories on response to sport injury, how an athlete perceives their experiences, and transitioning back to sport. Habits and routines are a driving force behind what a person does from day to day. By gaining a greater understanding of what these are, we are able to understand how they are impacted. The literature review will start by examining what habits and routines are.

Literature Review

Occupational Science and Occupational Therapy Theories.

Habits and Routines.

Literature suggests different ways of viewing habits and routines, although they are sometimes used interchangeably. Occupational science and occupational therapy

literature provides an in depth look at habits and routines. According to the Occupational Therapy Practice Framework (OTPF) (2014) habits are "Acquired tendencies to respond and perform in certain consistent ways in familiar environments or situations; specific, automatic behaviors performed repeatedly, relatively automatically, and with little variation" (AOTA, 2014). Routines, in the OTPF are defined as patterns of behavior that are observable, regular, and repetitive, and that provide structure for daily life. They can be satisfying, promoting, or damaging. Routines require momentary time commitment and are embedded in cultural and ecological contexts (AOTA, 2014).

According to Clark (2000), for an occupation to be considered a habit, it must be done repeatedly, repetitively, automatically, and with little variation. A routine is a way of organizing occupations. One such example would be a person's morning routine, which has more of a procedural way of completing occupations (Clark, 2000). Clark (2007) et al states that routines involve ordering, sequencing, and combining several simple activities to help create order. Habits can be used as a powerful source for shaping the lives of clients in rehabilitation. Clark (2007) goes so far as to say that in making habits a part of rehabilitation, occupational therapists would be allowing a person the time to stay involved in meaningful occupations; meaning occupational therapists would be allowing a person the right to health and quality of life through engagement in meaningful occupations. Wallenbert and Jonsson (2005) support the notion that a disorder or diagnosis can impact habits and routines. Occupational therapists remained aware of the impact on daily occupations in order to help the clients adapt to and accept their diagnosis (Wallenbert & Jonsson, 2005).

Different models provide a way to make sense of habits and routines. They are the combination of an interaction of a person within their environment doing the occupations that are meaningful to them.

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The Person-Environment-Occupation (PEO) Model (Law et al ,1996) is one way to look at the impact of habits and routines on occupational performance. The model guides clinical reasoning in analysis and understanding to form a foundation for application in practice. The PEO model of occupational performance adopts a transactional approach towards the relationship between a person and their environment. The interaction between the three components results in occupational performance. The interactions continue throughout the lifespan and remain dynamic. The person component encompasses the skills, knowledge, and experience that each individual has. Analysis of the person looks at motivation, emotional response, degree of autonomy, and the assumption that person is developing and intrinsically motivated. The environment is the context in which the occupation is performed. Optimal environments foster occupational performance. Occupation is defined as the meaningful tasks and activities engaged in throughout a lifespan (Law et al, 1996). The PEO model encompasses a function-dysfunction continuum. This continuum is also dynamic and ever changing. Problems associated with change or disability can affect the other components and the degree of occupational performance. Optimal function results from a good fit between the three components. Minimum fit can result in occupational performance dysfunction.

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Stress Model.

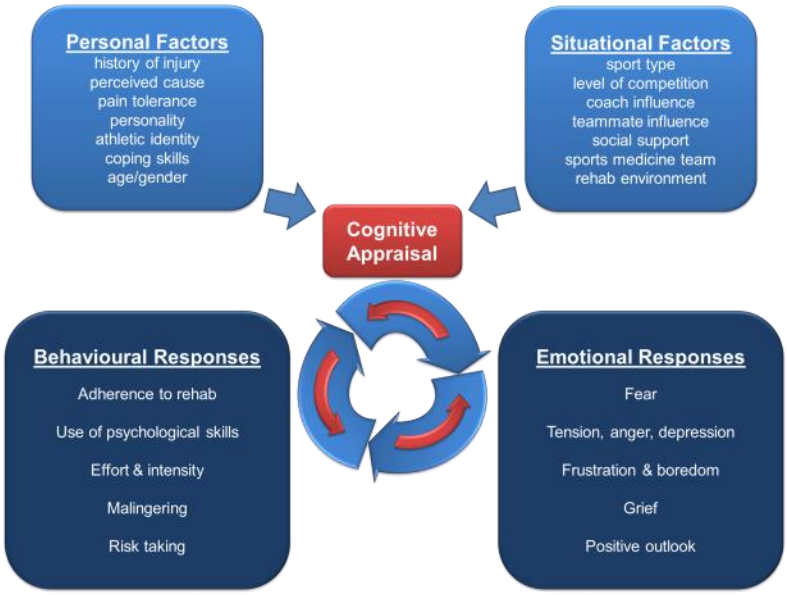
Multiple theories suggest the response of athletes to their injuries (Andersen & Williams, 1988; Granito, 2001; Wiese-bjornstal, Smith, Shaffer & Morrey, 2008). Andersen and Williams (1988) examine stress and athletic injury as related to how stress may impact the injury itself, and how to prevent stress from occurring once an injury has occurred. The stress model looks at potentially stressful situations, including injury as the main component that goes into an athlete's response to injury. Other components included in the equation are as follows: personality, history of stressors, coping resources, and interventions. Under personality, the stress model, included their competitive traits and motivation to succeed; stressors include life events, daily hassles, and previous injuries; resources, include self-management and a social support system. Each of these aspects is a part of the stress response of the athlete thus impacting their recovery and their susceptibility to further injury (Andersen & Williams, 1988). For example, if an athlete has limited access to coping resources and high life stressors they are more likely to become reinjured.

Cognitive-Appraisal.

Granito's (2001) model follows a cognitive appraisal approach to injury. This model compares a stressful event with an athlete's ability to cope with the event. Granito (2001) defined what areas are impacted by injury under the cognitive appraisal model. The seven categories that it follows are personal factors, effects on relationships, sociological aspects, physical factors, daily hassles, feelings associated with injury, and rehabilitation (Granito, 2001). For an athlete this means adjusting to the

new aspects of each of these categories and learning to cope with them following an injury.

Wiese-bjornstal, Smith, Shaffer, and Morrey (2008) have designed another cognitive appraisal model. This model looks at the response to sport injury in a psychological and sociological realm. It examines both the cognitive and emotional responses of athletes to a sport injury. The model shown below gives a detailed listing of the personal and situational factors that impact recovery and how cognitive appraisal of these factors lead to the behavioral and emotional responses of athletes as they respond to their sport injury (Wiese-bjornstal, Smith, Shaffer, & Morrey, 2008). Each athlete is unique and the many different components interact to form how they each respond to injury.



