

## Learning from the Experiences of Collegiate Athletes Living through a Season- or Career-Ending Injury

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An athlete's identity is often related to the goals of their team and their ability to achieve excellence in sport. A threat to an athlete's identity is a season- or career-ending injury. Athletes can respond to season- or career-ending injuries in ways detrimental to their psychosocial well-being (Ivarsson, Tranaeus, Johnson, & Stenling 2017). This study built upon existing knowledge by seeking to better understand the lived experiences of Division I collegiate athletes who experienced a season- or career-ending injury. There is a need for ongoing recommendations for helping athletes process their injuries. Researchers used a descriptive phenomenological approach. Researchers interviewed ten college athletes who experienced a season- or career-ending injury. Themes included: (1) physical and emotional stress, (2) resistance to resiliency, (3) importance of relationships with others, and (4) appreciation and cultivation for new possibilities outside of sport. This research provided insight for behavioral health professionals on injury response. This included the need for Post-traumatic Growth responses such as (1) building strong support pre- and post-injury, (2) recognizing healthy coping mechanisms, (3) cultivating new identities for athletes, (4) helping an athlete with identity loss, (5) helping athletes recognize new possibilities post-injury, and (6) helping an athlete maintain an appreciation for life.

An athlete's purpose is often related to the goals of their team and their ability to achieve excellence in their sport. Researchers define the level to which an athlete identifies with these team and individual goals as their

athletic identity (Brewer, Van Raalte, & Linder, 1993; Cabrita et al., 2014). As the level of competition increases (e.g., collegiate and professional), so too does a person's athletic identity (Rasquinha & Cardinal, 2017). This increase in identi-

ty is likely needed to handle the intense training, frequent competition, and high level of stress associated with collegiate and professional sports (Masten et al., 2014). Erving Goffman's *presentation of self* theory has been used to examine how athletes' experience their identity after a sport related injury (Dean, 2019).

While high-level athletes use their strong sense of athletic identity to fuel competitive success (Poucher & Tamminen, 2017), these athletes are not absent from facing threats to their identity (Giannone, Haney, Kealy, & Ogrodniczuk, 2017). One of the most common threats to an athlete's identity is injury (Heird & Steinfeldt, 2013). While injuries range in severity, an athlete's identity is most threatened with season- or career-ending injuries. These injuries force an athlete into a temporary withdrawal or permanent retirement from their sport (Cosh, Crabb, & LeCouteur, 2013; Masten et al., 2014; Stambulova, Stephan, & Japhag, 2007). The *presentation of self theory* brings attention to the impact of the social hierarchy within the athletic community and how athletes must confront how they perform their identity in each social interaction prior to and post injury (Dean, 2019; Goffman, 1959). Based on this theory athletes may compare themselves to others and search for who they are post injury in an attempt to understand where they fit within their ideal versus real self (Goffman, 1959).

While season- and career-ending injuries have a physical impact on an athlete's ability to perform, there are also less visible psychosocial challenges impeding an athlete's adjustment to

their new self (Perrier, Smith, Strachan, & Latimer-Cheung, 2014; Sanders & Stevinson, 2017). Understanding how injury impacts an athlete's identity is essential for those working in the athletic space to more effectively provide the support needed to promote the physical health, behavioral health, and social life of an athlete (Clement, Arvinen-Barrow, & Fetty, 2015; Cosh et al., 2013). Given the vast amount of athletic injuries within a given year (Williams & Krane, 2015), there is a need for research on how professionals can help athletes process their injuries, find new purpose in life, enhance their self-confidence, improve their social support, and practice strategies for appropriately coping with the trauma they experienced (Zoellner & Maerker, 2006). Moreover, hearing directly from student-athletes about their season- and career-ending injuries can help inform interventions aimed at supporting their experience and minimizing exacerbated trauma from such experiences.

### **Defining an Athletic Injury**

Researchers define a reportable injury as an injury that: (1) occurred as a result of participation in organized athletic practice or competition, (2) required the attention of an athletic trainer or physician, and (3) resulted in the restriction of an athlete's participation in their sport (Kerr, Hayden, Dompier, & Cohen, 2015). At the collegiate level, approximately 4,000 athletes each year experience a season- or career-ending injury (Kay et al., 2017). Within these

season- or career-ending athletic injuries, there are a variety of types, causes, and implications.

