REPORTED FORMS OF ADVERSITY BY FORMER COLLEGIATE ATHLETES AND TRANSFERABLE IMPACTS OF THESE EXPERIENCES

A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Exercise and Sport Science (Sport Administration).

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ABSTRACT

Jack Mitchell Haroldson: Reported Forms of Adversity by Former Collegiate Athletes and
Transferable Impacts of These Experiences
(Under the direction of Dr. Erianne Weight)

There has been significant debate regarding intercollegiate athletics and its place within the contemporary American academy system (Clavio et al., 2013; Martin & Christy, 2010; Mitten & Ross, 2013; Ross, 2012; Smith, 2011; Smith & Willingham, 2015; Southall & Staurowsky, 2013; Southall & Jonathan, 2014; Thoroughgood & Padilla, 2013; Van Rheenen, 2012; Wainstein et al., 2014; Zimbalist, 2018). This study utilized the Resiliency Model (Richardson et al., 1990) as a conceptual framework to determine how experiences of adversity encountered as a collegiate athlete impact the post-athletics life of an individual. Former athletes at least five years removed from collegiate participation revealed specific themes of adversity and their applicability to later areas of life. The results of this study will add to literature examining the long-term impacts of intercollegiate athletics participation. This study will also add to current research by identifying specific themes of reported adversity in collegiate athletics and how those themes influence transferrable impacts of athletic participation.

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CHAPTER 1: INTRODUCTION

1.1 SIGNIFICANCE

The collegiate-athletics model in the United States hinges on an underlying premise that elite-level competitive sport competition is housed within higher education because it inherently contains educational value (Brand, 2006; Weight et al., 2015). This unique American tradition is rooted in the belief held by many late eighteenth and early nineteenth century faculty and administrators that physical activity enhances character development of its participants (Putney, 2009). Officials argued that competitive sport in the academy setting would build admirable traits such as physical development and intellectual toughness all while attracting new students who value the same aforementioned traits (Ingrassia, 2012; Putney, 2009). Subsequently, the resulting intercollegiate model is markedly distinct from athletics systems in other parts of the world (Ingrassia, 2012; Rader, 1999). Supporting these foundational notions, research has suggested sport participation facilitates experiential opportunities for performance under pressure, failure, and adversity through which transferrable skills (such as psychological grit, persistence, and empowerment) can be developed. This study aims to examine former athlete perceptions of adversity and the transferrable impacts of these experiences as expressed within interviews with n = 215 athletes 5-40 years after the conclusion of their collegiate athletics experience.

Participation in athletics and physical activity has been linked with significant psychological benefits including increased assertiveness, self-reliance, and body satisfaction (Boyer, 2007). Furthermore, exercise has been associated with notable improvement in reading

comprehension, overall academic performance, and readiness to learn (Ratey, 2008). Specific to collegiate athletics, participation has been linked with an increase in positive cognitive outcomes such as critical thinking, academic achievement, logic, and reason. (Gayles & Hu, 2009; Plunkett et al., 2016) Collegiate athletic participation has also been associated with higher reported levels of teamwork, leadership, valor/bravery/courage, perseverance, time management, self-esteem, character development, and drive for achievement (Plunkett et al., 2016; Weight et al., 2014; Weight et al., 2018; Zwecher, 2014). However, participation as a collegiate athlete also exposes athletes to adversity in their social, psychological, and physical spheres. (Galli & Vealey, 2008; Hayden, 2018; Saxe et al., 2017)

There currently exists a significant level of public-concern relative to the operation, ethics, and effects of intercollegiate athletic participation (Clavio et al., 2013; Southall & Jonathan, 2014; Zimbalist, 2018). Notably, scholars assert Evidence of these issues have been a steady stream of notable collegiate notable collegiate athletic scandals which have developed in recent years, including an investigation into alleged academic malpractice at the University of North Carolina and sexual crimes committed and covered up at Penn State (Thoroughgood & Padilla, 2013; Wainstein et al., 2014). Advocates for collegiate-athletic integrity claim that collegiate athletics is run by profit-minded athletic directors who overemphasize winning, give exorbitant salaries to coaches, and place burdensome time demands upon the shoulders of athletes while simultaneously de-emphasizing academics (Lumpkin, 2008; Weight et al., 2018). Others contend that the "win at all cost" mentality held by athletic departments may create core value differences between the university and athletic department (Martin & Christy, 2010). Nonetheless, the landscape of collegiate athletics is under heavy public scrutiny, with numerous headlines and lawsuits calling for reform related to alleged excessive commercialism (Mitten &

Ross, 2013; Ross, 2012; Smith, 2011) unprincipled behavior (Smith & Willingham, 2015) and athlete exploitation (Southall & Staurowsky, 2013; Van Rheenen, 2012; Zimbalist, 2018).

That said, there is a noted lack of scholarly research focusing on the athlete experience, the adversity related to collegiate athletics participation, and the cost-benefit of these experiences. Furthermore, there have been very few studies that collect retrospective data from athletes several years after their athletic experience completes. This research will provide insight into this understudied and important area of interest. Finally, this study will give key administrators, coaches, and athletics decision makers insights through which they can improve the athlete experience. This study will also be useful to current and prospective athletes who may wish to gain valuable perspective from athletes of the past. As educational leaders seek the most effective methods of preparing productive world citizens, a vital element of doing so requires a thorough examination of holistic preparation for success in post-college life (Weight et al., 2016; Walker, 2002). Additionally, this study will advance the application of Richardson's Resiliency Model (1990) solely towards the environment of collegiate athletics, differentiating this study from other work relating to athletics and adversity (Galli & Vealey, 2008; Sarkar & Fletcher, 2014; Tabei et al., 2012) Findings of this study will likely be of interest to not only the collegiate-athletics administration community, but also current, former, and prospective athletes who wish to gain perspective on the overall experiences of a wide-ranging group of former collegiate-athletes. Additionally, due to the high nature of integration between athletics and the academy at American institutions of higher learning, it is critical to address the degree to which inherent educational value is present in collegiate athletics (Weight & Huml, 2016).

1.2 PURPOSE

The purpose of this study is to examine retrospective perceptions and current impacts of adversity through participation in intercollegiate athletics through the perspective of former college athletes.

RESEARCH QUESTIONS

- 1. What types of adversity are reported by former collegiate athletes during follow-up interviews conducted after cessation of the individual's athletic career?
- 2. How has the experience of significant adversity during college affected athletes in life after athletics?

1.3 OPERATIONAL DEFINITIONS

1-Adversity-[An experience that] typically encompasses negative life circumstances that are known to be statistically associated with adjustment difficulties (Luthar & Cicchetti, 2000).

2-Resiliency-Resiliency is the process of coping with disruptive, stressful, or challenging life events in a way that provides the individual with additional protective and coping skills than prior to the disruption that results from the event (Richardson et al., 1990).

CHAPTER 2: LITERATURE REVIEW

2.1 ADVERSITY/RESILIENCE

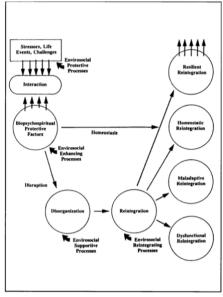
Richardson's Resiliency Model postulates that resilience is key in maintaining biopsychospiritual homeostasis within an individual (Richardson et al., 1990). Thus, in the same way a physical specimen reacts to stimuli to restore equilibrium, humans use resilience to react to a stressor in an effort to restore their psychological balance, with an overall goal of achieving resilient reintegration, or overcoming an obstacle after initial difficulty with better results the second time around (Richardson et al., 1990). This idea is further supported by Galli and Vealey (2008), who found that while athletes often viewed their struggles with adversity as being painful, that these same experiences were often responsible for strengthening the ability of athletes to react in a better fashion in similar future situations. Because of this, athletes who possess the necessary levels of resilience brought on by athletic adversity may not only find success in sport, but they may also gain resources by which adversity can be better responded to in the future (Galli & Vealey, 2008).