Firgure 1: Cognitive Appraisal Model to Sport injury

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Granito (2001) used a focus group approach to interview college athletes and their trainers in order to better examine an athlete's response to injury. Focus groups revealed seven main categories that were impacted by injury: personal factors, effects on relationships, sociological aspects, physical factors, daily hassles, feelings associated with injury, and rehabilitation. The personal factors included the personality and athletic identity of the athlete. These impacted how the individual would experience and react to the injury. Relationships were impacted by the injury. Every member of the focus groups mentioned that injury impacted relationships they had with their coaches, trainers, teammates, other injured athletes, and their parents. The sociological aspect category suggested that cultural factors and social influences can mediate the way an athlete experiences and talks about pain and injury (2001). Pain, surgery, use of medication, and physical deconditioning make up the physical factors of experience with injury. Daily hassles included getting around on crutches, losing focus at school, and disruption of daily tasks. Feelings associated with injury include depression and frustration. Rehabilitation included the interventions themselves as well as scheduling their times and getting to and from the training room. Each of these categories contains areas that changed an athlete's experience with their injury.

Phases of Recovery.

Bianco, Malo, and Orlick (1999) conducted qualitative interviews with 12 athletes on the Canadian Alpine Ski Team. The researchers were able to gain a better understanding of the relationships of variables which influenced their rehabilitation and

recovery. They found that there were three distinct phases which spanned across the entire experience with the injury or illness. The three phases are as follows: the injury-illness phase, the rehabilitation-recovery phase, and the return to full activity phase. The phases were divided by two major transition points: first, the decision to receive treatment and second, the decision to return to sport. The injury-illness phase looks at the time when the athlete was unsure of the diagnosis, and they experienced a great deal of stress from the unknown and from the inability to participate in sport. This phase lasts for a short period of time and much of how the athlete felt was dependent upon circumstances with the other athletes on their team. For example, whether or not their teammates had secured a spot on the team influenced how stressed they felt about having obtained an injury. The decision to undergo treatment was the next big transition for the athletes. The athletes had many different considerations during this time including whether or not they could continue participating with the injury incurred. Many of the athletes chose to attempt the sport with the injury.

Rehabilitation-Recovery Phase (Bianco, Malo, & Orlick, 1999) encompassed physical, cognitive, and emotional stressors for each of the athletes. This phase included symptoms, physical demands, motivation for rehabilitation, concerns about missed competition, and concerns about team status. The biggest emotional stress for the athletes was slow progress and/or setbacks in rehabilitation (Bianco, Malo, & Orlick, 1999). The athletes describe coping strategies during this phase including: accepting the injury and setbacks, believing in recovery, focus on improving, keeping a positive outlook, trying alternative treatments, learning about their injury and illness, and even taking a break from rehabilitation. The second transition was an athlete's decision to

return to activity. Transitions when returning back to a sport were driven by anxiety over losing a position on the team. The third phase of returning to activity saw athletes adopting different coping strategies such as focusing on the future, readjusting their goals, building physical strength, working at their own pace, and incorporating rest when they needed it. By knowing and understanding these phases of recovery, those involved in assisting with rehabilitation can better understand what the athlete is feeling in order to assist them in making the healthiest decisions.

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Coping Mechanisms.

Grindstaff, Wrisberg, and Ross (2010) examined the specific coping mechanisms of athletes. Study results found that athlete's experiences varied over time. The four major themes found that impacted their experiences were: perspective, emotion, coping, and relationships. A study by Bianco (2001) looked specifically at the recovery process for elite skiers who suffered from serious sport injuries. Skiers reported that there were many social supports that aided in emotional, informational, and tangible support. They found that the social support decreased distress and increased motivation (Bianco, 2001). The evidence shown gives the factors that impact recovery, supports for recovery, the model for response to sport injury, and coping mechanisms of the athletes impacted.

Johnston and Carroll (1998) found that athletes were more likely to adhere to the rehabilitation process if they had practical and emotional support and adopted a problem

solving coping strategy. However, if the athletes adopted an emotional coping strategy they were less likely to adhere. Support from significant others contributes greatly to the number of athletes who adhere to their rehabilitation (1998). One interesting finding came with gender differences. Women were more likely than men to take initiative and reach out for support, once support was found they were more apt to maintain their social networks (1998). Coping varies depending on the stages in rehabilitation (Johnston & Carroll, 2000). Moving forward, researchers compared the coping strategies in relation to sports involvement. Those more involved in sport were more likely to adopt a support-seeking coping strategy (2000). Those who were more involved in sport were also more likely to be better adherents.

Gould, Udry, Bridges, and Beck (1997) found seven higher order dimensions of coping strategies after studying recovery in elite skiers. The seven categories include: driving through, distracted self, managed emotions and thoughts, sought and used social resources, avoidance and isolation, took note and drew upon lessons, learned and other. Each of these described ways that the athletes chose to deal with their season ending injury. The results showed that there were other factors which impacted recovery. The themes included interpersonal resources, accessible quality medical resources, fortunate circumstances, environmental resources, past experience with injury, and financial backing. Like the study by Johnston and Carroll (2000) differences in male and female coping strategies were found.

Emotional Response.

Brewer, Linder, and Phelps (1995) led an investigation between situational barriers and emotional adjustment to athletic injury. Questionnaires were given to 121

patients in a sports medicine clinic to examine this relationship. The study found that situational factors were not strongly associated with the emotional responses of the athletes who were injured (1995). Physician rated current injury status, impairment of sport performance, and social support for rehabilitation were the variables most strongly associated with emotional adjustment. Individual differences in coping were apparent. The situational factors help to explain why some athletes experience distress while others do not. Those that experience distress may suffer with success in rehabilitation. Leddy, Lambert, and Ogles (1994) report that injured athletes exhibit greater depression and anxiety and lower self-esteem immediately following injury and at follow-up 2 months post injury. Five strategies are listed to help the athlete in their response to injury. 1. Be aware that there are psychological responses to injury, 2. Educate the athlete about these effects, 3. Get their previous history with injury and response to injury, 4. Assess for athletes who may be experiencing psychological trauma, and 5. Offer the athlete ideas for other ways to channel their energy (1994)

Johnston and Carroll (1998) used grounded theory to describe the emotional responses of athletes and their situational and temporal contexts. Results found that emotional responses were highest among the athletes with the most severe injuries. Most commonly, emotions that arose included, frustration, depression, anger and anxiety. Second to these emotions included guilt, shock, jealousy, and fear. The emotions differed as they moved through different stages of recovery. During the early phase frustration and depression was a result of incapacitation and the consequent disruption of normal function and involvement in their sport. Early on anger was also prevalent with medical personnel as the key factor. In the second phase, depression was associated with

a negative appraisal of their success in rehabilitation which led to poor adherence. In the final stages impatience to return to sport was the most common emotion.