Two classes of injury, chronic and acute, are typically treated very differently and can affect the athlete in different ways (Prentice, 2014). An acute injury is an injury that happens in one instance and is typically more traumatic. Acute injuries include the loss of bodily function or structure, immediate sensation of pain and discomfort, and incapacitation of an athlete (e.g., a torn knee ligament). A chronic injury is one that happens over time with repeated stress to the body (e.g., overuse injuries). A common example of a chronic injury is any tendonitis in the body, usually treated by discontinued use of that body part (e.g., the knees or ankles of long-distance runners).

### **Injury Response**

Athletes respond to season- or career-ending injuries in a variety of ways. Of particular concern is the number of athletes who respond to an injury in ways detrimental to their behavioral health and psychosocial well-being (Ivarsson et al., 2017). Research indicates injuries sustained by an athlete can cause health risks such as depression, anxiety, and suicidal ideation (Koren et al., 2005; Sheinbein, 2016). Research shows that many of these responses are directly related to an individual's loss of athletic identity (Masten et al., 2014; Sanders & Stevinson, 2017).

Amongst individuals with an increased level of athletic identity,

injuries can lead to greater feelings of loss and stress, challenges with anger management, problems with motivational adjustment, alcohol and substance use or misuse, and depressive thoughts (Clement et al., 2015; Cosh et al., 2013; Tamminen, Holt, & Neely, 2012). The identity loss, anxiety, and other responses an athlete feels in conjunction with their injury may result in the development of Posttraumatic Stress Disorder (PTSD) (Newcomer & Perna, 2003; Malhotra & Chebiyan, 2016). The behavioral expressions related to PTSD include: (1) aggressive outbursts, (2) avoidance of others (e.g., teammates and coaches), (3) avoidance of any athletic endeavor, (4) recurrent recollections of the injury, and (5) a sense of an unknown future (Bateman & Morgan, 2019). Additionally, athletes with high athletic-identity are at risk of seeing their injury as a personal failure (Heinrich, Spencer, Fehl, & Poston, 2012). Athletes might couple these feelings of personal failure with thoughts of blame, shame, and guilt (Timpka et al., 2015).

Blame, shame, and guilt are common mechanisms adopted after an injury or trauma. These feelings can be isolating (e.g., the athlete thinks they are the only person who felt that way and does not share the emotions of which they are ashamed). When athletes use self-blame concerning their injuries, they can cause significant damage to their mental and social well-being (Timpka et al., 2015). Athletes might then respond to their injury with negative coping strategies, which can lead to the aforementioned

challenges of stress disorders, substance use or misuse, and other behavioral health diagnoses (Newcomer & Perna, 2003; Malhotra & Chebayan, 2016).

The behavioral impacts of injury cause athletes to attend to others' perceptions of them more closely, impacting their comfort in being their authentic selves in athletic spaces (Goffman, 1959; Hickey et al., 2017).

### **A Posttraumatic Growth (PTG) Framework**

A concept that practitioners could use to support athlete growth after an injury is Posttraumatic Growth (PTG) (Salim, Wadey, & Diss, 2016). Use of PTG as a framework includes recognition there is potential for growth after a traumatic event in the five domains areas of PTG (1) personal strength, (2) appreciation for life, (3) new possibilities, (4) spiritual change, and (5) relating to others (Tedeschi & Calhoun, 1996). The process of growth does not necessarily mean the pain associated with injury subsided, and it does not mean that the athlete sought growth. Growth is something a person comes to acknowledge internally, not something they consciously seek (Salim et al., 2016). A recent study by Vann and colleagues (2018) found a PTG framework is possible following season- and career-ending injuries. These researchers found athletes experiencing a career- or season-ending injury were able to overcome the physical and emotional realities by finding personal strength, an appreciation for life, and the development of new social supports through their experiences

(Vann, Moore, Freiburger, & Johnson, 2018).