APPLIED LITERATURE

Richardson's Resiliency Model guided the conceptualization of this study. Resiliency is the process of coping with disruptive, stressful, or challenging life events in a way that provides the individual with additional protective and coping skills than prior to the disruption that results from the event (Richardson et al., 1990). When faced with an obstacle in life, a person may feel initial discomfort and/or doubt (Richardson et al., 1990). With time, however, an individual will use coping and reintegrative skills to hone and develop new strategies by which future adversity

can be overcome (Richardson et al., 1990). By relying on a mix of cognitive and behavioral coping strategies, athletes are often able to formulate a system where they can process notable forms of adversity such as athletic failure, injury, or athletic burn out (Galli & Vealey, 2008). Through the lens of Richardson's Resiliency Model, an athlete who experiences adversity has the opportunity to return stronger, wiser, and more equipped with personal skills and characteristics, which may enable them to overcome future instances of adversity (Richardson et al., 1990). Importantly, it should be noted that while sport often provides a safe space to fail, this is not to suggest that causes of sinister adversity should be tolerated (i.e. abusive coaches, etc).

While Richardson's Resiliency Model has a long and documented history in many research fields, it has only been relatively recently incorporated into the discipline of sport management. At the core of Richardson's model is the idea that resilience is a biopsychospiritual phenomenon by which an individual is able to respond to any sort of stressor or adversity and attain better results later on, also known as resilient reintegration. This is supported by the research of Galli and Vealey (2008) who used Richardson's Model as a guiding framework; eventually finding that athletes view their experiences with adversity as character building experiences where they were taught lessons by which they will be able to better prepare and respond more appropriately when the next round of adversity arises (Galli & Vealey, 2008). This statement was echoed by athletes while recovering from injury (Podlog & Eklund, 2006). This study will build on foundational research by continuing the use of Richardson's Resiliency Model, while also limiting subjects to those 5-40 years removed from their collegiate athletic experience. Additionally, the semi-structured nature of interviews with a larger sample size (N=215) allows for a broad level of themes to emerge regarding resilience and adversity in athletics.



(Richardson et al., 1990) 38

In general, those who exhibit resilience are more likely to display social problem solving skills, the ability to delay gratification, resilient self-efficacy, creative problem solving, a task-oriented nature, psychological flexibility, the ability to bounce back from adversity, self-motivation, a strong capacity for learning, and the ability to perform personal introspection (Richardson et al., 1990). Richardson's Resiliency Model framework has been applied broadly within the scholarly literature in studies in psychology (Kumpfer, 2002) while also aiding in Connor and Davidson's creation of the CD-RISC resilience scale (Connor & Davidson, 2003). Many studies have found that individuals who have higher levels of resilience are better able to cope with adversity in life (Connor & Davidson, 2003; Dyer & McGuinness, 1996; Gucciardi et al., 2011; Richardson et al., 1990). Resilience gives individuals a psychological buffer against harmful adversity-related effects, while also allowing the individual to persevere through perceived difficulty (Hayden, 2018).

Studies have suggested that adversity plays a key role in helping athletes develop psychological resilience (Galli & Vealey, 2008). Podlog and Eklund (2006) suggested that while painful and emotionally difficult, an injury may give an athlete the opportunity to set reachable

goals to work towards in hope of returning to play in a timely manner. These findings are supported by Luthar, Crossman, and Small (2015) who suggest that resilience reflects a positive personal response despite significant obstacles that may manifest within one's life. A noteworthy example of this idea is demonstrated in Scali and colleagues' research on resilience in breast cancer survivors (Scali et al., 2012). In the study, women cancer survivors were asked to complete a 10-question CD-RISC (Connor-Davidson Resilience Scale) questionnaire and were compared based on psychiatric symptoms (Scali et al., 2012). The result of this research demonstrated that women who scored high for levels of resilience reported lower overall risk of current psychiatric disorder (Scali et al., 2012). Women who tested at intermediate levels for resilience were more than twice as likely to have recently experienced breast cancer or a traumatic event (Scali et al., 2012).

The topic of resiliency in athletics has long been an area of interest in the fields of developmental and clinical psychology (e.g. Gucciardi et al., 2011). Relatively speaking; however, there has been a notable lack of research on this topic that explicitly focuses on the sport setting (Gucciardi et al., 2011).

Galli and Vealey (2008) utilized Richardson's Resiliency Model whilst conducting an interview of current and former collegiate athletes with the ultimate goal of exploring the prevalence of adversity reported and how individuals reacted to these experiences. Findings of the study suggested that adversity, sociocultural influences, and the presence of personal resources were direct precursors to positive outcomes (Galli & Vealey, 2008). Galli and Vealey's (2008) research is unique and relevant to this study not only because it tested current and former athletes under Richardson's Resiliency framework, but also because its findings suggest a link between adversity experienced whilst in athletics and personal growth/improvement later in life.

Outside of athletics, Martin-Kruum and colleagues' research on explanatory style suggests that individuals who exhibit an optimistic explanatory style generally fare better than those who employ pessimistic styles of explanation (Martin-Krumm et al., 2003). Individuals with a negative explanatory style often express their shortcomings due to a lack of control over stable causes, often resigning themselves to experience similar results in the future. (Helton et al., 1999) Conversely, those with a positive explanatory style often express their failures in terms of unstable causes (i.e. things that can be changed) such as effort or strategy. (Helton et al., 1999)

2.2 INTERCOLLEGIATE ATHLETICS EXPERIENCE

The body of intercollegiate athletics research provides a wealth of perspective related to the athlete experience. Issues of primary focus within this research center around the balance of academics and athletics (Comeaux & Harrison, 2007; Morgan, 2001; NCAA, 2016; Plunkett et al., 2016; Simiyu, 2010) commercialism (Chen & Zhang, 2012; Greenberg, 2008; Jenkins, 2003; Lumpkin, 2008; McAllister, 2010), and athlete rights/exploitation (NCAA, 2019; Yao, 2018). These issues are of primary importance because they are often foundational components of calls for broad-sweeping reform in collegiate athletics.

Intercollegiate athletic participation often necessitates a considerable time commitment by the athlete. It is no secret that athletes are often forced to juggle time spent between school and their sport(s) of choice, sometimes choosing the latter. In a study of Pac-12 athletes, the average time spent on athletics, including both voluntary and non-voluntary activity, was roughly 50 hours per week (*Student-Athlete Time Demands*, 2015). Furthermore, while 93% were satisfied with their general collegiate experience, 66% of Pac-12 athletes cited lack of free time as the biggest challenge of being a collegiate athlete, followed by 61% who reported academic challenges (*Student-Athlete Time Demands*, 2015). The average division-1 athlete spends

roughly 34 hours per week on athletics (NCAA, 2016) which has prompted research into the athlete academic experience. In a study of male athletes, Comeaux & Harrison (2007) found student's time spent with faculty to positively correlate with overall GPA. This is further supported by Morgan (2001) who found that when students report a sense of involvement on campus, they are more likely to experience positive feelings which aid in the enjoyment of their collegiate experience and increase desire to pursue post-baccalaureate education. Given the significant time demands of participation in varsity athletics, athlete time with faculty has been found to be lower than non-athlete students (Simiyu, 2010).

The tight schedule that often results from intercollegiate athletics participation, combined with basic NCAA/NAIA academic eligibility standards place significant amounts of stress upon athletes (Simiyu, 2010). Plunkett et al. (2016) found that when asked to name the three biggest hinderances they face in achieving balance in academics and athletics, athletes reported self (33.3%), friends (23.4), and coaches (18%) as their top three barriers to balance. Likewise, self (79.3%), family (38.7%), and friends (36.9%) were viewed by the same sample as being the biggest facilitators of athlete balance (Plunkett et al., 2016).