Transitioning

Back to Sport.

One of the biggest obstacles when transitioning back to a meaningful sport is the fear of reinjury. Kvist, Ek, Sporrstedt, and Good (2005) examined athletes who had undergone ACL reconstruction. Results identified that often social reasons or psychological hindrances influence an athlete's decision to return to sport. Eighty seven participants were involved 53% of which returned to their prior level of function. Those who did not were more likely to experience a higher fear of re-injury (Kvist, Ek, Sporrstedt, & Good, 2005).

Podlong and Eklund (2006) completed a study to examine the experience of athletes returning to sport following a serious injury. Prior to re-participation in sport the athletes' motives were examined. These included achieving personal goals, love of the game, bonding and socializing with teammates/training partners, maintaining fitness, and preservation of identity. Return to competition came with feelings of excitement and anticipation, anxiety over re-injury, and fear of not meeting performance expectations. There was also a decision making process which had to be followed including discussions on clearance, encouragement from support systems, pressures from coaches and teammates, and benefits of perceived autonomy (2006). Following the return to competition athletes dealt with fears of returning, encountering adversity, feelings of enjoyment from return, and positive aspects of returning (opportunities to play, coping with frustration, renewed perspective, etc.) (2006).

Out of Sport.

Stoltenburg, Kamphoff, and Bremer (2011) identified five themes as impacting transitioning out of sport: consequences of the injury, social support, athletic identity, nature of the injury, and pre-retirement planning. Support for using Taylor and Ogilvie's (1994) Conceptual Model of Adaptation to Career Transition arose from the interview data. Having a plan following an injury allows for a "smoother transition" (2011). It would be beneficial for all athletes to create a plan for the day that they will no longer participate in their sport. The findings suggest that when the decision to not play lies in someone else's hands the athlete has an easier time with the transition. Social support is crucial to the transition out of sport.

While there is an abundance of literature about habits and routines and season ending injuries, there is a gap in the literature specifically regarding collegiate athletes and the impact of injury. Thus, this study will seek to examine the specific impacts of collegiate athletes with season ending injuries.

Chapter Two

Journal manuscript

Introduction/Literature Review

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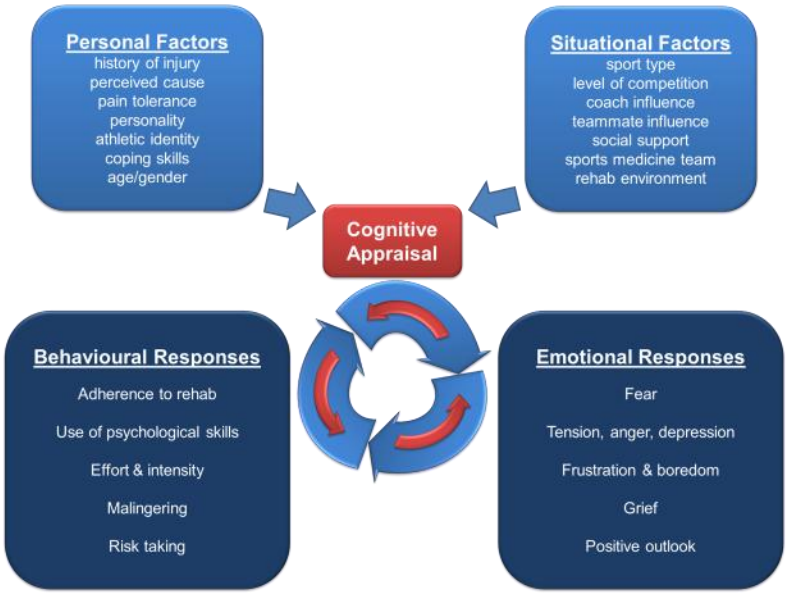

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Johnston and Carroll (1998) found that athletes were more likely to adhere to the rehabilitation process if they had practical and emotional support and adopted a problem

solving coping strategy. However, if the athletes adopted an emotional coping strategy they were less likely to adhere. Support from significant others contributes greatly to the number of athletes who adhere to their rehabilitation (1998). One interesting finding came with gender differences. Women were more likely than men to take initiative and reach out for support, once support was found they were more apt to maintain their social networks (1998). Coping varies depending on the stages in rehabilitation (Johnston & Carroll, 2000). Moving forward, researchers compared the coping strategies in relation to sports involvement. Those more involved in sport were more likely to adopt a support-seeking coping strategy (2000). Those who were more involved in sport were also more likely to be better adherents.

Gould, Udry, Bridges, and Beck (1997) found seven higher order dimensions of coping strategies after studying recovery in elite skiers. The seven categories include: driving through, distracted self, managed emotions and thoughts, sought and used social resources, avoidance and isolation, took note and drew upon lessons, learned and other. Each of these described ways that the athletes chose to deal with their season ending injury. The results showed that there were other factors which impacted recovery. The themes included interpersonal resources, accessible quality medical resources, fortunate circumstances, environmental resources, past experience with injury, and financial backing. Like the study by Johnston and Carroll (2000) differences in male and female coping strategies were found.

Emotional Response.

Brewer, Linder, and Phelps (1995) led an investigation between situational barriers and emotional adjustment to athletic injury. Questionnaires were given to 121

patients in a sports medicine clinic to examine this relationship. The study found that situational factors were not strongly associated with the emotional responses of the athletes who were injured (1995). Physician rated current injury status, impairment of sport performance, and social support for rehabilitation were the variables most strongly associated with emotional adjustment. Individual differences in coping were apparent. The situational factors help to explain why some athletes experience distress while others do not. Those that experience distress may suffer with success in rehabilitation. Leddy, Lambert, and Ogles (1994) report that injured athletes exhibit greater depression and anxiety and lower self-esteem immediately following injury and at follow-up 2 months post injury. Five strategies are listed to help the athlete in their response to injury. 1. Be aware that there are psychological responses to injury, 2. Educate the athlete about these effects, 3. Get their previous history with injury and response to injury, 4. Assess for athletes who may be experiencing psychological trauma, and 5. Offer the athlete ideas for other ways to channel their energy (1994)

Johnston and Carroll (1998) used grounded theory to describe the emotional responses of athletes and their situational and temporal contexts. Results found that emotional responses were highest among the athletes with the most severe injuries. Most commonly, emotions that arose included, frustration, depression, anger and anxiety. Second to these emotions included guilt, shock, jealousy, and fear. The emotions differed as they moved through different stages of recovery. During the early phase frustration and depression was a result of incapacitation and the consequent disruption of normal function and involvement in their sport. Early on anger was also prevalent with medical personnel as the key factor. In the second phase, depression was associated with

a negative appraisal of their success in rehabilitation which led to poor adherence. In the final stages impatience to return to sport was the most common emotion.

