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# TO WHAT EXTENT IS THE SAFETY OF COLLEGE FOOTBALL STUDENT-ATHLETES COMPROMISED BY PLAYING GUARANTEE GAMES AGAINST SUPERIOR OPPONENTS?

Daniel Ballou

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**TO WHAT EXTENT IS THE SAFETY OF COLLEGE FOOTBALL STUDENT-  
ATHLETES COMPROMISED BY PLAYING GUARANTEE GAMES AGAINST  
SUPERIOR OPPONENTS?**

By

**DANIEL E. BALLOU**

B.S., Business Administration/Marketing, Emporia State University, 1986  
M.S., Sports Administration, University of New Mexico, 2010

DISSERTATION

Submitted in Partial Fulfillment of the  
Requirements for the Degree of

**Doctor of Philosophy**  
**Physical Education, Sports and Exercise Sciences**

The University of New Mexico  
Albuquerque, New Mexico

**May, 2015**

## **Dedication**

*To Mom,*

*Thank you for always believing.*

*I am always amazed by your toughness after we lost Dad.*

*Your care and support are always there...it never waivers.*

*To Cesserie and Cal,*

*I hope this dissertation and doctorate remind you to never stop learning.*

*Cesserie, I've admired your passion for so long. Never lose it.*

*Cal, I would do well to model your kindness and practice it more.*

*To Jan,*

*Thank you for always asking about how it was going, and for believing this was a study worth pursuing.*

*To Angie,*

*You always know what to do and where to be.*

*You make this world a better place.*

*You make me a better man.*

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**ABSTRACT**

Powerhouse college football teams have a history of scheduling lesser opponents to start a new season. The revenues generated in college football due to television and post-season bowl games have made these games more common. Universities competing at the Football Bowl Subdivision (FBS) make up the top level of collegiate football. FBS schools have more scholarships to give and belong to conferences with television contracts worth millions of dollars. Schools at the FBS level compete in season-ending bowl games, and the top four teams compete in the College Football Playoff (CFP).

The Football Championship Subdivision (FCS) is the division made up by teams directly beneath the FBS schools at the NCAA Division I level. FCS teams have fewer scholarships to give and rarely play televised games. They compete for a spot in a 16-team tournament after the regular season.

The purpose of this study was to determine if football student-athletes from FCS schools had increased potential for injuries when their schools competed against teams from

the FBS. Because of the large financial payouts the FBS schools pay the FCS schools to play these games, the moniker *guarantee game* has become a common term in college football.

Of the 124 FCS member schools, about 30 compete in guarantee games on an annual basis. The researcher was interested in those FCS schools that typically play 1 – 2 guarantee games each season.

Data were collected from eight FCS athletic trainers consistently involved in guarantee games. Because athletic trainers work to prevent injuries, the opportunity to hear rich narrative from them was the foundation for this study.

The majority of FCS athletic trainers (67%) said their student-athletes suffer from increased soreness and are *banged up* following games against FBS schools. The majority also said that playing multiple FBS opponents in the same season is detrimental to the health of their student-athletes. The athletic trainers who reported that their school had played FBS opponents in consecutive weeks saw an increase in injuries.

None of the trainers reported that FBS games resulted in an increase of season-ending injuries, career-ending injuries, or catastrophic injuries.

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## Chapter 1 – Introduction

On Saturday, September 5, 2009, the college football season opened with Western Kentucky University's Hilltoppers traveling to Knoxville, Tennessee to square off against the University of Tennessee. For their efforts, the Hilltoppers were defeated by a score of 63 – 7. The Montana State University Grizzlies went on the road to East Lansing, Michigan, to play Big 10 member Michigan State and lost the game 44 - 3. In Gainesville, Florida, 2008 national champion Florida hosted Charleston Southern University and Florida emerged with a 62 – 3 win (Carey, 2009b). Western Kentucky, Montana State, and Charleston Southern are all members of the NCAA's Football Championship Subdivision (FCS), which is a lower division than that of the power programs they faced in those games.

Statistics relative to these three games included: 169 combined points for the three teams that won, 13 combined points for the three that lost; the average score of each mismatched game was 56.3 to 4.3 (or roughly the difference of eight touchdowns per game); perhaps numbers that were even more significant – the \$2.165 million that exchanged hands between the Athletic Directors of the host institutions, those offering powerhouse college football programs, and the Athletic Directors at the undermanned, often financially struggling, visiting institutions that lost the games. These contests are labeled “guarantee games”, or “payout games” in today's college football landscape. These terms are used interchangeably throughout the remainder of this study.

Those three lopsided games were not isolated to a single Saturday in September in 2009. On September 1, 2012, Savannah State University traveled to Stillwater, Oklahoma to battle defending Big 12 Conference champion Oklahoma State. This game ended with Oklahoma State winning 84 – 0 win.

In his post-game interview session, Savannah State Head Coach Steve Davenport was quoted as saying “hard to believe, but it could have gotten a lot worse. (Oklahoma State Coach Mike Gundy) kind of slowed things down” (Wojciechowski, 2012, p. 1). In a post-game article, *ESPN's* Gene Wojciechowski (2012) wrote on *ESPN.com*, “Savannah State was beaten up and semi-humiliated by a decision that valued money over sanity, and without realizing it, perhaps player safety too” (2012, p. 1).

Just one week later, Savannah State traveled to Tallahassee, Florida to take on perennial national college football power Florida State, the national champion following the 2013 season. The final score in that game was Florida State 55, Savannah State 0 in a game declared over early in the 3<sup>rd</sup> quarter due to weather related issues.

In the span of eight days, the Tigers of Savannah State were outscored by a margin of 139 – 0 in roughly six quarters of action. On the field of play, these scores provided evidence that the football student-athletes were not competitive while matched up against the student-athletes at Oklahoma State and Florida State. However, it could be argued that where Savannah State won was that in these two games the student-athletes on the field earned a combined payout of \$860,000 for the school (Smith, 2012).

There is no question the dollars generated from those games have gone far in improving the overall fortunes of the athletics department at the visiting schools (Carey, 2009a). But what has gone unanswered is how much physical punishment have the student-athletes on the wrong end of these guarantee games received?

### **Problem Statement**

High profile and highly-ranked college football teams have been scheduling easily winnable games against inferior opponents for years. Normally these games were the first of

the season and they would be a good warm up for the larger, nationally ranked team. Recently the scheduling of these games has become increasingly prominent as college football's elite teams from the Football Bowl Subdivision (FBS) power conferences (often referred to as the Power 5) have increased money to spend due to the revenue produced from the former Bowl Championship Series (BCS) that is transitioning to the current College Football Playoff (CFP) that takes effect after the 2014 regular season, and will crown a national champion in January, 2015 (Barnhart, 2014). These games are increasingly profitable for both the payer and the payee alike (Smith, 2012).

Consider that in 2013, Big 10 Conference athletic departments had a combined payout of \$4,495,000 for its member schools playing FCS opponents (Temple, 2013). League schools played 10 games against members of the FCS, with none of the games having a payout of less than \$350,000 (Temple, 2013). Ohio State paid \$900,000 for a September 21, 2013 game against Florida A&M, a game in which the Buckeyes won 76-0; on September 14, 2013 FCS member Youngstown State received \$650,000 to play at Michigan State, a 55-17 win for the Spartans; and on September 7, 2013 Wisconsin paid Tennessee Tech \$500,000 and won the game 48-0 (Temple, 2013).

Ironically prior to the start of the 2013 football season, the Big 10 Conference officials voted to end all games against FCS member schools (Myerberg, 2013). This was due to officials wanting one more conference game as the league added two new schools. Additionally, conference officials felt that the league champion's strength of schedule would be enhanced, making that team more appealing for inclusion in the CFP (Myerberg, 2013).

With the increase in payout amounts currently being exchanged, Athletic Directors at lower-level, FCS schools (and the 63 scholarships they are afforded) are competing

frequently with higher-level FBS schools (and the 85 scholarships they have available) and are taking on these games seemingly without consideration for the safety of the student-athletes (Faure & Cranor, 2010).

Seemingly, the current trend for some FCS member schools is to shop its football team out to the highest bidder in order to increase athletics department revenues. In the aforementioned Wisconsin vs. Tennessee Tech game in 2013, the \$500,000 payout represented more than 4% of Tennessee Tech's annual athletics budget (Temple, 2013).

### **Evidence for the Issue**

The examples of the games listed previously were just a few of the guarantee games that have been scheduled in recent years. Even though nearly all industry-related articles, and the few scholarly articles remotely related to studying these games mentioned an increased risk for injury, no empirical research studies had been conducted to verify or dispel the relationship between rate of injuries and number of guaranteed games played.

### **Deficiencies in the Evidence**

There was no real evidence supporting the claims of increased potential for injury in guarantee games. As mentioned earlier, nearly every industry-related article addressing this topic mentions a potential increase for injury, and athletic directors at the smaller schools have recognized the negative consequences that may occur if a team loses a player to injury in one of these games (Faure & Cranor, 2010).

An example of the type of information presented in industry-related articles follows. In the article "How Masochism and Attendance Apathy Highlight the Economics of College Football's Opening Week", Director of Sportsimpacts and Economic Professor Patrick Rishe, Ph.D., stated that:

So from a financial perspective, there are no economic issues I have with these games. However, what might become more controversial is whether such mismatches create a greater incidence of injury, and in particular, head trauma. I am unaware of any research that would suggest this is the case, but I further sense that this is because such research has not been undertaken. (Rishe, 2012, p. 2).