Current athletes also compete within a landscape that is becoming increasingly more open to commercialization. Lumpkin (2008) posits that athletic directors operate thinly veiled commercial enterprises disguised as educational entities. Jenkins (2003) supported this assertion noting the current corporatization of collegiate athletics; detailing how athletes obviously receive no direct pay despite rising NCAA-related revenue. In an increasingly competitive athletic landscape, schools often directly compete against one another to ensure they possess the best facilities, coaches, and support staff. Institutions and conferences have also established themselves as notable sponsorship partners with large companies, and lucrative multi-million

dollar sponsorship deals for apparel and multimedia rights at power-five institutions is now the norm. (Chen & Zhang, 2012). This statement is supported by Ozery (2018) who cited corporate support as a major revenue stream for athletic departments who simultaneously need to support high-cost athletic facilities. These statements are supported Smith (2012) who in turn cites increased commercialism in sports as a major reason why current athletes are treated increasingly as business commodities with little freedom of their own. In a system where start times (and thus travel times), frequency of play, distance of travel, and other factors are decided with commercial interests in mind, it isn't difficult to imagine how monetary interests may contribute towards adversity experienced by athletes.

Finally, athletes often encounter significant adversity related to rights and exploitation whilst in college. While the US Census Bureau (2019) reports that roughly 13% of the country is black, the overall black athlete population in the NCAA is 21%, and in revenue sports such as football, men's basketball, and women's basketball, black athletes comprise 49%, 56%, and 45% of the sport populations, respectively (NCAA, 2019). In addition, the percentage of black young adults (athlete and non-athlete) aged 18-24 enrolled in either a two or four year degree (36%) lags notably behind other ethnic groups such as 11sians (65%) and whites (41%)(National Center for Education Statistics, 2019). Furthermore, there currently exist large differences between black participation rates, black coaching staff members, and minorities in higher administration (Lapchick et al., 2017; NCAA, 2019). Of men's teams at the division I, II, and III level, whites occupy head coaching positions 86.1%, 88.1%, and 91.7% of the time, respectively (Lapchick et al., 2017). In addition, numbers of African-American NCAA managing directors and administrators have fallen since 2008, while numbers of respective D-1 men's and women's coaches continue to significantly lag behind at roughly 7% (Lapchick et al., 2017). Yao found

that students with darker skin tones and phenotypically non-white physical features reported more incidents of discrimination and feelings of not belonging than their white peers in American universities(Yao, 2018). With notable numbers of revenue sport participants being black athletes, combined with the relative low visibility rates of black coaches, and/or administrators at their respective universities, it is not unfathomable to grasp how minority student athletes may perceive racial inequalities to be contributory towards social adversity faced while in college.

2.3 IMPACT OF INTERCOLLEGIATE ATHLETICS EXPERIENCE

Scholarly literature in the field of sport administration offers a plethora of information regarding the effects associated with intercollegiate athletics participation. Weight et al. (2016) reported that the overwhelming majority (85%) of student athletes reported their athletic experience as a contributory factor in their overall education. Furthermore, collegiate athletics participation has been linked with notable levels of self-reported personal characteristics such as self-confidence and empowerment, time management, teamwork, mutual empowerment, and achievement of balance (Weight et al., 2016). These findings are echoed by Plunkett et al. (2016), who found perseverance, balance/time management, working with a team, and dealing with criticism to be the biggest overall lessons learned through intercollegiate athletics participation. Similarly, Weight et al. (2018) reported higher levels of perceived job satisfaction, higher reported salary, total work engagement, teamwork attribution, promotion rates, communication rates, and work-related dedication in former collegiate athletes vs non participants.

It has been posited that participation as a student athlete is associated with key benefits such as time management skills and key team experiences (such as travel, etc) which may allow

for athletes to acquire transferrable life skills for their post-athletic life (Paule & Gilson, 2010). Athlete participation has also been linked to higher levels of academic engagement in the classroom (Poczwardowski & Conroy, 2002). This is echoed by Weight et al. (2016) who states that intercollegiate athletic participation is linked with higher rates of marketability upon graduation, cognitive growth, time management, self-esteem, character development, and higher overall educational outcome. Zwecher (2014) paralleled these statements, arguing that team sport participation increases mental preparedness, maturity, and both social and professional development.

Several scholars argue that transferrable lessons gleaned from athletics participation can be used to positively impact the life of an individual after the cessation of their athletic career (Hayden, 2018; Plunkett et al., 2016; Saxe et al., 2017; Weight et al., 2016; Weight et al., 2018; Weight et al., 2019; Zwecher, 2014). While the cessation of an athletic career is certainly a significant obstacle to overcome, Martin-Krumm (2003) argues that explanatory style (i.e. rationalizing adversity in an optimistic/controllable or pessimistic/uncontrollable fashion) may be a key factor in overcoming such obstacles in life. By finding that participants with optimistic explanatory styles performed better after failure, expected success at a higher rate, and experienced less stress reactivity, we are better able to grasp why some athletes recover after failure in sports while others do not (Martin-Krumm et al., 2003). Thus, an athlete's ability to overcome ups and downs is a significant component of resilience (Martin-Krumm et al., 2003). With an abundance of reported impacts of intercollegiate athletics experience in scholarly research, a major goal of this study is to pinpoint such impacts from the self-reported perspective of former athletes 5-40 years after the cessation of their athletic career.

2.4 CONCLUSION

Researchers have been studying the psychological phenomena surrounding adversity and resilience for decades. Only in recent years, however, have these ideas been applied to student athletes and the collegiate population. While many athletes have been studied in the midst of participation, there are few studies that specifically focus on athletes whose collegiate athletic careers ended five or more years ago. Richardson's Resiliency Model was utilized to provide a guiding framework for this study. Athletes experience many factors whilst participating that may lead to adversity, including balancing school and sport, commercialism, and race-related issues. That said, participation in collegiate athletics simultaneously enables athletes to acquire transferrable skills to use later in life through adversity experienced via collegiate athletics.

CHAPTER 3: METHODS

Data collection took place as part of a larger interview-based study on the experiences of former college athletes. Participants for semi-structured interviews were recruited using chain referral sampling, which entails a "series of participant referrals to others who have experienced the phenomenon of interest" (Penrod et al., 2003, p. 102). Semi-structured interviews were utilized due to the researcher's desire to obtain a deep, yet easily understandable sample of data in a conversational manner (Harrell & Bradley, 2009).

Sample chains began from 15 distinct researchers in order to encourage a broad range of data collection. In order to be considered, athletes must have participated in intercollegiate athletics at a four-year institution while also being at least five years removed from their collegiate athletic experience. Researchers largely recruited participants within their respective social circles, and conducted interviews either face-to-face or over the phone. Researchers began each interview by reading a scripted consent statement to the interviewee. Data collection took place via semi-structured interviews that typically lasted 30-90 minutes, where participants were asked about their journey into athletics, family involvement, lessons learned through sports, collegiate coach relationship, as well as any obstacles faced along the way. The semi-structured interview format allowed the interviewer the freedom to ask guiding questions and probe deeper as he/she saw fit. Although the original purpose of the study was to examine lessons learned through sport participation, the semi-structured interview format allowed for participants to share impactful stories and explore themes related to sport on a deep level relative to their experience. Participants were largely male (73.49%), Caucasian (72.10%), and graduated college in the

1990s (39.30%). Furthermore, the vast majority of participants (78.60%) participated in NCAA Division I athletics, while other participants did so at the Division II, Division III, NAIA, or NJCAA level. Finally, while the most common sport played in college by participants was football (20.98%), the majority of participants (66.07%) competed in non-revenue sports. A full list of demographic data is available on table 1.