Compared to research investigating PTG with other populations, the growth observed by athletes with a season- or career-ending injury was comparable or higher. This includes comparable or higher scores with those experiencing natural disasters (Nishi et al., 2016; Nolen-Hoeksema & Davis, 2004), cancer patients (Dabhauer et al., 2013; Morrill et al., 2008; Sears & Stanton, 2003), coronary artery disease patients (Leung et al., 2012), individuals returning from military combat (Engelhard, Lommen, & Sijbrandij, 2015), and those experiencing physical and/or sexual abuse (Duan, Gao, and Gan, 2015).

### **Current Study**

Given the vast amount of athletic injuries within a given year (Williams & Krane, 2015), there is a need for understanding how the lived experiences of athletes with a season- or career-ending injury resonate with principles of PTG. From prior research, we know season- and career-ending injuries threaten an athlete's identity and their overall well-being (Masten et al., 2014; Sanders & Stevinson, 2017). *Presentation of self theory* provides the framework that athletes will continuously be reconfiguring their self concept in relation to themselves and others (Goffman, 1959). Research also indicates that a PTG framework can help us better understand how to support athletes who are seeking to overcome an injury. Qualitative examination allows for

the researchers to utilize the student-athlete perspective to formulate how other professionals can help an athlete process their injuries, find new purposes in life, enhance their self-confidence, improve their social support, and practice strategies for appropriately coping with the trauma they experienced (Zoellner & Maerker, 2006). Thus, a qualitative follow-up to previous research of Vann and colleagues (2018) through a theoretical lens (Goffman, 1959) is essential to learn more about the lived experiences of collegiate athletes who experienced these types of injuries. Additional qualitative examination can help identify an athlete's perspective regarding how they progressed toward growth and can provide a perspective beyond the language from the PTG domains used in the previous study (Vann et al., 2018). Through these lived experiences, the researchers aimed to establish a deeper connection with athletes. The researchers sought to answer the questions, (1) how does a behavioral health professional's helping method impact an athlete's response to their injury (2) and their working relationship? Additionally, the researchers sought to learn, (3) what do athletes find helpful with their newfound adjustment in living with their injury (Martin, Fogarty, & Albion, 2014)? This included an effort to learn more about the role of behavioral health professionals in supporting a strength-based and growth-mindset approach to an athlete's recovery

for return to play or their transition away from sport.

## Method

Descriptive phenomenology is a qualitative research methodology within the human science research paradigm, designed to understand and explain the meaning of human experiences (Fitzpatrick & Watkinson, 2003). Similar to phenomenology, descriptive phenomenology focuses on the lived human experience, but differs by illuminating trivial details that might otherwise be taken for granted (Wilson & Hutchison, 1991). Phenomenology research concentrates on the development and culminations of historical meanings regarding the experience (Lavery, 2003). This approach has a history of being used within athletics and sport (Kristiansen, Larsson, & MacFarlane, 2017; Ryba, 2008).

This study followed a logical, systematic, and multiphase methodological approach to capturing reflections of individuals' subjective experiences related to their season- or career-ending injuries. More specifically, the study followed principles of inductive reasoning, where observations and interviews led to the development of patterns, hypotheses, and theory. The use of phenomenology in this study included gathering information from participants, personal reflections from the researchers on the topic (a tenant of descriptive phenomenology), and information gathered from outside the context of the research project (e.g., historical documents).

## Study Participants

Researchers used purposive sampling to seek current or former NCAA Division I student-athletes from a mid-size, Division I University located in the Midwest. Researchers sought Division I student-athletes who could speak freely about recent season- or career-ending injuries. Researchers used coaches, members of the sport psychology staff, and members of the athletic training staff at the university to help identify participants. Ten student-athletes identified with the study inclusion criteria (e.g., current or former NCAA Division I student-athlete, 18 years of age or older, and experienced a season- or career-ending injury). Each student-athlete was given a pseudonym to protect their true identity. These student-athletes provided vivid descriptions of their season- or career-ending injury and their journey through the physical and mental recovery process. Descriptive phenomenology

relies on an accurate and comprehensive description and interpretation of a phenomenon often utilizing smaller samples (Ryba, 2008). See Table 1 for information about each study participant.