### **Purpose of the Study**

The purpose of this study was to identify if student-athletes on FCS teams were at an increased exposure potential for injury when scheduled to compete in guarantee games against teams that are members of the FBS. The increased exposure would be defined by athletic trainers who see the FCS student-athletes on a daily basis.

While the positives of the payout games were not being questioned, the potential negative effects on the young people representing the schools on the receiving end of the lopsided games were presented. Evidence was provided to validate or invalidate whether the safety of the student-athlete has become secondary to financial gain for the athletic department and university as a whole.

As the FBS institutions, especially those who are members of the aforementioned Power 5 conferences, look to gain additional home games because of the revenue derived, there appeared to be no shortage of FCS schools marketing their football programs to play in these games.

Payout games are a common occurrence in college football, especially at the beginning of a season when FBS member schools are looking to stockpile home games and wins. These games can be contested between schools classified at lower levels, or schools

that do not have the successful traditions of larger programs. In games like the ones mentioned previously, the results are typically lopsided on the scoreboard.

Football is a dangerous game when played at any level, and football injuries are among the highest in any sport (Randall, et al., 2007). Data show that injuries occur at a much higher rate in game situations than they do in practice (Randall, et al., 2007). What wasn't known is if there were higher rates of injuries, including those that can be classified as season-ending, career-ending, or catastrophic, as a result of playing in these types of seemingly mismatched games.

This study provided evidence to prove that guarantee games could lead to increased injury exposure for football student-athletes. Because data were collected from the football athletic trainers at FCS schools, evidence supporting the study's purpose emerged. Since this group of athletic trainers had practical experience observing their student-athletes in guarantee games, their knowledge regarding numbers of injuries, and the resulting severity of those injuries was the goal behind this study.

### **Research Questions**

The research questions specific to this study focused on to what extent the health of college football student-athletes is compromised by playing guarantee games against superior opponents. Inherent in the sport of football are numerous player collisions at very high rates of speed on every snap of the ball. Consequently, the severity of injuries will be explored in the questions as well.

- R1: When comparing games between FBS member universities and FCS member universities, is there an increased chance of injury as opposed to games in which FCS opponents are matched?

R1A: Is there an increase in season-ending injuries? (An injury that causes a player to come out of a game and not return for the remainder of the season)

R1B: Is there an increase in career-ending injuries? (An injury sustained in a game that does not allow a player to play collegiate football again)

R1C: Is there an increase in catastrophic (life altering) injuries? (An injury sustained in a game that causes death or quadriplegia)

R2: When playing multiple games between FBS member universities and FCS member universities, is there an increased chance of injury?

R3: When playing consecutive (back-to-back) games between FBS member universities and FCS member universities, is there an increased chance of injury?

### **Assumptions**

1. That football athletic trainers at all FCS member universities will accurately and honestly answer the survey questions to the best of their ability based on the experiences and observations during their professional careers.

### **Significance of the Study**

This study provided narratives and is exploratory in design. It is significant due to the lack of literature, both academic and within the college sports industry, on this topic.

Regardless of whether evidence supported increased potential for injuries, or failed to provide evidence, these data are beneficial for both sides of the debate regarding scheduling practices of FCS member schools. Because of this study, Athletic Directors at FCS schools may schedule games against FBS opponents with a cognizance and awareness based on the data presented here.

### **Limitations of the Study**

1. Potential study limitations were that data will only be collected from universities sponsoring football at the FCS levels. It did not take into account different levels of college football (NCAA Divisions II and III, nor NAIA Divisions I and II). Typically, revenue does not exist at those lower levels that make it a common scheduling practice in support of guarantee games.
2. This was a new data collection instrument, and consequently, there was no previous evidence of validity and reliability measures. The study was tested through the use of athletic trainers at the University of New Mexico as a pilot test group to increase content validity of the proposed questions.

### **Delimitations of the Study**

1. The results of the study are based on information received from athletic trainers at the time the study was conducted.
2. The interview questions were answered by athletic trainers specific to the football programs at their particular FCS school.

### **Definition of Terms**

1. *National Collegiate Athletics Association (NCAA)*: The governing body of college sports in the United States. The NCAA designates a national champion in every sport at every level with the exception of Division I football. The NCAA was founded more than 100 years ago to regulate safety in college football. Today it consists of three levels, Division I, II, and III.  
Each division creates its own rules and governing personnel, amateurism, recruiting, eligibility, benefits, financial aid, and playing and practice seasons –

consistent with the overall governing principles of the Association (NCAA.org, 2012).

2. *National Association of Intercollegiate Athletics: (NAIA)*: A lower level classification of collegiate sports conferences, colleges, and universities. NAIA schools typically have very small enrollments and many have religious affiliation. No NAIA schools are being used in this study.
3. *Bowl Championship Series (BCS)*: Was a five-game bowl system designed to create one national championship game and four other showcase bowl games. It existed from 1998 through the 2014 BCS National Championship Game (BCSfootball.org, 2012).
4. *BCS Selection*: The BCS had a formula for determining its rankings. These formulas consisted of human polls and computer rankings. There were a variety of polls and computer rankings that determined the overall BCS rankings. See College Football Playoff below for updated ranking information.
5. *BCS Automatic and Non-Automatic Qualifiers*: The champions of the Atlantic Coast Conference, the Big 10 Conference, the Big 12 Conference, the Pac 12 Conference, and the Southeastern Conference received automatic bids to appear in a BCS bowl game under the former system. The champions of the American Athletic Conference, Conference USA, the Mid-American Conference, the Mountain West Conference, and the Sun Belt Conference did not receive automatic bids to appear in a BCS bowl game. The five non-AQ conference champions could have received an at-large bid to a BCS game if it was ranked in the top 12 of the final BCS standings, or was ranked in the top 16 of the final BCS

standings and that ranking was higher than that of a champion from one of the BCS AQ conferences (BCSfootball.org, 2012).

6. *College Football Playoff (CFP)*: Starting with the 2014 regular season, the CFP replaced the BCS. It consists of six bowls plus a stand-alone national championship game. Three of the bowls are contract bowls because they have existing, long-standing affiliations with conferences: Rose (Big Ten, Pac 12), Sugar (SEC, Big 12) and Orange (ACC). The non-contract bowls are the Chick-fil-A, Cotton and Fiesta. The champions of the five automatic qualifying conferences (ACC, SEC, Big Ten, Big 12, Pac 12) with contract bowls are guaranteed spots in one of the CFP bowls. A sixth spot is guaranteed to the highest-ranked champion from the other five non-automatic qualifying conferences: (the American Athletic Conference, the Mountain West Conference, the Mid-American Conference, the Sun Belt Conference, and Conference USA). Each season, two of the six CFP bowls host semifinal games. The other four CFP games will have their matchups determined either by contract or by the selection committee (Barnhart, 2014).
7. *Football Bowl Subdivision (FBS)*: Members of the FBS are those schools mentioned in the 11 conferences above. They are designated as FBS because their seasons culminate by earning spots in bowl games. Those bowl games can be BCS bowls or non-BCS bowls. These schools were formerly classified as NCAA Division I-A. Schools in this classification can scholarship up to 85 student-athletes per team (NCAA.org, 2012).

8. *Football Championship Subdivision (FCS)*: These are schools that are members of conferences whose seasons culminate with a 16-team championship style tournament. These schools are not affiliated with any of the FBS conferences. These schools typically have smaller enrollments, much smaller budgets, play in smaller stadiums, receive little national media exposure, and can scholarship up to 63 student-athletes per team (NCAA.org, 2012).
9. *Guarantee Games (Payout Games)*: These are games that are normally hosted at a larger, FBS school. The FBS school brings in an FCS school which receives a paycheck ranging from several hundred thousand dollars up to a million dollars to play the game (Smith, 2009b).
10. *Season-ending injury*: This is an injury that caused a football student-athlete to miss the entire remainder of the season following an injury.
11. *Career-ending injury*: This is an injury that caused a player to stop playing football altogether.
12. *Catastrophic injury*: This is an injury resulting in partial or full paralysis, and even death (or leading to death). It caused a football student-athlete to not return to the life he had prior to the injury.

## **Chapter 2 – Review of Literature**

The purpose of this chapter is to review literature, both current and historical, that is relevant to intercollegiate college football. Specifically attempts were made to locate related literature examining injuries in the sport, and information pertaining to payout or guarantee games.

There is significance related to the historical perspective described in the following pages. The revenues generated in college football are at record highs related to ticket sales, television revenue, post-season bowl game revenue, and subsidiary sales (Smith, 2012). As the dollars increase and the value of college football programs extends into the millions of dollars at some schools, there are opportunities for Football Championship Subdivision (FCS) member schools to capture some of that revenue (Smith, 2012). The information presented here is intended to briefly highlight the evolution of college football. This is done in order to provide a foundation explaining how the number of guarantee games has increased due to rising financial benefits.

This chapter is organized in the following three areas: (a) an overview of the state of college football at the FBS and FCS levels; (b) the increase in the numbers of payout or guarantee games; (c) injuries related to college football.