Transitioning

Back to Sport.

One of the biggest obstacles when transitioning back to a meaningful sport is the fear of reinjury. Kvist, Ek, Sporrstedt, and Good (2005) examined athletes who had undergone ACL reconstruction. Results identified that often social reasons or psychological hindrances influence an athlete's decision to return to sport. Eighty seven participants were involved 53% of which returned to their prior level of function. Those who did not were more likely to experience a higher fear of re-injury (Kvist, Ek, Sporrstedt, & Good, 2005).

Podlong and Eklund (2006) completed a study to examine the experience of athletes returning to sport following a serious injury. Prior to re-participation in sport the athletes' motives were examined. These included achieving personal goals, love of the game, bonding and socializing with teammates/training partners, maintaining fitness, and preservation of identity. Return to competition came with feelings of excitement and anticipation, anxiety over re-injury, and fear of not meeting performance expectations. There was also a decision making process which had to be followed including discussions on clearance, encouragement from support systems, pressures from coaches and teammates, and benefits of perceived autonomy (2006). Following the return to competition athletes dealt with fears of returning, encountering adversity, feelings of enjoyment from return, and positive aspects of returning (opportunities to play, coping with frustration, renewed perspective, etc.) (2006).

Out of Sport.

Stoltenburg, Kamphoff, and Bremer (2011) identified five themes as impacting transitioning out of sport: consequences of the injury, social support, athletic identity, nature of the injury, and pre-retirement planning. Support for using Taylor and Ogilvie's (1994) Conceptual Model of Adaptation to Career Transition arose from the interview data. Having a plan following an injury allows for a "smoother transition" (2011). It would be beneficial for all athletes to create a plan for the day that they will no longer participate in their sport. The findings suggest that when the decision to not play lies in someone else's hands the athlete has an easier time with the transition. Social support is crucial to the transition out of sport.

Because an injury causes a great deal of dysfunction in one's life, it is important to understand its impacts. Because there is a lack of information regarding information specific to collegiate athletes, it is important to gain an understanding of their lived experience and how their lives were impacted.

Methods

The purpose of this qualitative cross-case analysis study was to gain an understanding of the lived experience of season ending injuries for collegiate athletes. Cross-case analysis was aimed at increasing generalizability, this is a way of ensuring that the events and processes were not wholly idiosyncratic (Miles, Huberman, & Saldana, 2013). The aim is to see the outcomes across many cases. It is a way of understanding each individual case, but bringing them together in a cooperative way (Miles, Huberman, & Saldana, 2013). Human subjects approval was obtained through Eastern Kentucky University on September 9, 2015.

Bracketing

Bracketing is used in qualitative research to set aside researcher assumptions (Fischer, 2009). It allows the researcher to set aside preconceived notions about a study in order to ensure that positivism or negativity about a topic does not hinder the results of a qualitative study (2009). Bracketing was used as a method to ensure that the primary researcher's biases and preconceived notions did not impact the findings of the study. The chosen method of bracketing was journaling. The primary researcher had a personal interest in the athletics program as a four year member of the dance team. During that period of time the primary investigator became friends with athletes from many of the teams, and personally knew members of the team who had experience with injury and rehabilitation. The primary investigator learned that sometimes the athletes had difficulties managing their schedules because of added rehabilitation times. In speaking to these friends, the primary investigator became interested in learning more about how a season-ending injury can impact an athlete. More specifically, how their habits and routines are impacted. The primary investigator herself suffered an accident which resulted in having surgery and rehabilitation and missing out on crucial practices at the beginning of her senior season.

Participants

Purposive sampling was used to identify the individuals for this study. In this type of sampling, participants will be chosen deliberately for the study (Ritchie, Lewis, & Elam, 2003). Flyers were distributed for the purpose of recruiting participants (See Appendix A). Potential participants expressed an interest either by phone or email, and the interviews were done at the university library in a quiet room. The participants were

chosen as they contacted the primary investigator and met the criteria for inclusion. Inclusion and exclusion for the participants was as follows: a current member of a university athletic team, have suffered an injury which precluded them from finishing their season, over 18 years of age, have suffered a season ending injury within the last 6 months, currently receiving athletic training services at their university. Exclusion criteria included participants who had suffered an injury outside of their designated sport and/or who had suffered a career ending injury. Three participants were enrolled in the study in order gain a deeper understanding of the lived experience of season ending injuries on collegiate athletes. Participant information can be found in the Table 1.

Table 1

Participants

Name	Gender	Age	Sport	Injury
John	Male	22	Football	ACL Re-tear
Suzanne	Female	19	Cheerleading	ACL tear
Matthew	Male	22	Football	Stress Fracture

Note: All names are pseudonyms

Data Collection

Data collection was done through completion of time logs followed by an in-depth interview. Two time logs, both pre and post injury, were filled out in order to gain a deeper understanding of how their schedules specifically changed. (See Appendix B). After time logs were completed, interviews were conducted by the primary investigator. The interviews were semi-structured and approximately thirty minutes long. Individuals were asked to describe their own personal experience with season ending injuries. A set

of questions was developed for use during the interviews to prompt as needed (see Appendix C). Signed consent was obtained prior to distribution of the time logs and completion of interviews (See Appendix D). Participants were given a copy to keep as reference. All research materials were appropriately stored in a lock file.

Data Analysis

Data analysis was done using cross-case analysis. The data from the interviews was analyzed through a series of steps. First the three interviews were transcribed verbatim. Transcriptions were read twice and key words or phrases were identified in each of these by writing them in the margins of the transcriptions with over one hundred codes identified. The next step was to find categories within the data. The researcher and faculty mentor reviewed each of the codes and developed categories by looking for relationships among the identified codes. Categories were entered into HyperRESEARCH (HyperRESEARCH, 2013) to look for trends. Categories were as follows: adaptations, barriers, being with the team, community/functional mobility, difficult/take more time, emotions, medical, practice, rehab, role shift, routines/changes, significant events, and supports. The Categories evolved into four main themes. Table 2 provides an example of how a set of codes led to categories and then one of the themes.