## Study Procedures

*Interview guide.* The semi-structured interview guide had a total of 11 prompts. Based on previous literature, researchers designed the questions to better understand the lived experiences of the participants (Ivarsson et al., 2017; Vann et al., 2018). The prompts asked participants to: (1) talk about their collegiate playing experience, (2) describe the injury that ended their athletic season or career, (3) discuss their initial thoughts after sustaining the injury, (4) discuss their thoughts six months after the injury, (5) discuss their recovery process, (6) share the coping strategies they used following their injury, (7) reflect on how their injury impacted their life, (8) identify where they found comfort and support after an

Table 1

### *Study participants*

| Pseudonym<br>(Identified Gender) | Age | Race/Ethnicity | Sport           | Injury Type   |
|----------------------------------|-----|----------------|-----------------|---------------|
| Abraham (Male)                   | 19  | White American | Football        | Season-ending |
| Angela (Female)                  | 22  | White American | Field Hockey    | Season-ending |
| Brandon (Male)                   | 25  | Black American | Basketball      | Career-ending |
| Carla (Female)                   | 23  | White American | Track and Field | Career-ending |
| Lauren (Female)                  | 22  | White American | Track and Field | Season-ending |
| Logan (Female)                   | 18  | White American | Field Hockey    | Season-ending |
| Parker (Male)                    | 20  | White American | Football        | Career-ending |
| Rachel (Female)                  | 24  | White American | Track and Field | Season-ending |
| Talle (Female)                   | 19  | Black American | Track and Field | Career-ending |
| Samuel (Male)                    | 21  | White American | Basketball      | Season-ending |

Note: All student-athletes were receiving some level of athletic scholarship. Injuries occurred anywhere from first-year of competition through the final year of eligibility.

injury, (9) reflect on what they learned as a result of the injury, (10) reflect on what they have learned about others, and (11) share any additional information they felt was pertinent.

*Pilot testing.* A pilot study, conducted with two former student-athletes with experience with a season- or career-ending injury, allowed the researchers to become familiar with the recording software. It also permitted the researchers to conduct a preliminary review of the open-ended questions. The researchers did not make changes following the pilot testing, as the pilot participants did not offer any feedback or suggestions for change.

*Interviews.* All ten student-athletes participated in an intensive interview with one of the researchers. The interviews took place in a private setting in an athletic facility. This space was selected so the athletes were in a familiar, informal space. Researchers believed this setting might help make the athletes more comfortable and facilitate more informative conversation. All interviews occurred face-to-face. The researcher conducting the interviews used multiple open-ended questions to engage the participants in conversation about their season- or career-ending injuries and how they processed the physical and emotional impacts of their injury. All follow-up questions flowed from participant responses to the open-ended questions. The open-ended questions did not ask specifically about elements of PTG. Instead, the questions were vague in nature to allow participants to take the interviewer where they saw necessary.

The researcher interviewed new student-athletes until data saturation occurred based on the researcher's belief that student-athletes responses began to display similarity suggesting new data would not be collected from this population (Guest, Namey, & Chen, 2020). The duration of the interviews ranged between 45 and 80 minutes. The researcher only interviewed each player one time. The researcher recorded each interview with a digital recorder, which allowed the researcher to listen closely to the participants story and recognize pauses around difficult topics or changes in body language useful to illuminate. Additionally, the researcher took field notes during the interview and used each player's current or former biography on the corresponding team website (or archived page). These were short paragraphs about each player's performance highlights from both college and high school. There was a small section on personal background information too. The biographies of the players were the historical documents reviewed by the research team.

### **Thematic Analysis**

Following transcription of the interview, the three researchers conducted a thematic analysis of the text independently. The researchers considered the detailed notes taken during the interviews, recorded notes taken while listening to and reading the interviews, and the historical contexts (e.g., athlete biography and personal background) into account (Lemke, 2012; Tessier, 2012). Specifically, the biographies provided background

information on each student-athlete that might not have been mentioned in the interview as well as information on their athletic performances that helped illustrate what was mentioned in the interview (Laverty, 2003). These data provided a more objective perspective on performance. This detailed approach of listening to and reading the transcriptions and relevant documents provided a systematic process for independently identifying emerging themes. The authors sent the transcriptions back to the participants to review for accuracy. Since it was possible for more than one theme to exist in each sentence, researchers independently considered each phrase, statement, or sentence in isolation so not to miss the meaning or essence of a student-athlete's experience (Fitzpatrick & Watkinson, 2003). Each researcher used an Excel file to organize potential inductive coding themes. The inductive coding method is used when little is known about the research subject, and researchers are conducting heuristic or exploratory research (Laverty, 2003).