### **An Overview of the State of College Football at the FBS and FCS Levels**

The game of football has been played competitively at the collegiate level in the United States for more than 100 years. As a sport inherent with physical contact, it was safety concerns about the early game of football that led to the establishment of the National Collegiate Athletics Association (NCAA) (Randall, et al., 2007). Recognizing the need to improve player safety, the NCAA has established rules to aid in the reduction of severe

injuries (Randall, et al., 2007). In spite of its brutality and violent collisions, college football is an American institution for millions of fans of respective universities across the United States (Randall, et al., 2007).

Because of the reach the sport has on this country, and because of the importance placed on it by the general public, the debate spawning to identify who the best teams are has been filled with controversy for years (Logan, 2007). Like the vast majority of all sports, college football crowns a champion at the end of the season. Unlike most sports though, college football does not have a true, inclusive playoff system to determine that champion. Historically the debate for who actually had the best team was a topic of discussion at many levels, and for years polls conducted by sportswriters and football coaches determined what school ended up being the nation's top-ranked team (Logan, 2007).

Because of the public outcry for a more definitive measure of a true national champion, several systems have been implemented to develop a consensus number one team. After a long period of using the polling system exclusively, the NCAA started the Bowl Coalition in 1992 (BCS Football (a) <http://www.bcsfootball.org/news/story/?id=4809699>). The coalition was made from five conferences, the Southeastern Conference, the Big 8 Conference (later the Big XII), the Southwestern Conference (no longer in existence), the Atlantic Coast Conference, and the Big East Conference. Independent Notre Dame was also involved in the coalition. Six bowl games were part of the coalition (BCS Football (a) <http://www.bcsfootball.org/news/story/?id=4809699>).

Under the rules of the Bowl Coalition, the five conference champions listed above would be extended invitations to the six bowl games, plus five at large teams. The coalition

existed for the 1992 – 1994 seasons (BCS Football (a) <http://www.bcsfootball.org/news/story/?id=4809699>).

Following the demise of the Bowl Coalition, the Bowl Alliance emerged, and it had a short-lived, three-year history. Like the coalition before it, the Bowl Alliance was formed for the purpose of trying to match the top two teams in a bowl game that would determine the national champion (BCS Football (c) <http://www.bcsfootball.org/news/story/?id=4809793>). The Bowl Alliance was in place for the 1995 – 1997 seasons. From its first days, the Bowl Alliance had conference tie-ins with the Southeastern Conference, the Big 8 Conference (Later the Big XII), the Southwestern Conference (no longer in existence), the Atlantic Coast Conference, and the Big East Conference. Like in the Bowl Coalition, Notre Dame, as an independent, was also part of the alliance (BCS Football (c) <http://www.bcsfootball.org/news/story/?id=4809793>).

The Bowl Alliance had agreements with the Sugar, Orange, and Fiesta Bowls, and conference champions from the list of member leagues would send their champions to one of the three alliance bowl games. The alliance also had one spot in its bowls for an at-large spot (BCS Football (b) <http://www.bcsfootball.org/news/story/?id=4819597>).

The Bowl Alliance eventually failed as the Big 10 and Pac 10 (now Pac 12) Conferences still had tie-ins with the Rose Bowl, and if a team from one of those leagues was number one, and because they didn't play in an alliance bowl, the possibilities were very real that college football could see split national champions, just like it had during the days of poll voting. This actually occurred once in the three years of the Bowl Alliance which was the opposite result of why the alliance was formed (BCS Football (c) <http://www.bcsfootball.org/news/story/?id=4809793>). With that, the alliance was dissolved

and the formation of the Bowl Championship Series was started and brought both the Big 10 Conference and the Pac 10 Conference into the mix.

The NCAA and the members of the BCS saw increased revenues that favored schools that were part of six collegiate athletic conferences known as BCS Automatic Qualifiers (AQ). The six conferences that made up the BCS AQ's were the Atlantic Coast Conference; the Big 10 Conference; the Big XII Conference, the Big East Conference; the Pac 12 Conference; and the Southeastern Conferences (BCS Football (b) <http://www.bcsfootball.org/news/story/?id=4819597>).

The BCS was in place from the start of the 1998 season and ended following the crowning of Florida State University as the BCS National Champion following the 2013 regular season. The BCS rankings relied on a combination of polls and computer selection methods to determine team rankings, and to narrow the field to two teams to play in the BCS National Championship Game (BCS Football (b) <http://www.bcsfootball.org/news/story/?id=4819597>).

The BCS National Championship Game was held at the conclusion of the bowl season, including the completion of four other BCS bowls (Fiesta Bowl, Orange Bowl, Rose Bowl, Sugar Bowl). Ironically, the BCS National Championship Game was not recognized by the NCAA as a collegiate championship (BCS Football (a) <http://www.bcsfootball.org/news/story/?id=4809699>), making NCAA FBS football the only sport the NCAA does not oversee the crowning of a national champion. Furthermore, it is the only sport at any level that did not decide its national champion in a playoff style format (BCS Football (a) <http://www.bcsfootball.org/news/story/?id=4809699>).

Additionally, there were five other conferences that competed in the BCS, but those schools were members of conferences labeled as non-automatic qualifier status (non-AQ). These conferences were Conference USA, the Mid-American Conference, the Mountain West Conference, The Sunbelt Conference, and the Western Athletic Conference (BCS Football (c) <http://www.bcsfootball.org/news/story/?id=4809793>). When related to common analogies in collegiate athletics, it is fair to report that schools and leagues in the AQ conferences are considered the *power conferences* in collegiate athletics, while the school and leagues in the non-AQ conferences would be coined *mid-majors* (Feinstein, 2009).

The AQ leagues saw significant financial gain from the system that had been in place (Smith, 2012). Consider that the Southeastern Conference earned \$52 million in bowl revenues following the 2013 season alone (Smith, 2012). Conversely those schools in conferences that did not earn automatic qualifying status, or who were in the lower FCS classification did not benefit by capturing the large payouts that come with a berth in a BCS Bowl Game. But smaller FCS schools began to capture some pieces of that pie by sending their football student-athletes to play in these games (Steinbach, 2010).

As mentioned in Chapter 1, the 2014 FBS season will culminate in the crowning of its champion in the CFP (Barnhart, 2014). Like the preceding BCS, the CFP does not impact FCS member schools.

### **The Increase in the Numbers of Payout or Guarantee Games**

It is important to recognize the historical systems that have been tried over the years because it is relevant to the upward trending of the economics associated with college sports, particularly college football (Thamel, 2006).

Literature will now be presented providing evidence of how guarantee games have grown steadily. Moreover, why the guaranteed payouts have climbed to the prices schools are earning today, and if this trend will continue at its current pace. As mentioned previously, changes could be forthcoming as officials from the Big 10 Conference have discontinued the practice of scheduling FCS schools (Myerberg, 2013).

The United States has the most structured collegiate sports programs in the world (Branch, 2011). It is the only country in the world that hosts big-time sports at institutions of higher learning (Branch, 2011). In the U.S., college athletics are part of everyday life for many people.

College sports are time-tested, traditional activities that can develop allegiances early in life, or later based on the surrounding environment one grows up in. Regardless, collegiate athletics are related to the culture of our nation (Branch, 2011). It's no wonder then, that as the high level of intercollegiate sports continues to evolve, collegiate administrators figured out ways to capture increased revenues. Making use of the big money football game seems to be one of the major ways this is happening (Smith, 2012).

Prior to the inception of the BCS in 1998, just eight percent of all non-conference games from schools in the FBS were played against schools in the FCS. In 2009, that number had increased to 21 percent (Daughters, 2010). This trend has been increasing and clearly the reason is the money available to the FCS schools. Perhaps the biggest factor leading to the increase in guarantee games was when the NCAA voted on legislation that added a 12<sup>th</sup> game to college football's regular season starting with the 2006 season (Daughters, 2010). When that happened, more games between FBS and FCS schools were scheduled, and financially speaking, have benefitted schools from both classifications (Smith, 2009b).

A typical non-conference college football home game can net a school as much as \$5 million dollars (Smith, 2009a). With revenue figures that high, it is no wonder that a large school capable of generating that revenue will pay handsomely to attract a lesser opponent. Secondly, games against inferior opponents almost always result in a win, which was very important to schools at the FBS level as they jockeyed for positions in the polls and computer rankings (Smith, 2009a).

The dollars earned by a host institution are just part of the overall financial picture painted by a home college football game. Economic impact and direct spending dollars for a host city are generated through the vehicle of college football games (Baade, Baumann, & Matheson, 2008), meaning home football games provide benefit beyond ticket revenue, providing more evidence that the games are beneficial to all parties involved (Baade, et al., 2008).

As long as there are schools willing and able to pay huge payouts, there are schools lining up on the receiving end to accept the money (Faure & Cranor, 2010). Many smaller schools are finding they actually have the leverage in negotiating the buyouts for these games due to the big schools' desire for home games (Faure & Cranor, 2010). Consider these recent examples: San Diego State (not an FCS university but representative of a historical *have not* program playing games against the *haves* of college football), a current member of the Mountain West Conference, played 23 guarantee games since 2000 (Steinbach, 2010). SDSU went 0 – 23 in those games, but received payouts of more than \$6 million along the way (Steinbach, 2010); Auburn University, in the fall of 2010, paid \$1 million each to Arkansas State and Louisiana-Monroe. Those were but two of 30 games across the country that paid more than \$500,000 that year (Steinbach, 2010).