Table 2

Data Analysis

Codes	Categories	Theme
Can't walk, leave early, walking a boot longer to get ready, difficult, boot, brace walking around, getting to class, stairs	Barriers	Barriers Influencing Change

Table 2 Continued

Data Analysis

Codes	Categories	Theme
shower, standard car, lack of sleep, no elevator, stand on one leg, clothing management with brace		

Note: This is only one example of how data was analyzed to form themes.

Findings

Cross case analysis revealed four main themes related to the lived experience of season ending injuries on collegiate athletes. The four themes identified were: changes in routine, transitions in sport participation, barriers influencing change, and supports. Themes are listed in random order not hierarchy. Additional information which did not raise to the level of a theme, but was noteworthy, or was unique to a case will be discussed.

Theme 1: Changes in Routine

One theme that emerged through the time logs and the interviews were examples of changes in the athlete's routine. These included specific times where the individual noted how their routines changed as a result of their injury. The individuals noted how much time they gave themselves to get up and get dressed, or go from point A to point B as a result of their sport injury. Participants also noted changes in what they wore post-surgery. The routines changed when dealing with their braces as well. Examples of this included: waking up in the middle of the night to put it on before evacuating for a drill, or accommodating the extra time needed to don the brace in their morning routine.

John stated, *"Straight out of surgery I don't think I wore anything other than shorts and a t-shirt because it was just the easiest thing to wear."* His statement showed how his clothing choices changed as a result of the injury and surgery. Suzanne explained how the brace may have impacted her clothing choices had her injury occurred later, noting that she would not have been able to wear her usual fall boots. Suzanne reported, *"Before the injury I would get up and do my hair. After the injury I just kind of got dressed, brushed my teeth and left."* Her whole morning routine changed as a result of the injury itself. Each of the participants mentioned leaving early each day to get to rehabilitation. Matthew stated this in a very straight forward way, *"I had to leave early because of walking around in a boot."*

Theme 2: Transitions in Sport Participation

The next theme was determined after taking a closer look at the categories labeled "practice", "rehab", and "role shift". Transitions in Sport Participation encompassed how their practice participation changed, the role of rehab in injury, and how their roles changed as a result of the injury. Practice participation changed in different ways for the participants. They became passive members of practice who at times attended rehab during practice times. In addition, one participant took on a coaching role during practice times. Rehabilitation also played a part in their changed sport participation. This included attending rehabilitation during times that were originally allotted to something else such as practice or rest. This became evident through closer examination of the athlete's time logs. Rehabilitation took up a significant amount of time in their schedules. Athletes also experienced role changes as a result of their injury. These coincided with the change of participation in practice.

John, *"I rehab during practice. I lift for the rest of practice."* His practice time was now taken up by lifting and doing his rehabilitation program; showing how his practice participation changed as a result of his injury. The role change to being a passive member of the team had an adverse effect on John. He spoke of the hardship surrounding a change in practice participation, *"When you sit on the sidelines and you watch practice you're like, man I would do anything to practice right now."* Rehabilitation changed participation in Suzanne's sport by taking up time in her schedule. She stated, *"I have [rehab] three times a week and that's the only thing that I have time for."* Suzanne squeezed rehab into her schedule in between class times, because there was no other time available for her to go. This kept her from being able to prepare for her next class or do any last-minute studying. Her role in practice also changed as a result of injury. Suzanne spoke about sitting out of practice. *"I hate watching other people. Sitting there forever and not being able to do anything. I can't even spot or help do anything."* Her role in practice shifted from being an active participant to one that watched from the side while attending practice. Matthew experienced a role shift from athlete to more of a coaching role. *"They have me marking down each of the defensive play callings."* When speaking of his new role on game days he stated, *"Now I'm walking around now, you know, let's go. You know we need a good game out of you, or you know, just play a good game today. Have fun today."*

Theme: 3: Barriers Influencing Change

The concept of barriers was one that came up repeatedly in the interview. This theme encompassed the many factors that led to a change in routine for the athletes following their injury. Noted barriers included: one's own mindset, being away from

home, and having a repeat injury. Community barriers included: distance from the dorm to the rehabilitation gym, stairs in the dorm, and not having a handicap accessible shower. The injury itself was also a barrier mentioned by the athletes. John said, *"I couldn't drive and it would take me forever to crutch from the dorm to the rehab building for treatment."* This statement reveals a couple of barriers. The first, an environmental barrier, how the location of the rehabilitation building made it difficult for the athlete, led to changes in routine of leaving early, or even calling the coaches for rides. The second barrier was the crutches and how they made it difficult to get from place to place.

Suzanne spoke of numerous barriers in the time following her injury. *"Getting in the shower was very hard. I had to hop on one leg anywhere that I went." "I had to bring my grandpa's car because mine's a manual. So I couldn't drive it."* Two barriers listed include one, not having a handicap accessible shower which would have made showering easier, and two, not being able to get around with her normal mode of transportation. Suzanne also spoke of other difficulties within the dorm including living on the second floor of a dorm with no elevator making it increasingly difficult to manage her belongings when traveling to and from her dorm room. Matthew stated it best when he said, *"All I had was one leg, and it was hard."* The injury itself was a major barrier for all three participants and led to a number of changes in their habits and routines.

Theme 4: Supports

Participants mentioned a great deal of supports throughout their interviews including: parents, friends, teammates, former teammates, trainers, doctors, coaches, and strength and conditioning coaches. Their support systems were very extensive. The most often mentioned supports for the athletes were their teammates. Support was provided to

them in different ways. Family provided emotional support as well as physical support in some cases immediately following surgery. Friends provided encouragement to the athletes along the way by giving reminders of what to do or not do and telling them to keep working that they would get better. Former players were also noted to be major supports for the athletes. They had experienced similar injuries so when the players reached out to them, they gave advice for how to handle the injury and what to do to become stronger. Coaches, trainers, and doctors provided the support needed to help them regain their ability to participate in their sport.

John when asked his biggest support, *"The coaches, I would call them and see if they could come pick me up."* Suzanne mentioned the football players who had experienced similar injuries. She said, "*Players on the football team have been really supportive of me. They understand how it feels."* Suzanne also mentioned occasions where her parents carried her to the restroom after surgery because she was unable to walk. Matthew had a perspective on the aspect of being with the team as a support. He stated, *"Being able to practice with the team is just something that you live for."* Being able to practice with the team and being with the team was support for him, as evidenced by his choice to rehab at practice down on the sidelines.