Researchers then shared their findings and worked to mutually code their independent findings into meaning units (Laverty, 2003). These meaning units ranged in magnitude from a single word to a full sentence to capture salient ideas. At this point, the researchers did not have sophisticated codes for the data, but rather, just an idea of what the overall data looked like. Researchers collaboratively reviewed these meaning units line-by-line to help establish initial codes. Researchers used categorization of these

codes to generate final themes (Guest, MacQueen, & Namey, 2012). Data not combined in the first round of theme generation was set aside as miscellaneous, then reviewed to see if the code fit into an existing theme, could be combined with other miscellaneous data to create a new theme, or remained miscellaneous (Guest et al., 2012; Maguire & Delahunt, 2017). To further examine patterns that were discovered in the main themes and provide clarity on the participants' experience, the researchers organized the data into explicit subthemes. Researchers categorized quotes from the participants that diverged slightly from the main themes of which they were under. The researchers decided the subtheme was meaningful based on the descriptive phenomenological process, which states the ideas must be linked and grounded in participate data (Sundler et al., 2019). Evidence of the links between the participants responses is provided in each sub-theme. During the analysis process, the researchers constantly debated to reach an agreement on the descriptions and interpretations of the student-athletes' experiences (Wilson & Hutchison, 1991). These debates helped the researchers avoid potential confirmation bias.

To promote the quality control of this study, the researchers used triangulation and peer debriefing. For triangulation, the researchers relied on more than one type of data to corroborate their findings (i.e., interview transcripts, field notes, and historical records). As previously mentioned, by debating findings amongst the research team, peer



debriefing occurred naturally. A case for quality control could also be made for the researcher's prolonged engagement in athletics as former student-athletes, as sport psychology providers, or as a Division I coach.

## Results

This section identifies various themes that emerged from the analysis of the transcripts and field notes. The researchers trust that participants' voices are heard in the examples used to illustrate themes and to portray each student-athlete's lived experience with a season- or career-ending injury. Researchers identified four main themes: (1) physical and emotional stress, (2) resistance to resiliency, (3) importance of relationships with others, and (4) appreciation and cultivation for new possibilities outside of sport. Sub themes were also identified to further examine concepts illustrated within the main themes. The sub themes anxiety and fear were generated from the first main theme of physical and emotional stress to better understand how the athletes responded to behavioral health professionals helping methods post injury. Researchers explored the meaning of each theme through quotations from participants.

### Physical and Emotional Stress

All ten participants expressed how their season- or career-ending injuries led them to experience high levels of physical and emotional stress. Many of these participants expressed feelings of identity loss, confusion, and social isolation

surrounding their injuries, which led to avoidance of others and the avoidance of athletic endeavors. Although some of the athletes identified a specific emotion their expression of those emotions were often interwoven with multiple emotional experiences. Talle stated, "It was super frustrating, because not only did it affect my athletic career, but along with my athletic career, it made me no longer want to be around the sport." Talle displays confusion and frustration in the change they are experiencing. For them their athletic identity is not only expressed by playing their sport, but in watching and being around sport as well. The *presentation of self theory* highlights the impact of identity within each moment (Goffman, 1959), for Talle there remains emotional stress of navigating those moments. Similarly, Brandon experienced anxiety when present at basketball games after his injury. His emotional pain stemming from his physical pain was primed by his environment. He shared, "I had all this pain that was still there, which was traced back to this one basketball injury. Every time I was near a court, I relived the injury." The reoccurring nature of Brandon's emotional pain was shared by others. Logan shared frustration with the timeline set by the medical team, "By six months I was sick of having to deal with this [ACL tear]. I felt I should have been done with recovery, but instead I was just mid-way through. I started losing my respect for the doctors." Logan based her timeline of recovery on a version of her ideal self that would have recovered faster (Goffman, 1959), which impacted

her perception of the doctor and made her feel inadequate in the recovery process. Logan and Brandon both had physical and emotional stress that made them disengage with sport in different ways. Exploration of research question (1) how does a behavioral health professional's helping method impact an athlete's response to their injury and (2) how does a behavioral health professional's helping method impact an athlete's response to the working relationship led the researchers to the following conclusion. Beyond interactions with physical therapy and other medical professionals the athletes did not appear to have strong working relationships with their coaches and peers.