Large payouts can go a very long way in helping to secure a balanced budget in many athletic departments (Thamel, 2006). As the costs associated with travel, scholarships, equipment, and other expenses incurred to operate sports teams continue to rise, smaller schools are using guarantee games as a way to offset expenses (Thamel, 2006).

In 2009, Delaware State University, an FCS school with an enrollment of just over 3,500 students, played at Michigan and came away with a \$550,000 paycheck, along with a 63 – 6 loss on the field. That \$550,000 payday though was worth about two years' worth of home game revenue the Hornets normally earn (Carey, 2009b).

In 2009, Delaware State's entire athletics department operating budget was \$12 million, while Michigan's was more than \$85 million in the 2007 – 08 fiscal year (Carey, 2009b). With the ever-increasing expense of putting teams on the playing field, shopping its football team to schools willing and able to pay high prices has become part of the norm at the school (Carey, 2009b).

Many schools are building the payout games into future athletic budgets years in advance, both on the payout side for the Power 5 conferences, as well as on the receiving end from those institutions in FBS non-power conferences and FCS schools. With some institutional financial allocations to athletic departments decreasing, and the financial guarantees offered by FBS schools on the upswing, there is little doubt that FCS schools will continue to follow the money and accept these invitations (Faure & Cranor, 2010).

The practice of scheduling games against lower level schools, or those from non-power conference FBS schools, benefits the host institution in two areas. First it practically guarantees a victory. Second, weaker teams will typically visit for a lower price than better teams (although the prices are rising dramatically), meaning the potential exists for a higher

profit on each home game. Because of the size of their stadiums, many of the lower level teams cannot negotiate a home-and-home series that would require the FBS team to visit in future years (Thamel, 2006).

It is hard to argue with the reasoning behind these games, and it is readily apparent that the monies paid out to the lower level school benefits the athletic department and university as a whole. By accepting these payout games, more opportunities may be provided young people as a sport that may have been scheduled to be cut at an institution may be spared as a result of increased revenues for the athletic department (Smith, 2009b).

In his article, Smith (2009a) supports this contention by quoting Dan Fulks, a Transylvania University professor of accounting who does consulting budget work with the NCAA. Fulks acknowledged that at most universities, football and men's basketball are typically the only two sports in an athletic department that make a profit, and these profits support all other sports a university sponsors (Smith, 2009a).

"Football drives the boat, no doubt," contributed Fulks. "There are implications when you have so much revenue coming from one source. With football supporting all other sports, it doesn't really matter if nobody else is selling tickets. But football, that's got to sell." (Smith, 2009a, p. 18).

Another benefit to a lower level team playing these games is increased exposure for the smaller school, especially if that team can keep a game close throughout. Occasionally a game that is supposed to be a breather for the superior home team doesn't turn out that way. In 2007, Appalachian State stunned 5<sup>th</sup>-ranked Michigan 34 – 32 on Michigan's home field, securing not only a \$400,000 paycheck, but also becoming the first FCS team to beat a ranked FBS-AQ team. Appalachian State had won three consecutive FCS championships, but

none of those titles earned the Mountaineers the type of publicity they received after the Michigan game (Megargee, 2008).

There are many industry related articles dealing with the benefits, mostly financial, of big payout college football games. In his article “Payoffs help out small schools, but result in fewer victories”, author Jack Carey of *USA Today* points to the scheduling strategy of Arkansas State athletics director Dean Lee to illustrate this point.

“Any time you go on the road and play any team the caliber you have to play to get the higher-end guarantees, your chances of winning are reduced,” said Lee (Carey, 2009b, p. 1). His teams that year played guarantee games at Iowa for \$900,000 and at Nebraska for \$750,000. Arkansas State lost both games.

Another example of the literature related to the money generated from big money games is contained in the article “Smaller schools cash in on game guarantees” by Michael Smith in *Street & Smith’s Sports Business Journal*. In this article, New Mexico State (FBS non-AQ school) director of athletics Dr. McKinley Boston said, “If I’ve got to go to Ohio State or Michigan in that huge stadium and take a whipping, I’m going to be appropriately compensated” (Smith, 2009b, p. 23).

In the 2009 season alone, there were 91 games featuring FCS teams competing against FBS teams. Seven of these games were contested against FBS teams ranked in the Top 25 at the time of the game (Faure & Cranor, 2010). The average margin of score in those games was 47 points per game (Faure & Cranor, 2010).

Of the 78 opening weekend games of the 2012 college football season, there were just two games pitting teams ranked in the Associated Press Top 25 (Staples, 2012). Additionally,

there were just eight games where opponents from BCS-AQ conferences played one another (Staples, 2012).

With the exception of the Big 10 Conference ending it's scheduling of FCS member schools, there doesn't appear to be any end in sight of these guarantee games as the dollars made available through television revenues continues to increase (Myerberg, 2013). Consider the Southeastern Conference's \$2.25 billion deal with ESPN for rights to televise the conference games through 2025. With an additional \$55 million annually from CBS, the SEC will get \$205 million a year over the life of the television contracts, a little more than \$17 million per school per year (Oriard, 2008).

A potential arising out of the new four team College Football Playoff is that larger, tradition-rich schools from the FBS may drop an easier, less-talented FCS team and take on a like opponent at a neutral site. This may occur for two reasons: (a) the potential to earn more money than playing a home game; (b) building strength of schedule (Temple, 2013).

On college football's opening weekend in 2012, the City of Atlanta Sports Commission put together games between FBS members Tennessee and North Carolina State on Friday, while Auburn and Clemson played on Saturday. Both games were contested at the Georgia Dome and each of the four schools walked away with revenues exceeding \$2 million (Staples, 2012).

The team that gets the win in these contests could see an immediate boost in the different football polls in existence, while the team that loses may also get a bolster from voters who applaud the willingness to play the game instead of a lesser opponent that would virtually guarantee a win (Staples, 2012).

The next section of this review will present data related to injuries in college football games and practices. Literature will also be presented regarding the types and severity of those injuries.

### **Injuries in College Football Games and Practice**

The literature of published research does not report the number of injuries in college football when an undermanned, less-talented team takes the field against a superior opponent, although it is mentioned in nearly every industry-related article related to the topic. The problem is that it is not supported by evidence of any type. For example, this statement that appeared in an article from the *New York Times*. “When the extra opponent is a bigger, faster, and stronger team, not only does the risk of embarrassment arise, but the potential for injury also increases.” (Thamel, 2006, p.2). While that statement may be the popular voice, as mentioned, there were no statistical data reports that supported those claims.

Faure and Cranor (2010) stated, “But along with the money comes a degree of risk. Smaller schools could pay a price in the form of season-ending player injuries. On paper, the small school’s players are as physically outmatched as the athletic department budgets that oversee the two programs, and that makes the likelihood of physical injuries a definitive threat. Without question, injury rates in football are among the highest in organized sport” (p. 195).

Faure and Cranor make this statement and use overall injury rates in college football to drive home the point. Student-athletes playing college football suffer roughly 36 injuries per 1,000 athlete exposures (Dick, et al., 2007).

Additional studies related to college football injuries have shown that the average college football team consisting of 100 players will have about two injuries for every three

times on the field (whether practice or games). These are classified as “time loss” (McKeag & Moeller, 2007) injuries. Injuries suffered most often by college football players are to the knees, ankles, and shoulders (McKeag & Moeller, 2007).

These statements supported the purpose of this research and further enforced the need to look at guarantee games when monitoring college football injuries. The statistics mentioned previously are based on overall injuries, and not broken down into categorical areas based on the opponent played, although data are available when breaking down injuries by position.

Since there is such a decided physical difference between players, athletic directors at the FCS schools (the person doing the scheduling of the games) admitted to having high levels of fear for their student-athletes going into these games (Faure & Cranor, 2010). One athletic director in that study confessed to the fear of his players getting hurt every single day from the time the agreement was made to play the game, until after the game ended. While none of his players were significantly hurt in the game, this athletic director felt he would have had to “go into hiding” if any had been (Faure & Cranor, 2010).

Three other athletic directors in the study also felt the risk of injury to their players was significant. While no players on any of these teams suffered season-ending injuries, the potential for a variety of injuries existed, and the athletic directors were fully aware of the possible increased risk (Faure & Cranor, 2010).

In 2006, when the NCAA proposed allowing 12 games (in a regular season), most coaches objected. Some saw the proposal as exploiting student-athletes. What resulted is the football team became a major fundraising arm for the university by capturing large revenues

over the time span of a few early season football games, thus in turn helping to ease budgets that may have operated at a deficit level for years (Thamel, 2006).

Because of the ever-increasing emphasis on speed, especially at the professional and upper collegiate levels, football is a violent sport with multiple collisions with every start of play. Football has a very high rate of concussions at all levels (Randall, et al., 2007).

Additionally, injuries to the head and neck, and other injury issues related to physical contact, are extremely common (Randall, et al., 2007). Head and neck injuries have been perennial problems in American football for more than 100 years. In 1904, 19 cases of death or paraplegia caused President Theodore Roosevelt to demand rules changes or he would put an end to the “brutality” involved in football or the elimination of the game altogether (Albright, et al., 1985).

Obviously changes were made to the game and for more than 100 years, the sport has grown and flourished. Better equipment and rule changes have helped promote higher safety standards, but by the very nature of the sport, injuries, some of which are catastrophic, still occur. Among those most common are those affecting the head and brain (Guskiewicz, et al., 2003).