All interviews were audio recorded, transcribed, and imported into Atlas.ti software for data analysis. Coding was completed simultaneously by two researchers, and themes were developed after all data was input in Atlas.ti. A total of eight separate chi-square tests of association were conducted between demographic factors and themes of adversity (A) and adversity effects (AE). Demographic factors included gender (male/female), graduation decade (1970s/1980s/1990s/2000s/2010s), ethnicity (black/white), and revenue sport status (revenue/non-revenue). Adversity themes included injury, balancing school and sport, coach/athlete tension, athletic failure, pressure to perform, teammate conflict, miscellaneous, lack of expectation, and race. Adversity effects themes included grit/perseverance, development of teamwork skills, time management, patience, depression/self-doubt/negativity, and humility. The independent variables in our chi-square calculation are demographic factors (gender, graduation decade, ethnicity, and revenue sport status) and adversity/adversity effects themes. Moreover, the dependent variable of our chi-square calculations are represented by the number of co-occurrences between the adversity/adversity effects themes and demographic factors.

Table 1
Demographic Information

Demographic Information		
	%	n
Gender		
Male	73.5	158
Female	26.5	57
Ethnicity		
Caucasian	72.1	155
Black	20.5	44
Pacific Islander	0.5	1
Hispanic	0.5	1
Not Identified	6.5	14
Revenue v Non-Revenue		
Revenue	33.9	76
Non-Revenue	66.1	148
Grad Year by Decade		
1960's	0.5	1
1970's	4.7	10
1980's	21.4	46
1990's	39.3	63
2000's	26.1	56
2010's	17.7	38
Did Not Identify	0.5	1
Division Level		
NCAA Division 1	78.6	169
NCAA Division 2	7.4	16
NCAA Division 3	12.1	26
NAIA	1.4	3
NJCAA	0.5	1

N = 215

Table 2 Sport Participation

	%	n
Sport		
Football	21.0	47
Baseball	15.2	34
Men's Basketball	13.0	29
Men's Soccer	6.7	15
Women's Basketball	6.7	15
Swimming	6.3	14
Women's Soccer	5.4	12
Track and Field	5.4	12
Women's Tennis	2.7	6
Men's Tennis	2.2	5
Wrestling	3.6	8
Volleyball	2.7	6
Cross Country	2.2	5
Men's Lacrosse	1.8	4
Men's Golf	1.8	4
Rowing	0.9	2
Women's Lax	0.9	2
Cheer	0.9	2
Gymnastics	0.5	1
Ice Hockey	0.5	1

N = 215

CHAPTER 4: RESULTS

The sample was skewed toward Caucasian (72.1%, n=155) men (73.49%, n=158) who participated in NCAA Division 1 Athletics (78.60%, n=169). Participants competed in 20 distinct sports while in college, with the most common sport being football (20.98%, n=47). The remaining participants self-identified as Black/African-American (20%, n=44), Hispanic (0.47%, n=1), or Pacific Islander (0.47%, n=1). The vast majority of participants participated in NCAA Division I athletics (78.60%, n=169), while most others did so at the Division II (7.44%, n=16) or Division III (12.09%, n=26) level. The remaining participants did so at the National Association of Intercollegiate Athletics (NAIA) or National Junior College Athletic Association (NJCAA) level, at rates of (1.40%, n=3) and (0.47%, n=1), respectively. The majority of participants concluded their collegiate athletic careers in the 1990's (39.30%, n=63), 2000's (26.05%, n=56), 1980's (21.40%, n=46) and 2010's (17.67%, n=38), yet a smaller percentage graduated in the 1970's (4.65%, n=10) and 1960's (0.47%, n=1). A complete list of demographic data is available in Table 1.

SOURCES OF ADVERSITY IN ATHLETICS EXPERIENCES

Participants largely identified adversity experienced in nine major categories. Participants most commonly cited injury (38.60%), balancing school with sport (37.67%), and coach v. athletic tension (33.49%) as their major sources of adversity while competing in collegiate athletics. Other cited adversity sources include: athletic failure (27.44%), pressure to perform (17.21%), teammate conflict (8.84%), miscellaneous (8.84%), lack of expectation (6.05%) and race (4.19%) (see Table 3).

Table 3
Adversity Code Co-Occurrences

•					Balancing	School &	
	Injury		Coach T	Coach Tension		Sport	
_	%	n	%	n	%	n	
Gender							
M	62.4	78	64.6	73	70.4	76	
F	37.6	47	35.4	40	29.6	32	
Ethnicity							
White	74.4	93	69.0	78	73.2	79	
Black	23.2	29	25.7	29	20.4	22	
Hispanic	0.8	1	0.9	1	0.0	0	
Pacific	0.0	0	0.0	0	0.9	1	
DNI	1.6	2	4.4	5	5.6	6	
Revenue/Non-Re	evenue						
Revenue Non-	39.2	49	32.7	37	32.4	35	
Revenue	60.8	76	67.3	76	67.6	73	
Grad Decade							
60s	0.0	0	0.0	0	0.0	0	
70s	5.7	7	3.6	4	1.9	2	
80s	22.0	27	15.5	17	19.6	21	
90s	36.6	45	20.0	22	25.2	27	
00s	20.3	25	31.8	35	34.6	37	
10s	15.5	19	29.1	32	18.7	20	

N = 215

INJURY

Nearly 2 in 5 (38.6%) respondents identified injury as a source of significant adversity. . Years removed from athletics participation, participants often cited injury and its host of downsides as a major obstacle in their athletic career. One former Division-1 football player provided the following statement regarding his experience: "I had an injury that was a really big part of my college sports career. I hurt my arm and I had to sit out a couple years really. That was really just a major event. When I look back on my years in sports that is something I have to remember." (White Male Division I Football 1982 Graduate)

Participants routinely recalled unhappiness from their injury experiences as mentioned by Participant 174, "I broke both bones in my leg against NC State in 1995, which was my very last football game and it just was a major blow to me personally. I still have repercussions from that injury. It kind of ripped football away from me, so I had to deal with that sort of the

psychological mess that came with that because I'd been a football player, like I said, since primarily for years by that point, I mean, I played for years and years." (White Male Division I Football 1996 Graduate)

Athletes cited injury as the most prevalent form of adversity in collegiate athletes. For example: "Well, my worst part of being the student athlete, especially at the college was when I tore my knees up, I tore both ACLs. So, it was the first time in my life I was not able to play because of being hurt. Back then, the recovery time was about a year on an ACL. So basically, throughout my five years in college I missed two full years of being able to compete. What I learned from that is that you've got to keep an upbeat attitude and you've got to look at the positives in everything. Even though I was hurt, I was still there primarily to get an education and I was taught early that there's only a small percentage of people that get to go from the high school to college and even fewer from their college to pros. So, I looked at it as I was already given the advantage to be a true student athlete, not just an athlete." (White Male Division I Football 1996 Graduate)

BALANCING SCHOOL AND SPORT

The second most prevalent theme of adversity experienced by 37.67% of participants related to difficulties associated with balancing school and sport commitments. Participants mentioned the need to navigate extremely demanding athletic schedules combined with high academic rigor. The combined stressors associated with maintaining standards in the classroom as well as the playing field may be contributory to aversity experienced as a collegiate athlete. "Balancing hard academics and sport was not easy but it paid off in my time management skills." (White Male Division I Baseball 2014 Graduate) One participant shared the following: "I am thirty-seven years old now and I still remember the hardship of managing classwork and

obviously your relationships...whether it be with a significant other or your teammates or coaches or other professors." (White Male Division II Baseball 2003 Graduate) This sentiment was echoed by other participants. For example: "Playing for a such a storied program, basketball was a huge commitment between time on the court, film, travel, and recovery. Because I added that commitment as a full-time student at a public university, I really had to plan out my days and my weeks, and make sure there was a balance. Time management and organization were essential in being able to be successful at both athletics and academics." (Black Male Division I Basketball 2005 Graduate)