Additional Information

Additional information regarded the participants' perception of change and motivation for rehabilitation. Participants noted at the beginning of the interview that they did not perceived that a lot had changed in their daily lives. Upon interviewing the participants further, it became evident that their habits and routines had changed a great deal. They came to realize these changes through the course of their interview and in

reviewing their time logs. The perceptions of the athletes were similar regarding the changes in their daily live. The largest motivating factor for them was to regain the strength needed for them to return to their desired sport. While this information did not rise to the level of a theme, it is important information to note.

Case Differences

When completing the cross-case analysis differences arose among the three cases. Two of the participants were very externally motivated, while the other was more internally motivated. Matthew, more internally motivated, mentioned only his self as a support initially while the other two participants mentioned parents and friends. It took further questioning to understand the true depth of the Matthew's support system beyond his own personal encouragement. Suzanne, the only female participant went more into detail on specific activities of daily living when discussing her challenges immediately following surgery. Their time logs reflected what was said during their interview experiences. The participant which was more internally motivated continued to increase the amount of time spent in the rehabilitation gym, whereas the other two still reflected time spent with others in their schedule. Suzanne, also noted the increased time it took for her morning routine as compared with her routine prior to her injury.

Discussion

The Person Environment Occupation (PEO) Model Law et al ,1996) was used as framework from which to examine the different themes that arose in the study concerning the lived experiences of season ending injuries for collegiate athletes. When using the model and considering how it related to the themes of the study it was interesting to note that much of the Person portion of the model came during the interviews before the

examination of the themes began. Who they are and what they do was seen in the participant information provided from the very beginning. The Person portion of the model creates a picture of who the participants are including intrinsic motivation. Their roles changed from being a sport and practice participant to being a rehabilitation participant. This was evident in the theme 'Transitions in Sport Participation'.

The Environment portion of the model encompassed aspects of both the "Barriers Influencing Change" and the participants' "Supports". After observing the physical, social, and institutional environments, links between environment and the two themes became evident. Barriers influencing change and supports are both crucial aspects of the environment, which in turn falls under a section of the model.

Occupation is what these athletes are actually doing. Their occupations changed a great deal when their habits and routines changed, as was discussed in the theme 'Changes in Routine'. Occupations can also be seen under "Transitions in Sport Participation". Their occupations were changed from being an active athlete to one who is taking part in a rehabilitation program. Even when looking at differences in the cases one can see how the PEO model can be used to describe the experiences of all the athletes. One athlete was very internally driven listing himself as a support and motivating himself through himself. This would be linked to the person factors and his own coping skills. The other two athletes were very driven externally. These included social supports which are included under the environment piece of the model. Their occupational performance, reflecting the interaction between person, environment, and occupation show their occupations are now performed due to the injury and included

their reaction to the changes. Table 3 illustrates the application of the PEO model through a comparison of the cases.

Table 3

Participants Compared using the PEO Model

Name	Person	Environment	Occupation
John	Male, Athlete, ACL Injury Re-Tear, Treated for bilateral ACL injury, College student Attends additional therapy, 1st string on the football team	Cultural: College Physical: Athletic training room, dorm, bathrooms, Powell, football field Social: teammates, parents, friends, those he does not know, former teammates, coaches Institutional: therapy provided through the school	Attending rehab, ADLs, Educational occupations
Suzanne	Athlete, Female,ACL injury Competitive cheerleader College student, no prior injuries, feels discouraged during practice	Cultural: College Physical: Athletic training room, dorm, bathrooms, Powell, cheer gym Social: teammates, parents, friends, those she does not know, other injured athletes Institutional: therapy provided through the school	Attending rehab, ADLs, Educational occupations
Matthew	Male, Athlete, stress fracture College student, took on assistant Coach role	Cultural: College Physical: Athletic training room, dorm, bathrooms, Powell, football field, rehab during practice hours Social: teammates, parents, friends, those he does not know,	Attending rehab, ADLs, Educational occupations

Table 3 Continued

Participants Compared using the PEO Model

Name	Person	Environment	Occupation
Matthew (cont)		former teammates, coaches Institutional: therapy provided through school	

Note: All names are pseudonyms

Because of the relationship to athletics, it is important to look at the findings through the lens of a sports medicine model of response to injury. The cognitive appraisal model encompasses personal factors, situational factors, behavioral responses, and emotional responses (Wiese-bjornstal, Smith, Shaffer, & Morrey, 2008). Comparison of the cognitive appraisal model (Wiese-bjornstal, Smith, Shaffer, & Morrey, 2008) to the PEO model shows the link that occupational therapy can have to sports medicine. The two models show how occupational therapy and its foundational models can be used when looking at injury in an athletic population. Personal factors in the cognitive appraisal model can be related to the person aspect of the PEO model. For example, history of injury, personality traits, athletic identity, coping skills, age and gender – aspects listed under Personal Factors – can all be seen in the PEO model example in Table 3.

Situational factors from the cognitive appraisal model such as coach influence, teammate influence, social support, sports medicine team and rehabilitation environment are include the environmental factors that played a major role in the PEO model. Behavioral responses most closely resemble the occupation and occupational performance. For example, how the athletes responded to their injury, including changes

in habit and routines related to adhering to rehab, effort and intensity expended, and the use of their own psychological skills in the cognitive appraisal model. The Emotional Response portion of the cognitive appraisal could fit into Person or Occupational Performance in the PEO. However, even when asked directly about their emotions, they chose to not make this a big part of their discussion. They would mention it briefly such as: *"I felt down,"* John, but the athletes did not dwell on their emotions throughout their interviews as having a major impact on their experience with injury. It appeared through the interview process that the athletes were focused on getting better and returning to their sport at some point. They did not take the time to dwell on their emotions surrounding the accident, but instead pushed forward and worked through it to regain the strength needed to return to sport.

When examining each of the four themes further it became evident in the themes and their resemblances to research in the literature review. Under the first theme 'Changes in Routine' similarities were seen as they related to information by Clark (2007). Clark (2007) discussed how routines help shape and organize occupations. They involve ordering, sequencing, and combining several simple activities to help create order. In the study, the athlete's routines shaped how they spent their day. The injury changed how much time they gave themselves to get ready. The injury led to changes in a new morning routine and the development of other new routines at other points in their day or week. Gould, Udry, Bridges, and Beck (1997) examined coping mechanisms of athletes. There were seven categories in coping. One of the categories included learned and other. This meant that athletes learned from the barriers which influenced change and made these changes themselves in their daily routines. We saw this through the time

they allotted themselves, changes in clothing, and even through how they chose to do daily routines. For example, standing on one leg was a way of adapting their way of showering to accommodate for the injury.