Mild traumatic brain injury (MTBI), or concussion, has been defined as a traumatically induced alteration in neural function, which may or may not involve loss of consciousness (Pellman, et al., 2004). The high incidence of cerebral concussion in sports is well documented. According to the Centers for Disease Control and Prevention, approximately 300,000 sports-related concussions occur annually in the United States, and the likelihood of serious sequelae, which The American Heritage Dictionary of the English

Language defines as “a secondary consequence as a result of injury or disease” may increase with repeated head injury (Guskiewicz, et al., 2003).

Literature specific to increased chance of injury based on playing in big-money college football games isn't established. Studies have been conducted that documented injuries among college football players in games compared to those in practice. During the 16-year reporting period, about 19% of the Division I, II, and III NCAA institutions sponsoring football participated in the Injury Surveillance System. The results from the 16-year study period showed little variation in injury rates over time: games averaged over 36 injuries per 1,000 athlete exposures (AE's); fall practice, approximately four injuries per 1,000 AE's; and spring practice about 10 injuries per 1,000 AE's. The in-game injury rate was more than nine times higher than the in-season practice injury rate, and the spring practice injury rate was more than two times higher than the fall practice injury rate (Randall, et al., 2007).

In its most recent release of information from data collected from the 2004/05 – 2008/09 seasons, the NCAA re-emphasized that football injuries are more likely to occur in games than practice. Perhaps due to increased education strategies aimed at football student-athletes, the results of the latest study have shown that college football injuries overall occur at a rate of “8.1 injuries per 1,000 athlete exposures” (NCAA, 2010). The study also shows that while down from previous studies, football injuries are seven times more likely to occur in games than in practice (NCAA, 2010).

According to the latest data, ligament sprains are the most frequent injuries, with lateral ankle ligaments and knee medial collateral ligaments two of the more common incidents (NCAA, 2010). Dick, et al. (2007) supported this by reporting that during the 16-

year sampling period, internal knee derangements occurred most frequently, encompassing nearly 18% of all college football injuries. The second most common injury were angle ligament sprains (15.6%) (p. 4).

Injuries suffered during the 16-year reporting period additionally were classified based on the timeframe that would keep a student-athlete from playing. Knee injuries are likely to be categorized as severe, which is defined as an injury that would keep a student-athlete in restrictive or completely refraining from participation for up to 10 consecutive days (Dick, et al., 2007).

While knee injuries are the most frequent injuries suffered by college football players, and may affect a player for the rest of his life (Rovere, Haupt, & Yates, 1987), there is no evidence to support that knee injuries are sustained at higher rates in games where one opponent is significantly less talented than the other. In fact, 24.1% of injuries occur during acute noncontact plays (NCAA, 2010).

Running plays account for 18% of injuries on the offensive side of the ball, and 15.6% of injuries on the defensive side. Passing plays account for 14.9% of offensive injuries, and 9.2% of defensive injuries. Specialty team plays (kickoffs, punts, point after tries) account for 13.6% of all football-related injuries (NCAA, 2010).

Running, passing, and specialty team plays are all important to this study because they are plays with the potential for violent contact and collisions every time the ball is put into play. Football athletes who travel greater distances on each play (kickoff team members, punt team members, quarterbacks, running backs, wide receivers, tight ends, line backers, and those in the defensive backfield) will typically be involved in more high-speed collisions (NCAA, 2010).

The next area of concern related to injuries for college football players are those in the head and neck area. Concussion accounts for 7.4% of all injuries in college football players (NCAA, 2010). Research also shows that 17.8% of all concussions for defensive players occur on running plays, but conversely 16.3% occur to offensive players on passing plays (NCAA, 2010). This is information that was explored as it relates to guarantee games as bigger, faster, more talented players are colliding with smaller, slower players throughout 60 minutes of game playing time.

Research indicates that concussions occur at rates of .81 for every 1,000 athlete exposures. The rate of concussion is higher in games as opposed to practice, and those football players with a history of concussion are much more likely to have repeat concussive symptoms opposed to those who have never suffered one (McKeag, 2003).

Concussion symptoms from years of playing football with repeated head impact are gaining momentum from the mainstream media. The world's foremost leader in sports publications, *Sports Illustrated*, has done repeated articles on the effects of head trauma and concussion on former players. As recently as September 5, 2012 *SI*'s cover featured former college and professional star Jim McMahon with the caption NFL Concussions, the Other Half of the Story. However, clinicians have been dealing with *what is* and *what isn't* of concussions for many years, often with opinion outweighing evidence (McKeag, 2003).

Some positions on the football field lend themselves to higher rates of injury based on where they are lined up on the field. Linebackers have the highest rate of injury across the board. Linebackers are injured at a rate of 13.5% (NCAA, 2010), and are most often involved in tackling plays (by its very nature, the linebacker position typically lends itself to high rates of tackles combined with many violent collisions. Linebackers often start a play five yards

behind the line of scrimmage meaning that they often are heading forward at full speed roughly the same distance away from the ball as is a running back. Due to the distance between the two players, jarring impacts are often the result of a play). It is not surprising that running back injuries, as well as wide receivers, are next with injury rates at roughly 11% (NCAA, 2010). By comparison, quarterback injuries occur at rates under 6%.

Since football is played at such high speed, with violent collisions occurring with every snap of the ball, it is hoped that epidemiologic data could help athletic trainers and strength and conditioning coaches look for injury patterns and trends (Dick, et al., 2007). If these trends are identifiable, precautions that could result in the prevention of injuries may be implemented.

Since the competitive mismatches only occur in game situations, the potential for overall injuries are already increased, and pitting inferior athletes against those that are bigger and stronger, could prove to pose an even greater incidence of injuries.

From the literature presented, it is clear that injury reports specifically based on playing guarantee games simply did not exist. While the literature did not support the claim that there may be increased injury risk, no empirical evidence existed that could refute or substantiate claims that guarantee games are or are not the cause. Consequently this lack of knowledge is why this study has significance both in an academic setting and for practical use.

### **Chapter 3 - Methodology**

The purpose of this study was to determine whether college football guarantee games matching Football Bowl Subdivision (FBS) opponents against teams from the Football Championship Subdivision (FCS) raised the potential for increases in injuries. This chapter is organized according to the design of the research, sampling method, measures and instrumentation, data collection procedures, and data analysis plan.

In order to obtain the necessary data for this study, the use of human subjects was necessary. This required the review and subsequent approval of the University of New Mexico (UNM) human subjects Institutional Review Board (IRB). The initial recruitment email, research protocol, instrument, informed consent, and departmental approval was submitted and approved by the UNM IRB (Appendices A, B, and C).

A list of interview questions specific to football athletic trainers at all 124 FCS member institutions was distributed and used to obtain data for this study (Appendix D).

#### **Research Design**

The primary design of the study provided a format where FCS athletic trainers were asked to provide narratives of their experiences related to differences in injuries to their student-athletes when those student-athletes played guarantee games against teams from the FBS.

This study is a qualitative exploratory descriptive research project aimed at uncovering college football injuries in two comparison groups: 1. When an FCS school played a game against an FBS member school; 2. When an FCS school played a game against another school from the FCS.

The qualitative research analysis used in this study helped uncover whether FCS athletic trainers described an increase in injuries of all types related to playing FBS opponents. The athletic trainers offered detailed and rich description of the types of injuries common to their student-athletes. Athletic trainers are tasked with prevention and treatment of injuries to their student-athletes prior to practice and game exposure, so their insight was invaluable regarding player safety.

Because empirical research had not been conducted on this topic, the four members of this dissertation committee agreed that a qualitative study would be the most appropriate approach to the data being sought. Exploratory qualitative research is based on collecting data that represents interactions from those individuals who represent the research questions that were identified (Bowen, 2005).

The benefit of conducting this study in a qualitative method was to present data that provided a level of understanding and knowledge of the subject matter from the detailed perspective of those individuals who are surrounded by student-athletes on a daily basis, and who work each day to care for and prevent injuries. This method encouraged the study participants to offer their opinions, present their level of expertise, and reflect on the experiences of the specialized world in which they live (Bowen, 2005).

### **Researcher Perspective**

As an exploratory researcher hoping to uncover an increased risk of injury in these games that were seemingly mismatches, at least on the scoreboard, there was an obligation to remain objective in this study. If a game was mismatched on the scoreboard, that difference was likely due to the talent level, size, strength, and speed of the players on the winning team. Even so, this did not necessarily equate to the players on the losing team being put in

positions that would make them more susceptible to injuries. However, until data were collected and analyzed, and the responses of professional healthcare providers were presented, the question remained unanswered.

Having spent ample time with college and high school football student-athletes, the researcher believed it was important and relevant to this study to share personal experiences related to the sport at the collegiate level, and to explain why this area of study was undertaken.

### **Researcher Background**

The researcher's entire professional career has been spent in athletics, and he has worked in a collegiate athletic department at a university that is a member of the FBS. This university is in a conference that automatically qualified its conference champion for a BCS bowl game prior to the start of the new College Football Playoff (CFP) in 2014. This is mentioned because at the time the researcher worked at this school, there was no BCS and the bowl system was traditional with conference winners being aligned to historical bowl games.