*Anger.* In addition, regarding their working relationships, participants shared the anger and resentment they felt of others about their athletic injury. Abraham shared, "They [teammates] bullied me because I could not play anymore. I was left out by all social groups, they disowned me, which caused me to react with anger." Although Abraham was able to identify his primary emotional pain as anger, it is clear he experienced sadness from the social isolation. He lacked the emotional and social support necessary to cope with his injury and change in identity. At times participants did not experience behavioral health professionals attempting to aid them; thus, their reactions were in response to silence as opposed to effects made toward a working relationship. Carla added, "My dad was not supportive after my injury. He was mad at me for...not being a normal

teenager...He really got angry with me, it became a poor relationship." Participants also portrayed anger and resentment towards their medical providers. Rachel stated, "Doctors did not believe me. It took nine doctors to get me to this point. I did not understand how doctors could not understand my pain." Some of the athletes' anger stemmed from sadness while other athletes root emotions were feelings of loneliness or helplessness. Expressions of helplessness were reactions to their injuries and were enhanced by professionals that did not extend efforts to understand their experience.

*Fear.* The athletes felt they lacked informational support after their injuries. Eight participants shared the fear of the unknown surrounding their injuries. Those interviewed largely agreed there was much to learn along the way and felt they compared themselves to where they thought they should have been in their progress. Lauren shared, "It was difficult for me to wrap my mind around something that did not have a time limit." Other participants shared the sadness underneath their fear of the uncertainty in returning to the sport. Parker explained, "I realized that [playing football] was actually a lot of fun, and I felt like I was missing out." The unknown of medical procedures and uncertainty in their social environments brought physical and emotional pain and stress on the athletes.

### **Resistance to Resiliency**

In many instances, participants felt they had little, if any, control over what was going to happen next. Angela and

Carla simply stated, “I cried a lot” or “I would go home crying because the pain was so much. It was a long and frustrating recovery process.” Samuel stated, “It is really hard not to let your sport define you, but that is what is happening.” Rachel said, “I had lost so much of what I felt like was my purpose and my passion. I did not know how to control it.”

Many athletes also saw varying degrees of resistance to this unwanted change. Lauren mentioned, “I thought I did not need to take anything [medicine] to feel better. I just dealt with the pain. My recovery process was just pretending I was not injured.” Parker added, “I think my initial thoughts were just kind of resistance, like I am not going to do anything unless you absolutely make me.” The participants’ emotions continued to change throughout their injury recovery process. Others met these changing emotions with an increase in risky, maladaptive behavior. Talle stated, “I would think oh, I have a migraine. I will just get drunk and forget about it. These concussions ruined my athletic and social life. It was horrible.” Abraham shared, “I not only disowned my faith, Christianity, I turned to drugs and alcohol to cope.”

*Transformationally Resilient.* While there was resistance to these life changes, there was also transformational resiliency. All ten participants, while sharing stories of heartbreak and frustration, also found ways to use different resources to help them through the process of grief and loss of identity and experience. Participants felt if they did not find or seek out resources, their response to the injury

would lead to persistent use of damaging coping mechanisms. Angela shared, “Coping was hanging out with the right people.” Brandon added, “Being injured showed me I cannot just make myself better, there are people, like AT [athletic trainers] I need to rely on. My teammates and coaches were helpful. There was also God’s role in helping me heal.” Parker voiced, “I guess the biggest part of my recovery process has been finding a support group and having good friends, while still realizing everyone is not going to understand.” Logan concluded, “While the injury defined me at times, I eventually learned it could not define me completely. I learned there was more to life than an ACL tear.” The athlete’s initial resistance created a gap between them and support services. Once they were able to transform into an emotional state of resiliency, they were able to acknowledge the efforts those around them and behavioral health professionals were making to support them. Thus, in response to the first and second research question the methods most useful to the athletes were those that remained persistent and creative throughout the period of uncertainty the athlete’s faced.