COACH VS. ATHLETE TENSION

A third emergent theme of adversity experienced by 33.49% was that of coach vs. athlete tension. Often, participants viewed their coach as a major determinant of collegiate athletic experience quality. However, other participants had negative experiences with their collegiate coach: "[The relationship was] miserable. I'm still to this day very good friends with his son. But [my coach] is dead to me. I had three more years...I played a year, and I had three more years of eligibility...I missed out on a lot of good memories. Road trips, friendships, I lost friends from leaving. People were like 'I can't believe you're letting him get the best of you.' But I just didn't want to waste my four years of college being treated the way I was." (White Male Division II Baseball 1999 Graduate) This sentiment was expressed by other participants in this study: "My relationship with [my coach] is very bad. I don't have any respect for him, and like I said earlier, I learned a lot about what not to do, how not to treat people, how not to put other people first before you. Whether you're the starter or if you're third string, you've got to treat everybody with the same respect. Show your gratitude for everybody and that's something he was very bad at. He didn't know how to do that. I'm grateful for my experiences that I

learned through him about how not to coach and how not to treat people because that shaped me in a lot in life." (White Male Division I Wrestling 2009 Graduate)

OTHER ADVERSITY SOURCES

Athletes also cited athletic failure (27.44%) as a source of adversity related to collegiate athletics. Often times, this was paired with another form of adversity, such as pressure to perform (17.21%). "I definitely had my fair share in bad experiences as a collegiate athlete. I thought I wanted to go to a big school and play for a team that was always contending for a national championship. I got along with the team very well, but at our first away match of my freshman season we were playing at Alabama and my head coach came up to me and said 'the girl you are playing really wanted your scholarship, but we gave it to you instead. So prove to us we made the right decision.' I went on the court and lost very quickly because of the pressure the coach had put on me by saying that. That was a very low point for me especially as a freshman. I transferred soon after that." (White Female Division I Tennis 2014 Graduate) The adversity that emerged through pressure to perform and athletic failure was echoed by participant 103: "For me I think it was probably the ambition to be a world champion, olympic champion, and to be a national champion and to really having not accomplished that in college, you know, I thought I was going to be a four-time national champ and I didn't win it once in college. So you're working through that disappointment and you know the expectation and then continuing to sort of set the bar higher and set the next goal and the next goal. So I think that you know it was really about managing disappointment." (White Male Division I Wrestling 1987 Graduate)

Less often, athletes recalled adversity stemming from teammate conflict (8.84%) miscellaneous origins (8.84%), lack of expectations (6.05%) and race (4.19%). Related to teammate-related adversity, a White Female Division III Volleyball player mentioned, "We had

very different personalities and people who we weren't necessarily super close on the team...We had to figure out that there are good things about everybody, and there are bad things about everybody. You just have to figure out how to make it work when you have to be around somebody that you have to be around. A lot of your year, a lot of your day. I've worked in jobs that I didn't always agree with what the decisions were above me. But you just have to know your place to some extent. So it helped in that regard." (2005 Graduate) This sentiment was echoed to a more extreme extent by participant 46 who recalled getting into fights with his teammates: "At the end of the day we would have to work together regardless if we liked each other or not." (Black Male Division II Football 1991 Graduate)

Miscellaneous sources of adversity were also listed by 8.84% of participants: "The worst times were winter conditioning...and fall camps, where they...not to say they tried to kill you, but they wanted to bring you as close to your breaking point as possible. And I think maybe that's why it's so hard to answer this question, because they broke us down and we realized how strong we were as people, how strong you can be as a person. So, we would have adversity but we just fought through it." (Black Male Division I Football 2009 Graduate) Another participant cited the transition to college as a miscellaneous source of adversity: "I think in the beginning it was hard. I was 10 hour drive away from home. I was 1,900 miles from home and I didn't have mom watching over me and you're on your own." (Pacific Islander Male Division I Football 1996 Graduate)

Other participants mentioned the need to overcome adversity related to the lack of expectation placed upon them as an athlete: "I had a lot of success in baseball, but I wasn't anybody who was going to be recruited to play baseball or anything like that. But, I loved baseball and I knew I wanted to play baseball. I basically just showed up at the practices and

nobody knew who I was. I just showed up with a ball my freshman year and worked out with the team. I really just kept showing up. Every practice and every meeting, I'd just show up. I think they were just amused by me at the beginning. I was a hard worker and I'd do everything. I'd throw batting practice, because I have a talent where I can throw perfect batting practice forever. I can throw an endless amount of strikes, so I'd just throw batting practice. I think they kept me around just to throw batting practice. I stuck around and stuck around, and by the time in my senior year, I didn't really play, but I was elected captain of the team after my junior year. So that at least ensured me that I was going to be on the team in my senior year." (White Male Divison I Baseball 1990 Graduate) Participant 75 expressed a similar sentiment regarding his physical ability in sport: "I was short, but I pitched – I had to work hard. I think that was the biggest lesson is to overcome certain things. I mean I had a good arm, and was pretty smart at pitching. But I had to overcome some obstacles as far as physical stature and all that." (White Male NAIA Baseball 1974 Graduate) Finally, participant 122 noted an alarming realization: "I was actually recruiting bait for someone who was on my club team, so learning those things and feeling not even wanted by your coaches, I learned to prove them wrong." (Black Male Division I Soccer 1994 Graduate)

Finally, a small number of athletes reported experiencing adversity related to their race. "A difficult experience for me was going to a college that didn't have a lot of minorities or didn't have a lot of people who were exposed to minorities before. There were occasionally people who had a different opinion about things and there was discrimination/racism but it didn't happen very often. When it did happen, it was a negative or bad experience I had. I learned how to move forward despite all of the bad encounters." (Black Male Division I Football 1993 Graduate)

Similarly: "I've heard racial-backhanded compliments, and then there's people wondering if you

got in (to school) because of your athletic ability, like did you just get in because your athlete?" (Black Male Division I Tennis 1981 Graduate) Other participants recalled racial adversity as part of friction with their collegiate coach: "Wrestling experiences made me stronger, being the only one Black on wrestling team for example, I remember once I changed the music to hip hop, I got cursed at and my coach he berated me in front everyone and said the captain got to change the music. So, 5 years later I'm captain so I get to change the music, he then changes the rule on me and we had to listen to country, I should have protested my first year. I learned through the experiences and reflecting on them: I would replay it and say what I would do, try not to wait because regret doesn't feel good." (Black Male Division I Wrestling 2001 Graduate)

RQ2- HOW ADVERSITY HAS AFFECTED ATHLETES IN LIFE AFTER ATHLETICS

Participants most commonly referenced grit/perseverance (51.63%), development of teamwork skills 50.70%), and time management (34.42%) as major takeaways of adversity they experienced while competing in collegiate athletics. Additional themes of adversity effects included patience (13.49%), depression/self-doubt/negativity (13.49%), and humility (12.09%). A complete list of adversity effects frequencies are available in table four.

 Table 4

 Adversity Effects Code Co-Occurrences

	Grit		Teamwo	Teamwork Skills		Time Management	
	%	n	%	n	%	n	
Gender							
M	68.6	35	66.7	12	76.5	26	
F	31.4	16	33.3	6	23.5	8	
Ethnicity							
White	80.4	41	72.2	13	76.5	26	
Black	19.6	10	27.8	5	17.7	6	
Hispanic	0.0	0	0.0	0	0.0	0	
Pacific	0.0	0	0.0	0	2.9	1	
Did Not ID	0.0	0	0.0	0	2.9	1	
Revenue/Non-Re	ev						
Revenue	25.5	13	33.3	6	32.4	11	
Non-Revenue	74.5	38	66.7	12	67.7	23	
Grad Decade							
60s	0.0	0	0.0	0	0.0	0	
70s	3.9	2	5.6	1	2.9	1	
80s	29.4	15	11.1	2	11.8	4	
90s	29.4	15	33.3	6	29.4	10	
00s	25.5	13	33.3	6	35.3	12	
10s	11.8	6	16.7	3	20.6	7	