When the researcher started working in the athletics department at this school, the football program had one of the worst records in the country. As the fortunes of the program began to turn around, games were scheduled against teams that would now be considered to be at the FCS level. At that time they were known as NCAA Division I-AA. These games were scheduled because the coach thought that would give his team a chance to win some games, and start turning around the mindset of the young people involved in the program.

Eventually the program did get turned around, and as it did, the games against the lower classification level began to diminish. However, once the 12-game schedule was put

into place in 2006, it became evident that FBS universities were scheduling increased numbers of FCS games and the lopsided scores were ever-increasing. At the same time, the funds that were being provided to the lower level schools were also increasing to unprecedented levels.

Once the number of these games increased, the researcher began to question whether these games were a good idea based on several factors, among these was the increased injury potential. The researcher was also coaching high school football at the time and was involved in games where his team was the superior one against a smaller school, or conversely, where his team was the smaller school against a much bigger school. The researcher noticed a distinct difference in the behavior of the kids he coached depending on who the opponent was. The researcher noticed fear in some of the athletes that did not appear to be present in games against lower level opponents, or at the same classification.

Having observed guarantee games at the collegiate level as an industry professional, and having coached in mismatched games at the high school level, the researcher's interest began to pique. A desire to study all aspects related to these games emerged. While this study focused solely on the potential injury perspective of guarantee games, the researcher is planning to conduct future research to identify other aspects related to these games.

Football is a violent game and is the only team sport where every snap of the ball dictates that opponents physically try to keep one another from accomplishing a task. Consider that every time the ball is snapped, offensive linemen engage with defensive linemen to move them out of the way and defensive linemen do what they can to not get moved. Running backs carry the ball and do what they can to stay on their feet. Defensive players do what they can to make contact with the running back to get him on the ground.

The one person who has the football is a legal target for 11 defensive players who are trying to take that player to the ground, often times with several defensive players accomplishing this.

This rudimentary explanation is meant to emphasize just how rough the sport is. When one team is physically superior, in that they are stronger, bigger, faster, more athletic, fear of injury may enter the minds of the athletes on the lower-level team. Another topic as part of this study was aimed at determining if there was an observable fear of injury noticed by the athletic trainers from their football student-athletes, and whether that fear potentially could lead to a student-athlete suffering an injury. The researcher confidently believed that athletic trainers would reveal information about injuries and other relevant topics related to these games that can open up further areas of study on this subject matter.

### **Population and Sample**

The sample in this study was comprised of football athletic trainers from a population of college FCS universities. There were 124 universities and colleges that made up the entire population of the FCS division. The sample population consisted of athletic trainers whose teams had played FBS member schools. Only FCS teams that engage in these games were targeted. Of the 124 FCS schools, nearly 30 schedule guarantee games multiple times each season. The goal was to conduct eight interviews with FCS athletic trainers and this goal was accomplished.

Qualitative research is extremely labor intensive and researchers often split the process into stages. While different researchers may utilize their own processes and labeling of such, seven categories typically encompass the necessary progressions in a study. These

are: thematizing, designing, interviewing, transcribing, analyzing, verifying, and reporting (Fink, 2000).

### **Instrumentation**

Because the population in this study was clearly defined, purposive sampling was used in order to clearly target the athletic trainers who have experience in treating student-athletes before, during, and after these games. This identifiable population was purposefully selected because it was the only group capable of providing the insight necessary to convey information related to the study, and the study was wholly dependent on collecting data based on levels of expertise from the population (Creswell, 2007).

To increase reliability, athletic trainers at the University of New Mexico (UNM) were interviewed face-to-face in a private setting in order to provide feedback on the questions, as well as to get an idea of the amount of time each interview would take. The UNM athletic trainers were used as a pilot because of the convenience of scheduling these interviews, and because UNM is an FBS member school. The pilot study did not reduce the number of FCS athletic trainers potentially available to interview.

After conducting the pilot interviews, the researcher asked for comments about the questions and reviewed them with the pilot group for content analysis. This increased the content validity of the instrument since experts had the opportunity to review the questions, offer suggestions, and make appropriate changes. The following areas of discussion were asked by the researcher after the questions were reviewed by the pilot group:

- question clarity
- consistency and meaningfulness
- the use of proper terms related to football student-athletes,

- injury terms (season-ending, career-ending, catastrophic)
- additional common medical/industry terms described by athletic trainers in treatment of football injuries
- personal and ethical considerations

The first section of the interview questions included an explanation of the study, a subsection for obtaining the participant's informed consent, and instructions for completing the interview, including repeated mentions that the name of the individual and the university would remain anonymous throughout the interview process as well as during the results and analysis stage.

The second section was used to gather specific career-related characteristics of the population. The following areas were covered:

- How long the individual has worked in college football
- How long the individual has been in their current position
- Estimation as to the number of games in their career that have been contested against FBS-member schools
- How they would self-describe the success level of their current school based on wins and losses (low, mid, high)

Since the athletic trainers answered questions directly related to injuries occurring in two different game classifications, it was expected that validity measures would be high in that the instrument would accurately measure what it was meant to (Patton, 2002). In this case, it would measure an increase in the number of injuries in FCS and FBS games played by FCS teams. Validity in qualitative research is largely based on the ability of the researcher to uncover credible and accurate data (Patton, 2002).

The third section of the interview consisted of questions directly related to the study. These were questions that discussed injuries, and presented an opportunity for the sample population to provide information from their vantage point, enabling the rich sharing of information pertinent to the topic (Creswell, 2007).

If the athletic trainers provided data consistent among the respondents, a high measure of reliability was drawn from the questions. This was overwhelming as several questions had drawn like responses from all eight participants. The reliability measures were strengthened through the use of the pilot interviews and the results obtained from them. Because the researcher began to see reappearing themes and commonalities in responses, this study was strengthened, regardless of whether the answers supported the researcher's hypothesis.

### **Data Collection Procedures**

The pilot interviews occurred in May 2014 and once the questions were finalized, Institutional Review Board (IRB) submission occurred in June 2014. After initial feedback from IRB representatives, the final submission for IRB approval occurred in July 2014. Once the study received IRB approval, an initial list of 124 FCS athletic trainers was identified and contacted via email. Once athletic trainers agreed to be part of the study, interview times were scheduled and conducted. The researcher did not wait until the list of eight interviews were all scheduled before starting the interviews. The process of scheduling interviews and conducting them was simultaneous.

The interviews took place via telephone from the Sandia Board Room at the home office of the Albuquerque Convention & Visitors Bureau, where the researcher is employed as the Director of Sports Marketing. The researcher was the only person in the room during

the time the interviews were conducted and recorded. The audio recordings were then downloaded to the researcher's personal laptop computer and immediately erased from the digital audio recorder. The interviews were then transcribed, and following transcription, the interviews were emailed as a word document attachment to the participants to check for accuracy. Once the participants read the transcribed version of their interviews, they emailed approval for their information to be included in the study.

As the interviews were conducted and the information recorded, the transcription process began immediately following each individual interview. Since there was a tremendous amount of data, it was imperative the transcription process began immediately in order for the analysis process to begin (Yin, 2003).

Data were transcribed using a paid transcriber available through the UNM Office of Graduate Studies. Once transcribed, the researcher spent an immense amount of time reading through the interviews in order to start coding the data, and then looked at connections between those codes (Strauss & Corbin, 1990).

### **Data Analysis Plan**

The data analysis plan was first and foremost an attempt to answer the research questions according to the responses provided by the participants. The transcriptions were read with the goal of identifying prominent topic codes as the first building block of common themes.

The first step in the actual data analysis process was through the use of open coding using an inductive approach to identify common responses. An inductive approach was appropriate since there were no prior data so inducing themes and categories were derived from the collected data (Elo & Kyngass, 2007). Open coding allowed for note taking and

emphasized the creation of headings and themes directly from the content of the interviews (Hsieh & Shannon, 2005). The headings were then taken from each individual transcript and listed on a coding table. This allowed for the generation of multiple categories and themes, and the process of linking those themes to more specific layers of coding (Burnard, 1991).

Once the open coding was conducted and the initial themes were in place, more detailed axial coding began. Axial coding is the process of connecting core themes during qualitative data analysis (Strauss & Corbin, 1990) and is the process of relating codes and categories to one another. The general foundation of relationships is understood, according to Strauss and Corbin (1990) who suggest using a "coding paradigm", to include categories related to the study. Based on the pilot interviews conducted, examples of a coding paradigm could have been terms such as *increased contusions*, *lengthy recovery*, and *repeated acute injuries*. These axial codes were funneled from a broader theme related to injuries, or as noted by Elo and Kyngas (2007), themes can start at a "main category", be grouped into specific themes labeled "generic categories", and finally itemized into "sub-categories". These categories should allow for rich, descriptive narratives crucial to the qualitative research process (Creswell, 2007).

Because the researcher was recording responses that were very similar from most, and in some cases all the participants, often times the coding process was able to go from an open coding level directly to a specific code. Due to the consistency in participant responses, there was no need to further link similar themes.

### **Study Limitations**

The potential for researcher bias can occur in qualitative research since the researcher acted as the data collection instrument, as well as the data analysis instrument. These are

characteristics that are inherent when conducting qualitative research so care was taken to keep researcher bias out of the results.

One way this was accomplished was for the researcher to consider that there have been games contested between college football programs at a variety of levels where the lower-level team has won the game. Programs at the upper level of the FCS have often times competed very well with members of the FBS, especially those teams that would be considered to be at the bottom of that division and regardless of conference affiliation.