### **Importance of Relationships with Others**

Athletic and social support led to growth in the participants. First, participants wanted to keep a sense of belongingness with their athletic identity. While they were coming to terms with their injuries, it was important for them to still feel a connection with that part of self.

Parker shared,

Just being on the field Friday night, just being on the sidelines, that helped keep my mind off my injury and focus on the game that's being played. I was always looking for anything I could do to help anybody that was out there.

Abraham stated, "I would still go to the weight room and just do upper body."

Angela discussed how much the athletic training staff helped throughout the recovery process. "I spent a lot of time in the athletic training room. Thankfully, there were a lot of awesome people in there. Any time I was discouraged there was just a lot of smiling faces to lift me up." Other participants turned to their coaching staff for support. Carla shared, "She [coach] helped me see that I'm still part of the team. I was still an important aspect of the team." Rachel explained,

My coach really wanted me to stay around so I took on a student-coach role. I remember seeing other injured athletes who had quit or gone away from the team. So I was really glad to be able to stay with the team.

The accommodations provided by coaches and athletic trainers to alter a training routine or engage in the team by sitting on the sidelines were received positively and enhanced the working relationship with the athletes. Still, socially, participants relied heavily on their friends and family. For many athletes, this started with family and friends believing both the physical and psychosocial pain asso-

ciated with a season- or career-ending injury. Talle recounted, "They [family and friends] believed my pain and they helped me get my life back on track." Lauren shared an experience with her mom in which her mom shared why she wanted her to continue her rehabilitation after the injury. "She [mom] told me I want to be able to visit you in 20 years, see you playing with your kids. I do not want to see you eating your food through a straw." Logan stated, "I have the greatest small group of friends." Samuel detailed, "[I received] so much encouragement from them [family and friends] through phone calls and text messages. These [calls and text messages] helped me to realize it will get better." The athletes gained a sense of hope and possibility, which are both aspects of posttraumatic growth.

### **Appreciation and Cultivation for New Possibilities Outside of Sport**

While not easy, participants shared stories of triumph as they overcame adversity and found ways to face the trauma of their injuries. This theme most directly relates to the third research question, what do athletes find helpful with their newfound adjustment (Martin, Fogarty, & Albion, 2014)? Many of these participants found ways to soften the loss of athletic identity, to overcome feelings of loss, and to reduce stress symptoms. Participants did this by finding increased value in other areas in their life. For instance, Talle shared, "My injury has allowed me to feel more humble and prideful." Lauren stated, "I feel like I

lost everything, and I did lose everything. Then I found strength inside me. I never knew I had that much [strength] inside of me.” Brandon detailed, “[I learned from my injury] that I relied on other people and things for my happiness. That was not good – happiness needs to come from within.”

Some participants found appreciation for and devotion in other areas of life. As Angela said, “I think I learned about my other interests throughout my injury.” Abraham shared, “I started to focus on my studies and just figured out what I wanted to do with my life outside of sport.” Logan also focused on gaining acceptance to graduate school.

I got accepted and that made me feel really good. It showed me I was able to make the best of what happened. I was able to overcome it [the injury]. I was proud of myself. I thought I would never have that feeling again.

Faith was also an integral part of the growth process. Abraham shared...

My faith is a really big part of my life. So that [faith] was probably my biggest coping strategy. Prayer and realizing God was putting me through this for some reason helped. And even though it was hard to realize what it was, it helped me find peace and to know that it [the injury] happened for a reason.

Carla expressed, “I was not religious before I got injured, but I became religious, I found a reason for my suffering. And through it [the injury] I have been able to

help others who I might not have otherwise helped.”

## Discussion

### Thematic Analysis Review

This study highlights overarching themes that constitute the experiences of athletes impacted by a season- or career-ending injury. Participants experienced these injuries in manners which previous research would project. First, all study participants had their athletic identity threatened by their injury (Dean, 2019; Giannone et al., 2017; Heird & Steinfeldt, 2013). Participants believed their injuries obstructed their ability to achieve team and personal goals related to their sport (Brewer et al., 1993; Cabrita et al., 2014). The injuries required all participants to take either a temporary or permanent withdrawal from their sport (Cosh et al., 2013; Masten et al., 2014; Stambulova et al., 2007).