N = 215

GRIT/PERSEVERANCE

The most commonly cited takeaway stemming from adverse experiences in collegiate athletics is that of grit/perseverance. A former Division 1 swimmer provided the following statement regarding the transferrable applicability stemming from his collegiate experience: "I've been looked over for jobs, missed promotions, and have had to deal with that disappointment. But swimming taught me to have a short memory and that I had to move forward as soon as possible." (White Male Division I Swimmer 2010 Graduate) Participants commonly expressed the belief that participation in collegiate athletics places demands upon an individual that closely mimic post-athletic professional life. For example: "From waking up early

to going to sleep late to trying to weight train to trying to study. I mean with work; the same things apply with a 9-5 corporate job and the same disciplines that you use in your everyday life." (Black Male Division I Football 2010 Graduate)

Athletes often mentioned instances of grit/perseverance directly after instances of adversity. A former Division 1 football player provided the following statement regarding his experience of adversity through injury and subsequent refinement in psychological grit/perseverance: "I had a stress fracture. I break my foot second day of camp. And I'm just distraught. Because I've never been out of football. I've had bumps and bruises, but I'd never been out for a game. So, I break my foot second day of camp, and miss the first two games. And then we had a bye week going into our third week. I came back on the bye week, and for some reason, they put me in the lineup and I ended up playing in the third game. And of all of my other incoming freshmen, they all got redshirted. But, I mean, it was just adversity. I could have felt sorry for myself and tanked the season, but I just, I grinded, I did my rehab. I got back on the field. I was kicking butt, so they put me in the game. So, just another story about adversity." (Black Male Division I Football 2012 Graduate)

DEVELOPMENT OF TEAMWORK SKILLS

The second most commonly cited takeaway stemming from adverse experiences in collegiate athletics relates to the development of teamwork skills. Most often, athletes participate alongside teammates with differing backgrounds, personalities, experiences, and goals.

Consequently, athletes cited the ability to cooperate and get along with others as an important takeaway from collegiate athletics. Similarly, participants cited the workplace and relationships as two major areas where teamwork skills learned via athletics have been applied. A former Division 1 lacrosse player reported the following regarding her development of teamwork skills

through collegiate athletics: "I often found myself almost being like a peacemaker/middle man in this situation knowing that taking one side over another with these strong personalities would not create unity, it would just divide. So just trying to meet in the middle and navigate through strong personalities was the best way to learn. I would say this is what I remember really preparing me for teaching, way back, just working in groups and teams growing up and in college." (White Female Division I Lacrosse 2006 Graduate) This statement was echoed by participant 109, who added: "Being accountable for yourself and your teammates as well. So, if you see somebody not pulling their weight, telling them 'hey, we're in this together and we're a team'. Not really calling out your teammates, but letting them know the greater purpose that we're trying to achieve. In order to do that, to call someone out, you need to be accountable for yourself. That makes you disciplined as a person and that has carried over into my work life and personal life. You notice that you're not late for things anymore. You show up to things when you tell people you're going to show up, because you're accountable for yourself." (White Male Division III Baseball 2013 Graduate)

Individuals often expressed satisfaction with being able to work with differing personalities towards the accomplishment of a goal. For example: "Career-wise, you learn the nuances of working as a team. I have a team of people that work for me and I try to instill in them that we're one team and we should work together. Let's not go off and work individually. And it helps you. I tell the people who come to work in our group, not for me but in our organization, that there are all kinds of personalities that you have to navigate within a company or even internally with our group. So you have to figure out how to work with them, and it's the same thing as being on a team." (White Male Division I Baseball 1995 Graduate)

TIME MANAGEMENT

The third most commonly cited takeaway stemming from adverse experiences in collegiate athletics relates to the increased ability for athletes to employ effective time-management skills. According to participant 211: "Balancing hard academics and sport was not easy but it paid off in my time management skills." (White Male Division I Baseball 2014 Graduate) A former Division 1 lacrosse player provided the following statement regarding time-management as a result of adversity stemming from the need to balance demands in both school and sport: "I learned self-confidence, discipline, team work, time management, setting goals and knowing how to achieve goals. Self-confidence, discipline and time management are absolutely the most important three." (White Male Division I Lacrosse 1982 Graduate)

Participants also mentioned time-management skills to be a direct result of adversity experienced as a collegiate athlete: "My first year at college I struggled to balance school and athletics. We were always busy with practice and I felt like I didn't have enough rest and this was the hardest time for because I felt like I did not have enough balance. I learned how to compete for playing time at college as a freshman and how to compete with constant new players. I learned how to work hard both academically and athletically and to push myself."

(Black Male Division II Soccer 1992 Participant 47) This statement was echoed by a former baseball player, who stated the following regarding his initial academic struggle and eventual improvement: "Freshman year was really hard and I stunk it up in the classroom, so I had to go to summer school to stay eligible. I had a lot to learn as a student athlete. Coming in as a freshman, I didn't put in the time and didn't have good study habits so I had to learn quickly that both being a student and an athlete were important. Being a student actually came first and then being an athlete comes after that. I really had to learn how to focus on the right things because

my university was very hard academically. I had to learn quickly how to deal with academic challenges and time management while playing baseball." (White Male Division I Baseball 1991 Graduate)

Other athletes mentioned how balancing school and sport helped create transferrable skills for use later in life: "You have to, at any level, manage time very well if you want to be successful in school. Success on the field and in the classroom were both very important to me, I double majored and wanted to graduate in four years. I had to keep my schedule in line and stay on task. Over time it became second nature to me in terms of scheduling and keeping things straight. My coach my sophomore year would say, "if you're on time, you're late, so be early." And that stuck with me, to this day I still practice that and tell the kids that I've coached even today." (White Male Division II Lacrosse 2004 Graduate)

Finally, athletes mentioned that time management skills gleaned through athletics carry over to post-athletic life: "My experience during college balancing both athletics and school ingrained this work ethic in me that I still use today to continue to get the needed work done."

(White Male Division I Wrestling 2006 Graduate)

PATIENCE

Participants also cited patience (13.49%) as an effect of adversity through participation in collegiate athletics. "I learned how to control my frustrations and also how to be patient with the big picture/overall outcome." (White Female Division I Track and Field 2004 Graduate). Other athletes echoed this sentiment: "I've learned that you've got to be patient in everything you do. Patience, man. I think from being around baseball, it instilled in me in almost everything I do." (Black Male Division I Baseball 2011 Graduate) Other participants noted how patience was learned directly through an adverse experience, such as injury: "I got hurt in college playing

basketball, and was out about 6 weeks. The setback of not being able to play, being on crutches, and having to work my way back up to strengthen my knee was a huge learning experience for me. It was something that I had to cope with, because there was nothing I could do about it, except be patient and train over and over again so that I could get back to where I was." (Black Female Division I Basketball 1991 Graduate)

DEPRESSION

Some athletes mentioned depression/self-doubt/negativity (13.49%) stemming from athletics-related adversity. "I was a walk on, and I kind of had some effects from that thinking maybe I'm not as worthy." (White Male Division I Soccer 1987 Graduate) Others felt negative effects from transitioning out of sport: "I feel like I had a bout of depression, where I kinda, I felt like I almost lost my identity. For the longest time it was like 'oh yeah you play baseball' and now I used to play baseball." (White Male Division I Baseball 2009 Graduate) This statement was echoed by other participants: "Transition out of sport for me was really hard. I experienced many hurdles. My physical hurdle was my herniated disc in my neck that required cessation of all impact for me. I has to resort to walking or yoga and confined me to only certain exercising. I became very depressed which then also impacted my social relationships with a lot of my friends. A lot of my friendships were competition based because I ran with people and did triathlons with big crowds. It really affected me mentally and socially as well. It was a huge struggle for me and nothing really helped. I had to change my attitude and outlook on life before I was finally able to overcome my state of depression." (White Female Division I Swimming 1981 Graduate)

HUMILITY

Finally, 12.09% of athletes identified humility as a result of adversity experienced as a collegiate athlete. "I learned a little bit of humility and doing things I didn't want to do for the ultimate goal of playing and being a supportive teammate. And I kinda realized I was being stubborn and selfish. So I just had to fold and play the way my collegiate coach wanted me to play in order to be a better teammate and the player she wanted me to be." (White Female Division I Lacrosse 2006 Graduate) This sentiment was echoed by other participants: "In swimming, it's a lot of work for a fraction of a second, and if you want something, you have to work for it. I swam until I was 25, 7 years of those on the US national team trying to make the Olympics. It's a brutal sport, and it truly taught me humility and perspective because things don't always work out how you planned." (White Male Division I Swimming 2010 Graduate) This is supported by participant 170: "Humility goes a long way. Like just putting your head down and working hard and not feeling entitled to immediate results." (White Female Division I Volleyball 2005 Graduate)

PATTERNS IN ADVERSITY EXPERIENCES BY DEMOGRAPHIC VARIABLES

Chi-square analyses of association were conducted for the purpose of comparing ethnicity, gender, graduation year, and revenue/non-revenue sport status to reported themes of adversity. Chi-square tests of association were conducted on an individual basis between demographic factors and forms of adversity and adversity effects previously coded through Atlas.ti software.