Another potential limitation to this study was that all interviews were conducted over the telephone with no face-to-face interaction. It was the goal of the researcher to conduct some face-to-face interviews either personally or via a video conference, but because the 2014 football season had gotten underway by the time IRB approval was granted, this was not possible.

### **Study Delimitations**

Since this study explored and collected data from those athletic trainers at FCS schools whose programs have experience competing in these games, the study has high levels of reliable and valid data. Athletic trainers have gained the knowledge and experience necessary to provide descriptive and pertinent data, regardless of whether it supported the study's original hypotheses.

## **Chapter 4 -- Findings/Results**

The purpose of this study was to discover if athletic trainers at the NCAA Football Championship Subdivision (FCS) observed a higher incidence of injury when their squads played guarantee games against member schools of the Football Bowl Subdivision (FBS). The study was not designed to gather data related to specific reporting of injuries to student-athletes in particular games, but rather was structured to gain the perspective of those medical professionals who are engaged in the practice of prevention and treatment of injuries to student-athletes on a daily basis.

In order to be eligible for this study, participants were required to be FCS athletic trainers dedicated to the sport of football at their school. Additionally it was required that the trainers had enough longevity in their careers in order to have been involved in multiple guarantee games against FBS opponents.

Of the 124 schools classified as being at the NCAA FCS level, 26 could be identified as having a consistent history of scheduling FBS games on an annual basis. Of the 26, the researcher was able to capture nearly a third of them (30.8%) for a one-time, digitally phone-recorded interview. Eight athletic trainers participated in this study and all met the career longevity requirements.

Included in the pre-interview questionnaires participants were asked to confirm their number of years spent in athletic training overall, and numbers of years at their particular school. This information not only was important to determine if the athletic trainers had appropriate experience in guarantee games, but also enough experience to self-define what level of success their schools had in these games.

Additionally the athletic trainers were asked to self-identify their school as having a low, middle, or high level of success based on wins and losses in all games, not in games against FBS schools. This was important as responses obtained during the interviews differed based on the level of success the school had.

## **Participants**

The participants were labeled by the researcher as AT's (Athletic Trainer) 1 – 8. Information on the university employing the athletic trainer is not disclosed to help protect the identity of the participants. Information provided by the trainers is identified by AT with the appropriately assigned number to follow (AT – 2 for example). A brief narrative for each of the eight participants in the study follows:

AT – 1: This participant has spent nearly 30 years as an athletic trainer with more than 26 years at the same school. The football program was self-categorized as having a high level of success. This athletic trainer reported being involved in 1 – 2 FBS games each year since the school moved up from NCAA Division II to Division I at the FCS level.

AT – 2: This participant has spent 16 years as a collegiate athletic trainer and the last six of those years have been at the current school. This trainer reported the FCS school to be a mid-level team, and they typically play 1 – 2 guarantee games each year.

AT – 3: This athletic trainer has more than 35 years' experience in athletics training and has been at the current school for nine years. This participant reported the school to be a low-level FCS team in terms of success on the field. The current school plays 1 – 2 guarantee games each season.

AT – 4: This participant has more than 22 years in the athletic training industry and has been at the current FCS school for more than three years. The football program was self-

categorized as having mid-level success in terms of wins and losses. AT – 4 reported that the school has been involved in two games each season where the FCS school played a member of the FBS.

AT – 5: This participant has spent nearly 13 years as an athletic training professional with five years coming at the current school. The football program was self-categorized as having low-level success in terms of wins and losses. This participant reported that the school had been involved in 1 – 2 “play-up” games each year.

AT – 6: This participant has spent more than 30 years in the athletics training profession, and all those years have been at the same school. This athletic trainer described the college football program as a low-level FCS team. AT – 6 reported that the school will typically play two guarantee games each season.

AT – 7: This participant has more than 15 years in the athletics training industry, with seven of those years at the current school. This participant self-categorized the FCS school as being mid-level in terms of wins and losses. This athletic trainer reported the school played two games each season against member schools of the FBS.

AT – 8: This participant has nearly 29 years of athletic training experience with 26 of those years at the current school. This athletic trainer self-categorized the program as being a low-level school based on wins and losses on the playing field. AT – 8 said that on average the school has played two guarantee games each year, but there have been years where three such games were on the schedule.

### **Data Collection Instrument**

The researcher used a scripted list of interview questions to conduct the interviews (see Appendix D). These scripted interviews were designed to answer the research questions

that formed the foundation of this study. Some leeway was given to the researcher to ask follow-up or further inquiry questions based on answers provided by the participants. In general though, most answers were specific to the script in order to compare, identify, and describe the themes that emerged from the interviews.

## **Theme 1 – Positive Financial Benefits to FCS Schools Playing Guarantee Games**

### **Against FBS Opponents**

The initial theme that emerged from the study related to the perspective of the athletic trainers as an overall athletics industry professional. The first two questions in the interviews were not related to the fundamental research questions of the study, but instead were designed to provide a baseline of the overall thoughts of the athletic trainers on guarantee games. All the participants identified the financial guarantees as the major component, and all agreed that the games are important to their schools, and all offered differences as to how the games are justified as evidenced by the responses below:

Clearly they are designed to generate revenue for our university, our athletic department as a whole. In this day and age, there really is a mentality of everyone wanting to get theirs, so to speak. This is a way for FCS schools to get theirs. The NCAA revenue pie is expanding and as more money is out there to be had, this is a way some of that money can be brought in to lower level, less revenue driven schools. I believe for the most part these games have been positive for schools like ours. We just don't have the fan base or other revenue sources to generate the kind of payday that the larger schools have. I can see why there would be some negative perception because some of the scores are really lopsided, but I think for us, and for

most of the people (other trainers) I've talked to in my 20 years, we survive, move on and hopefully do well in our conference games (Participant AT – 6).

Other athletic trainers also reported the financial benefits as the primary factor, but some mentioned the excitement the game generated and how it not only improved the fortunes of the athletic department from a financial perspective, but also the enthusiasm that can be generated by the FCS school.

I know for the smaller schools there is obviously a financial component to that. It's a large payday for us. It really helps support our athletics program across the board. So I think there is a financial component. I think there is a little bit of excitement and energy for a school when you're the small school so it helps the recruiting a little bit. I'm sure it helps just with energy and overall mood. And realistically you go into those games knowing that you've got some challenges, and it's going to be a long day and you know the chances and the odds of you coming out with a victory are pretty small, but it's a neat experience for a small school to go into those big Division I FBS schools and have that opportunity to play in front of 60, 70, 80,000 people. For some of our players, and even some of our staff members, you only get that a couple of times in your career maybe (Participant AT – 4).

While all the athletic trainers discussed the positive aspects of the financial guarantees, some of the supporting answers provided variations of why the games were positive events. Another example of an athletic trainer discussing the positive factors of the payday but for differing reasons follows. AT – 2 and AT – 3 discussed how the gap in talent on the field has been narrowed and offered opinions as to why:

Well, in a nutshell, I would say it's strictly about money. It's a revenue stream for our schools to play the big boys. I think it has come to a point now where there are some kids, for whatever reason, the quality of the kid has generally gotten a lot better. I believe it's from being in it from high school, from youth leagues, kids just have a lot better grasp of what they're doing. And when they come to school the kids just want that opportunity to continue on and play. You would be surprised how many great athletes are coming out of smaller schools and have the opportunity to play in the pros. At one time I thought the talent difference was huge, it was a big difference, and it was almost kind of unfair. It was nothing but a paycheck and it still is a paycheck, but today I'm still glad that we do it and in some respects we're closing the talent gap. When the kids do play well, it can be a big boost for our entire season (Participant AT – 2).

AT – 3 also spoke of the reduction in the gap in talent, but offered perspectives related to success some of the FCS schools had, and how that has improved the football program's recruiting:

The thing about it is that they are recruiting in such a manner now that athletes, regardless of where they're at, what state they come from, how they've been coached for the most part, are much more developed and have a different perception than they used to. I think when they walk into a stadium with anywhere between 50 and 80,000 people, because there is less of a physical gap, they come in and I think as time has gone on, and the fact that some of them have rose up and defeated some of these bowl-type teams, upper echelon teams, they believe they have a chance. Because of those things, because of the change in perception that there is really not much of a

difference when the two play one another, I think going toe-to-toe now is perhaps a lot different than what it may have been 20, 30 years ago (Participant AT – 3).

AT – 3 also made the point of how the money generated from guarantee games has helped the smaller schools make improvements to facilities, and that has helped the FCS schools compete on the playing field with some of their FBS opponents:

Right now the playing field has been leveled in regards to coaching and in regards to facilities. I think that the Football Championship Subdivision schools athletically in their training methods, and across the board have become so much closer to FBS schools. . . even though their facilities are not obviously as immaculate or as large and they don't have the resources as the Bowl Subdivision schools, they are improving their facilities to the point where a kid may decide to go to an FCS school than a lower level FBS school (Participant AT – 3).

Another athletic trainer offered that the challenge of the games, especially coming from a high-level FCS school, offered an opportunity to see how their team competed against schools from the FBS.