Second, participants responded to their season- or career-ending injuries in a variety of ways. Injury response had a detrimental impact on the behavioral and psychosocial health of the participants (Ivarsson et al., 2017). Some of the detrimental impacts discussed by participants included: feelings of loss and stress, challenges with anger management, loss of social relationships, decrease in motivation, and alcohol or substance misuse (Clement, et al., 2015; Cosh et al., 2013; Tamminen et al., 2012). The experiences discussed by participants also possessed possible elements of PTSD. Of particular concern was participants avoiding

others, avoiding athletic events, reliving the injury, having anger outbursts, and worrying about an unknown future with their sport (Bateman & Morgan, 2019).

While all participants expressed challenges associated with their injuries, each of these individuals also showed resiliency throughout the recovery and transition process. *Presentation of self theory* (Goffman, 1959) indicate athletes may move through a process of understanding how their current identity of as an athlete intersects with the recreated identity post injury. However, getting to a place of understanding how to express that sense of self requires processing through the performance of self and perceptions of what they should be (Goffman, 1959). In fact, all participants expressed an ability to grow in various domains as a result of their injuries. The areas of growth expressed by participants were similar to those discussed in the Posttraumatic Growth (PTG) literature. PTG domains include: (1) personal strength, (2) appreciation for life, (3) new possibilities, (4) spiritual change, and (5) relating to others (Tedeschi & Calhoun, 1996). Research by Vann and colleagues (2018) found that high school and college athletes experiencing season- or career-ending injuries also showed signs of PTG after their injury.

Knowing there is the potential of negative and positive impacts of a season- or career-ending injury, this research provides insight for behavioral health professionals and others in the athletic space. This includes the need for (1) building strong support

pre- and post-injury, (2) recognizing the importance of healthy coping mechanisms, (3) helping an athlete with the loss of their identity, (4) helping athletes recognize new possibilities post-injury, and (5) helping an athlete maintain an appreciation for life despite athletic implications. While providers never want to diminish the reality of the injury, positively impacting the lives of athletes, in addition to educating professionals, could significantly impact how future generations of athletes respond to injuries that threaten their well-being. Greater focus on role clarity and informational support may reduce feelings of fear athletes experience.

### **Limitations and Future Research**

Given this is a qualitative study on season- and career-ending injuries, the intent was not to make generalizations regarding this study to other populations. This study and its methods are transferable to other contexts, and the detailed descriptions here within enable the reader to make comparisons to other individuals or groups. While the study constitutes a small number of college athletes, it provides an in-depth view of injury response experiences. One limitation within the method was the absence of member checking with the original transcripts, as this method increases the trustworthiness and credibility of the study; however, member checking does not equate to objective truth (Smith & McGannon, 2018).

As research on PTG continues to develop in other aspects of human experiences, those involved in advancing

athletes should utilize such knowledge as a source for intervention development (Vann et al., 2018). The collaborative efforts of sport social workers, sport psychologists, athletic trainers, faculty athletic representatives, and a coaching staff can aid in such intervening stances. Future research should explore the roles each of these individuals can play in best practices for promoting PTG. An understanding of which sport and when the injury occurred for the athlete in their career would be an important addition to a study to know when to intervene with which athletes. Future research should also explore what athletic variables promote or decrease PTG.

### Conclusion

Reactions to injury, specifically season- or career-ending, can manifest in many different ways for college athletes. With the risk of psychosocial detriment after injury such as depression, anxiety, and suicidal ideation (Koren et al., 2005; Sheinbein, 2016), it is imperative to understand the experiences of athletes and potential athletic identity loss after injury. By recording and discussing the experiences of these athletes we have a better understanding of how they navigate their injuries and how their injuries impact their psychosocial well-being. We know growth after an injury is possible, but may be varied in different athletes, thus we must be willing to provide the support for them to overcome the deeper emotional pain and kaleidoscope of emotions and experiences that can transpire.

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