Under 'Transitions in Sport Participation' links were seen to the phases of recovery (Bianco, Malo, and Orlick, 1999). There were three phases of recovery including: illness-injury, rehabilitation-recovery, and return to full activity. The illness-injury phase was seen in the study through their inability to participate in sport. Their roles changed from active to passive members in practice due to their injury and subsequent surgeries. Rehabilitation-Recovery looked specifically at the role of rehab in recovery. The article also looked at motivational factors that drove the athletes in that particular study. It was found that rehab played a major role in recovery including how rehab had to be squeezed into the schedule and how much time it actually took up. In the additional information motivational factors were seen as well; each of the athletes was motivated by their potential to return to their desired sport the following season. Once again a coping mechanism from Gould, Udry, Bridges, and Beck (1997) was seen in transitions in sport participation. The coping mechanism most closely related was driving through. The athletes experienced transitions in sport participation, but had the motivating factor of returning to sport to help push them through.

The third theme of 'Barriers influencing Change' was related to information found in the study done by Granito (2001) looking at the lived experiences of injury for professional skiers. Three main aspects were found in the study related to their injuries including personal factors, relationships, and daily hassles (Granito, 2001). Daily hassles were most closely related to the barriers influencing change. The athlete's barriers

included managing the distances between buildings on campus and managing a brace or crutches every day.

Anderson and Williams (1988) discussed the stress model in response to athlete injury. The factors included in the stress model were as follows: personality, history of stressors, and coping resources and interventions. Personality included whether the athletes were internally or externally motivated. History included whether or not they had experience with injury, as John did. Coping resources were most closely tied to the theme of 'Supports'. An increase in coping resources resulted in less of a chance of re-injury due to decreased stress from the injury. As we saw in the study, the athletes used their supports throughout the entirety of their experience with injury. Gould, Udry, Bridges, and Beck (1997) examples of coping resources were seen in the supports listed by the athletes; specifically 'sought and used social resources'. The athletes mentioned and used their supports throughout their experience with their season ending injury.

Trustworthiness

Trustworthiness was demonstrated by member checks, bracketing through journaling, consultation of an experience researcher for analysis of data, and an audit trail. In the audit trail, the researcher kept a record of anything related to the study, and in this way was able to describe how the results will be obtained (DePoy & Gitlin,). Mentor consultation was completed throughout the process with a faculty advisor who is an experience researcher. In doing this the researcher is assuring that the data is analyzed in a way that represents the experience being studied (DePoy & Gitlin, 2011). In this process the researcher can meet with their research mentor in order to check the work that they have been doing. Triangulation, the process of using multiple data sources in the

same study for validation purposes (Hussein, 2009), was also used. Interviews, time logs, and literature were all used to support the data and findings in the study.

Strengths and Limitations

Strengths of this study include the in-depth first-hand accounts given by the athletes through the interview process which added depth to the time logs. Another strength of the study was the commonalities that emerged from the three interviews allowing for four common themes to be identified. Potential limitations included a small sample size. Each of the participants was from the same university in the southeast. This makes it difficult to generalize results to athletes in other parts of the country. Saturation was not reached, meaning that more research would need to be done with additional participants until the same themes arose repeatedly. With more time and participants it would be possible to reach saturation. This suggests further research for occupational therapy and its role in the rehabilitation of athletes who have suffered from a season ending injury.

Implications

The limitations of the study helped illuminate some implications for further research. Further research may include athletes from different parts of the country to see if their experiences carry the same meaning for people in different regions of the United States. It would also be interesting to interview athletes from many different sports to see if any further themes developed. Only one participant was a female, therefore, research could be conducted to see if any themes are gender specific. Finally, emotional responses to injury and treatment could be further probed.

Findings of the study have practical implications for those practicing occupational therapy. First, there is application to non-athletes. Whether it is an injury or a particular diagnosis that caused an occupational disruption, it is important to consider changes in habits and routines with each client. Next, practitioners must understand what the client views as support. In this study, we saw a variety of supports among only three athletes. Correctly identifying the range of a client's supports can used to incorporate these supports into treatment. As the findings revealed, the athletes did not always perceive a change in routine at first. Using multiple approaches to information gathering was important in addition to the use of interviewing skills. The clients can be helped to understand their routines and to see and understand where the disruptions are as they may be invisible to them. Use of a client centered approach and a normal context was also evident in the athletes drive to participate in a familiar context contributing to a sense of normalcy.

Conclusion

This research revealed the lived experience of collegiate athletes with season ending injuries. The results contribute to the literature in that it explores how a sports injury impacted their habits and routines, by seeing the changes in routines, and by exploring the many aspects that influence and surround these changes. Occupational therapists be better able to understand and consider their role in seeing, understanding, and including habits and routines in the lives of clients who have an injury or medical diagnosis disrupt their lives. Using the PEO model as a framework to address these issues, occupational therapists may be able to understand how they can be more impactful in helping a client get back to their valued occupations. Not only occupational therapists

but also teachers, professors, and athletic trainers can use these results to see how they can support and better serve student athletes in keeping with the mission of the National Collegiate Athletic Association for student-athlete success on the field, in the classroom, and for life.

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APPENDICES

APPENDIX A:

IRB Approval

Graduate Education and Research
Division of Sponsored Programs
Institutional Review Board

EASTERN KENTUCKY UNIVERSITY
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http://www.sponsoredprograms.eku.edu

NOTICE OF IRB APPROVAL

Protocol Number: 16-021

Institutional Review Board IRB00002856, DHHS FWA00005552

Review Type: ☐ Full ☒ Expedited

Approval Type: ☒ New ☐ Extension of Time ☐ Revision ☐ Continuing Review

Principal Investigator: Leah F. Thomas Faculty Advisor: Dr. MaryEllen Thompson

Project Title: Collegiate Athlete's Lived Experiences of Season Ending Injuries

Approval Date: September 9, 2015 Expiration Date: 5/31/16

Approved by: Dr. Tara Shepperson, IRB Member

This document confirms that the Institutional Review Board (IRB) has approved the above referenced research project as outlined in the application submitted for IRB review with an immediate effective date.