ETHNICITY

In analysis of adversity type by participant identity, athlete ethnicity was significantly tied to instances of racial adversity $\chi^2(8, N=536)=25.408$, p=.001. with an adjusted standardized residual of 4.6. Complete figures for this calculation are available in table five.

Table 5 *Experiences of Adversity Based on Ethnicity*

	White	Black	χ2
Race	10.0%	90.00%	25.408
	(-4.6)*	(4.6)*	
Athletic Failure	79.50%	20.50%	
	1.3	-1.3	
Balancing School and Sport	78.20%	21.80%	
	1.1	-1.1	
Coach v. Athlete Tension	72.90%	27.10%	
	2	.2	
Lack of Expectation	68.80%	31.30%	
	5	.5	
Injury	76.20%	23.80%	
	.7	7	
Miscellaneous	70.80%	29.20%	
	3	.3	
Pressure to Perform	70.20%	29.80%	
	6	.6	
Teammate Conflict	65.40%	34.60%	
	-1.0	1.0	
n	395	141	

N = 536 (Adjusted Residuals) * p < .05

GENDER

In an analysis of adversity type by participant identity, athlete gender was not significantly associated with instances of adversity $\chi^2(8, N=555)=15.221$, p=.055. That said, the individual comparison between gender and injury-related adversity contained an adjusted residual of 2.2 for male and female participants, with men significantly more oten expressing injury-related adversity. A complete list of figures are available in table six.

Table 6 *Experiences of Adversity Based on Gender*

	Male	Female	χ2
Race	90.90%	9.10%	15.221
	1.5	-1.5	
Athletic Failure	73.80%	26.20%	
	.8	8	
Balancing School and Sport	70.40%	29.60%	
	.0	.0	
Coach v. Athlete Tension	64.60%	35.40%	
	-1.5	1.5	
Lack of Expectation	81.30%	18.80%	
	1.0	-1.0	
Injury	62.40%	37.60%	
	(-2.2)*	(2.2)*	
Miscellaneous	87.00%	13.00%	
	1.8	-1.8	
Pressure to Perform	81.60%	18.40%	
	1.8	-1.8	
Teammate Conflict	69.20%	30.80%	
	1	.1	
n	390	165	

N = 555 (Adjusted Residuals)

REVENUE/NON-REVENUE

In analysis of adversity type by participant identity, revenue/non-revenue sport status was significantly tied to instances of adversity $\chi^2(8, N=555)=16.941$, p=.031. The individual comparison between revenue/non-revenue sport status and athletic failure-related adversity contained an adjusted residual of 3.2 for revenue and non-revenue participants, demonstrating adversity related to athletic failure to be significantly more prevalent in non-revenue athletes.

^{*} p < .05

 Table 7

 Experiences of Adversity Based on Revenue/Non-Revenue Participation

	Revenue	Non-Revenue	χ2
Race	45.50%	54.50%	16.941
	.9	9	
Athletic Failure	17.90%	82.10%	
	-3.2*	3.2*	
Balancing School and Sport	32.40%	67.60%	
	2	.2	
Coach v. Athlete Tension	32.70%	67.30%	
	1	.1	
Lack of Expectation	25.00%	75.00%	
	7	.7	
Injury	39.20%	60.80%	
	1.6	-1.6	
Miscellaneous	52.20%	47.80%	
	2.0*	-2.0*	
Pressure to Perform	32.70%	67.30%	
	1	.1	
Teammate Conflict	42.30%	57.70%	
	1.0	-1.0	
n	184	371	

N = 555 (Adjusted Residuals) * p < .05

CHI SQUARE ANALYSIS OF ADVERSITY EFFECTS

Several chi-square analyses of association were also conducted for the purpose of comparing ethnicity, gender, revenue/non-revenue sport status, and graduation decade to reported themes of adversity effects. Chi-square tests of association were conducted on an individual basis between demographic factors and themes of reported adversity effects previously coded in Atlas.ti software. While none of the tests were significant at the .05 level, the lack of significant differences between demographic indicators is noteworthy.

While the overall test returned statistically insignificant results, the chi-square analysis comparing ethnicity with depression/self-doubt/negativity suggested a notable difference between white and black participants with an adjusted standardized residual of 2.7. While the adjusted residual for white participants experiencing depression/self-doubt/negativity was -2.7, the figure for black athletes was 2.7. This analysis suggests that depression/self-doubt/negativity may manifest at a higher prevalence-rate in black collegiate athletes because of adversity faced.

CHAPTER 5: DISCUSSION

The purpose of this study was to examine retrospective perceptions and current impacts of reported adversity through participation in intercollegiate athletics from the perspective of former collegiate athletes. To this end, the use of in-depth semi-structured interviews allowed for themes to develop in an organic fashion. Furthermore, the semi-structured interview format allowed participants the flexibility and freedom to speak to the themes they felt were most applicable to their athletic experience. This study supported previous research by suggesting a link between athletics participation and experienced adversity. Furthermore, key takeaways from athletics, such as development of time-management characteristics, builds upon scholarly literature associated with this topic (Paule & Gilson, 2010; Plunkett et al., 2016; Simiyu, 2010; Weight et al., 2014; Weight et al., 2016; Weight et al., 2018; Zwecher, 2014).

A major form of adversity cited by athletes stemmed from injuries experienced while in college. Athletes often viewed their sport to be closely tied with their identity. Thus, a forceful and often sudden inability to participate often served as a disruptive event capable of causing the individual to enter the psychological stage of disorganization in Richardson's Resiliency Model (Richardson et al., 1990) In accordance with Galli and Vealey (2008), participants tended to mention injury as a form of adversity that forced them to overcome obstacles in order to return to their previous level of play. Furthermore, participants reported examples of adversity stemming from injury including feelings of social isolation, fear of reinjury, and missing out on competition, which is supported by Podlog & Eklund (2006). These examples of hardship give real world examples of the reintegration process decribed by Richardson et al. (1990), while

simultaneously highlighting the cause and effect nature of adversity experienced and the achievment of resilient reintegration. Notably, many athletes mentioned adversity through injury next to a key takeaway from their collegiate experience including patience, humility, etc.

A second common adversity theme that emerged related to juggling the demands of athletics and academics at the collegiate level. Consistent with concerns raised by Morgan (2001), NCAA (2016), and Plunket et al. (2016), athletes often found it difficult to excel academically while participating in collegiate athletics. Difficulty existed not only during the transition to college, but also well into their athletic careers. That said, many participants shared that once they made the necessary lifestyle adjustment, key takeaways were translated to similar activities later in life. This is consistent with the ideal "resilient reintegration" stage of Richardson's Resiliency Model (Richardson et al., 1990). Consistent with injury-related adversity and effects, school vs. sport balance is a challenge often translated not only to a future professional career outside of sports, but also to how participants parent and interact with those closest to them. While athletic participation is certainly time-consuming on its own right, the inclusion of academics within the American collegiate sport model places tremendous demand on athletes to organize, prioritize, and create plans for how they live their lives. While athletes reported being uncomfortable while dealing with balancing school and sport in the moment, these intense time demands may be a key ingredient to the long-term marketability, career success, and life satisfaction of collegiate athletics (Weight et al., 2018).