Principal Investigator Responsibilities: It is the responsibility of the principal investigator to ensure that all investigators and staff associated with this study meet the training requirements for conducting research involving human subjects, follow the approved protocol, use only the approved forms, keep appropriate research records, and comply with applicable University policies and state and federal regulations.

Consent Forms: All subjects must receive a copy of the consent form as approved with the EKU IRB approval stamp. Copies of the signed consent forms must be kept on file unless a waiver has been granted by the IRB.

Adverse Events: Any adverse or unexpected events that occur in conjunction with this study must be reported to the IRB within ten calendar days of the occurrence.

Research Records: Accurate and detailed research records must be maintained for a minimum of three years following the completion of the research and are subject to audit.

Changes to Approved Research Protocol: If changes to the approved research protocol become necessary, a description of those changes must be submitted for IRB review and approval prior to implementation. Some changes may be approved by expedited review while others may require full IRB review. Changes include, but are not limited to, those involving study personnel, consent forms, subjects, and procedures.

Annual IRB Continuing Review: This approval is valid through the expiration date noted above and is subject to continuing IRB review on an annual basis for as long as the study is active. It is the responsibility of the principal investigator to submit the annual continuing review request and receive approval prior to the anniversary date of the approval. Continuing reviews may be used to continue a project for up to three years from the original approval date, after which time a new application must be filed for IRB review and approval.

Final Report: Within 30 days from the expiration of the project, a final report must be filed with the IRB. A copy of the research results or an abstract from a resulting publication or presentation must be attached. If copies of significant new findings are provided to the research subjects, a copy must be also be provided to the IRB with the final report.

Other Provisions of Approval, if applicable: None

Please contact Sponsored Programs at 859-622-3636 or send email to tiffany.hamblin@eku.edu or lisa.royalty@eku.edu with questions about this approval or reporting requirements.

Kentucky UNBRIDLED SPIRIT

APPENDIX B:

Recruitment Flyer

Athletes Needed!!

EKU Student Athletes who have experienced a season ending injury needed to share their experiences about their injury!

Requirements:

- **Participant is currently a member of an EKU athletic team.**
- **Participant has suffered an injury that will keep them from finishing the season.**
- **Over 18 years of age.**
- **Participant has suffered the injury within the last 6 months.**
- **Participant is currently receiving Athletic Training services at EKU.**

*****If interested please contact Leah Thomas at (606)231-8412 or leah_thomas53@eku.edu**

APPENDIX C:

Time Log

Weekly Time Log

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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APPENDIX D:

Sample Interview Questions

Sample Interview Questions

Grand Tour Question:

Tell me about your injury and how it has impacted your everyday life.

Follow up questions as needed:

-What injury did you sustain? (Body part?)

-What did your schedule look like before the injury?

-What did your schedule look like following the injury? (How do doctor visits and therapy sessions impact your daily schedule?)

-Describe how you felt in the few days following your injury. (Did you have differing emotions? How do you feel when you are watching your teammates practice?)

-What difficulties have you faced, if any, that have hindered your ability to perform your everyday activities? (Dressing? Bathing? Eating?)

-What are your experiences with being able to get around in your community following the injury? (Does it take more time to get to class, work, practice?)

-What did your social life look like prior to and following your injury?

-What supports have been provided to you through this process? Were there any barriers? Who and/or what have you found most helpful?

-Was this an emotional injury for you?

APPENDIX E:

Informed Consent Form

Consent to Participate in a Research Study

Lived Experience of Collegiate Athletes with Season Ending Injuries

Why am I being asked to participate in this research?

You are being invited to take part in a research study about the lived experience of season ending injuries for collegiate athletes You are being invited to participate in this research study because of your recent experience with an injury. If you take part in this study, you will be one of about 6-8 people to do so.

Who is doing the study?

The person in charge of this study is Leah Thomas at Eastern Kentucky University. She is being guided in this research by Dr. MaryEllen Thompson. There may be other people on the research team assisting at different times during the study.

What is the purpose of the study?

The purpose of this phenomenological study is to develop an understanding of collegiate athletes and their lived experience with a season ending injury. At this stage in research, collegiate athletes who have suffered from a season ending injury at Eastern Kentucky University will define the experiences.

Where is the study going to take place and how long will it last?

The research procedures will be conducted at a location determined by the interviewer. You will need to come to the determined location 2 times during the study. Each of those visits will take about 45 minutes - 1 hour. The total amount of time you will be asked to volunteer for this study is 2 hours over the next 6 months.

What will I be asked to do?

For this study you will be asked to take part in an interview and fill out a time log that will outline your own experiences in living with a season ending injury.

Are there reasons why I should not take part in this study?

If you are under the age of 18 or you have not suffered an injury as a result of participating in collegiate athletics you will be excluded from volunteering for this study.

What are the possible risks and discomforts?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life.

Will I benefit from taking part in this study?

You will not get any personal benefit from taking part in this study.

Do I have to take part in this study?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

If I don't take part in this study, are there other choices?

If you do not want to be in the study, there are no other choices except to not take part in the study.

What will it cost me to participate?

There are no costs associated with taking part in this study.

Will I receive any payment or rewards for taking part in the study?

You will not receive any payment or reward for taking part in this study.

Who will see the information I give?

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. For example, your name will be kept separate from the information you give, and these two things will be stored in different places under lock and key.

However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a Also, we may be required to show information that identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as Eastern Kentucky University.

Can my taking part in the study end early?

If you decide to take part in the study, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the study.

The individuals conducting the study may need to end your participation in the study. They may do this if you are not able to follow the directions they give you, if they find that your being in the study is more risk than benefit to you, or if the agency funding the study decides to stop the study early for a variety of scientific reasons.

What happens if I get hurt or sick during the study?

If you believe you are hurt or if you get sick because of something that is done during the study, you should call Leah Thomas at (606) 231-8412 immediately. It is important for you to understand that Eastern Kentucky University will not pay for the cost of any care or treatment that might be necessary because you get hurt or sick while taking part in this study. That cost will be your responsibility. Also, Eastern Kentucky University will not pay for any wages you may lose if you are harmed by this study.

What if I have questions?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Leah Thomas at (606) 231-8412. If you have any questions about your rights as a research volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636. We will give you a copy of this consent form to take with you.

What else do I need to know?

You will be told if any new information is learned which may affect your condition or influence your willingness to continue taking part in this study.

I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered, and agree to participate in this research project.

_____

Signature of person agreeing to take part in the study Date

_____

Printed name of person taking part in the study

_____

Name of person providing information to subject