Athlete-coach tension was another relatively common form of adversity cited in this study. While positive relationships between coaches and athletes were certainly common, a notable link also existed between those who experienced tension in their relationship with their coach. It was also rather common for participants to claim that a rocky relationship with their

collegiate coach represented an adverse experience that ultimately gave them motivation to treat others differently in their own life. Many participants used negative memories of past coaches as a reminder to provide better opportunities for young athletes whom they are able to influence. In terms of Richardson's Resiliency Model, this serves as an example of resilient reintegration, where an athlete who experienced past adversity has eventually returned stronger, wiser, and determined to treat others better than they were (Richardson et al., 1990). As previously mentioned, athletes often viewed their relationship with their coach to be a major determinant of student athlete experience quality. Thus, tension in the relationship between an athlete and coach was reported as a significant source of adversity.

It is important to note that while coach vs. athlete tension may create an adverse environment for an athlete, that is not to say that such an environment should be intentionally promoted. Furthermore, while many participants who experienced tense coach relationships used these experiences for self-betterment later on in life, that is not to suggest that coaches cannot equally motivate, educate, and enrich athletes without creating a sub-optimal team environment.

Participants also mentioned other themes of adversity, such as athletic failure (27.44%), teammate conflict (8.84%), miscellaneous (8.84%), lack of expectation (6.05%), and race (4.19%). While different, all sources of adversity created the same effect of disrupting a participant's homeostatic state, and forcing them to go through the reintegrative process. (Richardson et al., 1990) Through this process, an individual is removed from a state of homeostasis and given the opportunity to reintegrate in the form of resilient reintegration, homeostatic reintegration, maladaptive reintegration, or dysfunctional reintegration (Richardson et al., 1990). (Galli & Vealey, 2008)

Participants commonly cited grit/perseverance as an effect of adversity experienced in collegiate athletics, most notably relating to balancing school and sport. Similar to previously discussed themes, grit/perseverance quotations were often directly preceded or followed by some notable form of adversity. In support of Hayden (2018), participants viewed grit/perseverance to be acquired largely due to adversity related to academic/athletic balance. In terms of Richardson's Resiliency Model, grit/perseverance development is seen as a "takeaway" or "added tool" that one is able to use in future adverse situations (Richardson et al., 1990). Many participants experienced takeaways of resilient reintegration in the form of positive personal traits such as increased patience, the development of time-management and teamwork skills, and grit/perseverance through adversity, as referenced by Galli & Vealey (2008). However, several participants experienced negative implications such as depression, self-doubt, and other forms of negativity associated with adversity in collegiate athletics.

Many participants identified the positive development of teamwork skills, timemanagement skills, patience, and humility as notable takeaways of collegiate athletic
participation. Participants also reported experiencing depression, self-doubt, and negativity
resulting from the same set of adverse experiences. Teamwork skills developed largely due to
participants who competed in collegiate athletics alongside other individuals with different
backgrounds, beliefs, and experiences. Consequently, many athletes reported increased abilities
to cooperate and work with others as a major takeaway from athletics experience. Likewise,
Richardson's Resiliency Model (1990) attributes this instance of self-improvement through
adversity as a sign of resilient reintegration. Participants also reported time-management as a
direct result of adversity experienced in collegiate athletics. Quotes reporting time-management
skill improvement overwhelmingly bordered instances of adversity. Notably, many participants

viewed quality time-management skills to be acquired largely due to adversity related to academic/athletic balance. Findings suggest time-management to be a major transferrable skill gleaned from collegiate sport participation, and lend support to Zwecher (2014) in that regard. Patience (13.49%), depression/self-doubt/negativity (13.49%), and humility (12.09%) were also reported by participants as notable takeaways from adversity in collegiate athletics. While patience and humility would be listed under Richardson's Resiliency Model as an example of resilient reintegration, depression/self-doubt/negativity would, depending on severity, likely be listed under maladaptive reintegration (Richardson et al., 1990).

Finally, chi-square tests of association returned statistically significant results comparing experiences of adversity based on ethnicity (p = .001) and revenue/non-revenue sport status (p = .031). The same chi-square test comparing experiences of adversity to gender returned statistically significant results at the .10 level (p = .055). Results suggest notable differences in reported experiences of reported adversity based on demographics. Specifically, instances of perceived adversity were linked with ethnicity (p = .001) and revenue/non-revenue sport status (p = .031) at a statistically significant level. These figures build on Richardson's Resiliency Model (1990) by giving concrete examples of adversity reported by athletes as well as identifying demographic groups that experience particular forms of adversity more often than others.

This study differed from previous research by utilizing a large sample of semi-structured interviews (N=215) to explore perceived themes of adversity and how they in turn created overall themes of adversity effects. Unlike most studies on reported athlete adversity, this research focused specifically on those who are five years or more removed from their collegiate athletic career. Secondly, while Richardson's Resiliency Model has been around for years, it has

only more recently been applied to the realm of collegiate athletics. By applying Richardson's Resiliency Model to a broad spectrum of former athletes, we were able to understand and record specific instances of perceived adversity while simultaneously understanding the resulting adaptations made by athletes. While Richardson's Resiliency Model provides an overall framework for understanding this phenomenon, the information gleaned from this study does a fantastic job of showcasing the cause and effect component of athletic-related-adversity as a whole, while also highlighting the human element inherently associated with these stories. Findings of this study also relate to broader issues of collegiate athletics previously mentioned. While some have pointed to college athletics as a restrictive and exploitative system that is unnecessarily burdensome on athletes, findings of this study suggest that athletes view their overall experience to be significantly related with positive personal trait development such as teamwork and time management skills, grit/perseverance, and humility.

LIMITATIONS AND FUTURE RECOMMENDATIONS

While this study provides unique contributions to the field of sport administration and adversity-related research, there are limitations to this study's overall structure and generalizability. While this study was able to collect large amounts of information, its qualitative nature also meant that we were limited by the subjectivity of the participant's recalled experiences. Furthermore, data was collected initially by a core of 15 researchers, and the chain referral sampling method meant that most participants were closely connected in some fashion to the researcher. Consequently, a large number of participants are from the Power Five level of Division I athletics. A large number of participants either attended college at or currently live in the eastern and southern regions of this country, which may limit overall generalizability to other geographic areas. Additionally, athletes who experienced severe forms of adversity may not be

in the social sphere of researchers and as such this data may not be reflective of the entire gamut of collegiate athletics experiences.

Findings from this study provide several different opportunities for future research. Interview themes from participants aided in understanding the connection between collegiate athletics participation and adversity experienced. Furthermore, those themes helped us understand, via real-life stories, how adversity impacted former athletes during and after their time in college. Paired with available research from Richardson's Resiliency Model (Richardson et al., 1990), future research would be best used to determine whether desirable psychological traits are a product of collegiate athletics competition, or if latent positive psychological traits allow individuals to succeed and make it to collegiate athletics in the first place. Additionally, it would be useful to understand how reported responses of participants change as time passes. Ideally, each athlete should be given an exit interview at the conclusion of their collegiate career in order to establish a baseline comparison should the individual participate again in the future. Results could be compared to determine how ideas and perspectives change with time.

CONCLUSION

This study helped address a notable research gap at the national level regarding athletic-related adversity and the transferrable impacts of those experiences. While most participants cited some form of notable adversity, obstacle, or difficulty as a result of their collegiate athletics experience, the vast majority of individuals reported their time as a collegiate athlete to be an extremely formative, impactful, and overall positive experience. Coaches, administrators, and support staff can use this information not only to better support their current student athletes, but also to refine and improve the experiences of future athletes for years to come.

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