To be honest with you, I think it's good obviously for us coming from an FCS school. Not to be pretentious or anything but we're at the high end of FCS so that's a challenge that we like to take on. We're not doing it just for the money; we're doing it to see where we're at. We have a number of individuals here who live in areas with the large FBS schools and our kids like to show them that they maybe could have played at that level (Participant AT – 1).

Another benefit of playing guarantee games was mentioned by several trainers. This was related to the overall student-athlete opportunities that the young people in the FCS football program can be afforded because of the dollars generated from the guarantee games.

I think those games help fund the programs who may not otherwise have the money to be able to provide their student athletes with the greatest experience, or the supplies they need. We may get new equipment, safer equipment. They may get more nutritional meals when we travel. I think these games help keep those types of things improving from year to year. They (guarantee games) help fund them in ways that their particular university is not able to do (Participant AT – 5).

AT – 7 reiterated comments regarding improved opportunities for student-athletes, but also discussed how the games have provided direct benefit to the athletic training department:

If we didn't have those games, being at an FCS level, our budgets would struggle in overall honesty. The games are, for the main reason, being played so the schools can afford nicer things for our student-athletes, and not just the football program. To have different things in our budget, especially the sports medicine side to help us with our budget so we can have nicer equipment, which helps us care for our athletes better (Participant AT – 7).

As mentioned previously, the first two questions of the interview were used to gain an overall perspective of the athletic trainers based simply on industry knowledge of the guarantee games. The questions following were related to injuries and the observations and reporting of these injuries from the athletic trainer's perspective. With that, the underlying research questions of this study are now presented.

**Research Question (1).** When comparing games between FBS member universities and FCS member universities, is there an increased chance of injury as opposed to games in which FCS opponents are more closely matched?

As the participants answered this question related to their experiences in injury prevention and treatment during FCS vs. FBS games, the second theme of the study emerged.

### **Theme 2 – Decline in Overall Health of FCS Football Student-Athletes Following FBS Games**

This theme was related to overall health of the football team during the game, immediately after the game, and the following 1 – 3 days after the game. The majority of athletic trainers felt their student-athletes were typically “more sore and banged up” than they were following games against member schools of the FCS.

The athletic trainers also mentioned that because guarantee games are typically played early in the season, student-athletes may emerge from these games with fewer injuries than if the games were played later in the year. The following comments address and support the second theme that emerged from the study:

We definitely are a bit more banged up following these games. Because we play them early in the season I think we are a bit healthier going into the games so we may not get as beat up as we could if the games were later. Definitely our guys who are on the field a lot in these games tend to be a little bit more banged up than normal.

Sometimes though, teams are just more physical than another team regardless of the level. But generally, yeah you see more guys getting day-after treatment following games against the bigger schools (Participant AT – 6).

Another athletic trainer inferred that some of the injuries suffered by his student-athletes could be classified as significant, but still manageable related to getting those injured student-athletes back on the field:

Overall the games that we come back from playing-up...in those games we come back with overall generally more soreness and we are banged up. I will say there have been more significant injuries that have occurred during some of those games. I don't believe we suffered any career-enders or anything like that. In general, we do have a lot more injuries reported on the days after those play-up games (Participant AT – 5).

Due to the responses regarding increased injuries during, immediately after, or soon after a guarantee game, the researcher asked follow up questions related to what types of injuries were most common. The responses that followed varied, but the general underlying premise was that fatigue and lack of depth from the FCS schools increased the potential for all types of injuries.

I would say the number one cause of injury that we probably face is our guys . . . its multiple things that happen to you, but what happens most is fatigue. Our players get worn down quicker and so they're more susceptible . . . when you get tired and you're still trying to go, your body wears down, there are a lot of different things that happen. With our linemen, it is a lot in their legs. They don't have the ability or they're just not strong enough and they get trapped and they're hurting down around their knees. Our receivers, our skilled kids, seem like they have a few more knocks, and more headaches than normal when we play teams in our own league (Participant AT – 2).

Another participant offered more specific information when discussing the most common types of injuries:

In my years here, I don't think we've had what I would call a typical injury that occurs during these games. I think its overall soreness and I guess if we have injuries it might be an AC (anterior cruciate) sprain or an ankle sprain. Just typical football injuries (Participant AT – 7).

Another participant answered the follow up question with an explanation of the overall differences in injuries that occurred, and this athletic trainer also mentioned fatigue and the wearing out factor. Additionally though, the participant spoke of how the factors of the heat in the early season, and the lack of depth for the FCS school can be a cause of injuries as a game progresses. Some of these injuries ranged from minor to severe:

I would say very rarely in my experiences have I ever really felt that we were in physical danger, if you will. But there was one experience when we did play a Top 5 (in BCS rankings) school and you could just tell. There was just a physical difference, not just a size, strength, and speed advantage. We really had a long day from a healthcare standpoint both from orthopedic injuries, and we had a few head injuries that game. It's my experience the times I've done this I always feel the competition is usually pretty spirited in the first half and then at halftime, coming out in the 3rd quarter is when I see injuries and the game separates a little bit. I think in my experience typically these games always happen early in the year so we have the heat component and multiple times we go out for crampers and dehydration because our ones and twos are playing the entire time...we have to. By that time, they're (FBS opponent) able to sub in their threes (third team) a little bit and hopefully . . .

I'm sure from their standpoint, they might be up two or three scores, maybe more, and they're starting to rest their ones (first team) so they're getting deeper into their roster and hey, we're all we got. Guys are cramping, guys are getting tight 'cause they have to go every play just to keep it within a 2-score or a 3-score game...just to keep it respectable. It's that 3<sup>rd</sup> quarter the wheels fall off. We start to get injured, they get up a score or two, or three, they're able to rest their ones, they're into their threes and fours (fourth team) and now we just can't get the game over quick enough. The one game I'm really thinking about in my history . . . we were a pretty sub-marginal FCS and we're playing a Top 5 FBS team. I was on the field longer than some of our players that day. I had more reps on the field that day than our starting quarterback for sure. I don't know if they're just bigger, faster, stronger, they can get to the spot quicker than our guys can, combination of all the above but, yeah, that was a long day (Participant AT – 4).

To further support this claim, one athletic trainer spoke of the violence that has been observed in guarantee games. While not describing injuries specifically, this athletic trainer did make note of the number of injuries that occur in some FBS games can potentially be more numerous than in games contested against FCS opponents:

In that situation, I think sometimes these games can be a little bit more violent than it needs to be, but I think it depends from school to school. We've played some Bowl Championship schools (AT – 7 was referencing FBS schools), the main Division I schools, that have not been that violent. But, yes, I've also experienced where some of the schools, the upper division guys, they have just been violent, you know, more like a bully to the smaller schools. In other words, if we play schools on our level, if

the number of injuries that will occur within that game would be about five or six, it's likely that it will go up to anywhere between 10 to 12 (Participant AT – 8).

The sub-research questions that supported the first research question broke down the classification levels of injuries to three areas: 1) season-ending injuries; 2) career-ending injuries; 3) catastrophic or life-altering injuries. The three categories were asked of the participants in order and are presented here in the same manner. The responses to these questions provided the third theme of the study.

**Research Question (1a).** Is there an increase in season-ending injuries? (An injury that causes a player to come out of a game and not return for the remainder of the season)

**Research Question (1b).** Is there an increase in career-ending injuries? (An injury sustained in a game that does not allow a player to play collegiate football again)

**Research Question (1c).** Is there an increase in catastrophic (life altering) injuries? (An injury sustained in a game that causes death or quadriplegia)

### **Theme 3 – No Increase in Season-Ending, Career-Ending, Catastrophic Injuries When FCS Member Schools Play FBS Opponents**

The eight athletic trainers unanimously responded that in their experience working isolated guarantee games, there was no increase in the occurrence of injuries at the three levels. The participants were asked about injuries in these three areas as individual topic questions so they could consider the levels one at a time. Answers to the questions ranged from simple “no” answers (AT – 1, AT – 5, and AT – 7) to some explanation as part of their answer. Because the responses came from experts in their fields, and from people who are directly involved in treating their student-athletes before, during, and after guarantee games, this theme is a broad research question that provided the foundation for this study. The

researcher included the answers to the questions related to all three classification levels in order.

**Season-ending injuries.** When asked about season-ending injuries, the majority of participants offered responses confirming no difference among opponent levels. One participant offered “It just depends on some years. I don’t know if it’s that big of a difference. I don’t think there’s much difference” (Participant AT – 2).

Another participant felt season-ending injuries were not related to the two teams on the field, but were injuries that occur as part of the sport itself:

Not directly related to the play on the field itself. It’s kind of ironic the injuries that I see in these types of games are injuries that could have occurred at any time. They are not because of the contact, not because of what they do or what we don’t do, but it just so happens that if you go down and look at a synopsis of how severe injuries occur and when they occur, again, we’re always talking about something that could have happened against anyone (Participant AT – 3).

AT – 2 discussed how season-ending injuries haven’t been directly related to guarantee games, but did revert back to earlier comments about how injuries resulting from these games may make it more difficult to get student-athletes back for games later in the season:

I don’t know if I’ve had any season-ending injuries coming out of one of those games but you certainly get those 2, 3, and 4-week injuries, maybe an MCL (medial collateral ligament) sprain, an ankle sprain, injuries that are going to now start affecting the next couple of weeks and now you’re trying to get these guys back for conference. At our level typically what will happen is you’ll maybe play one big

school. You may play a big Division I (FBS) school, maybe we'll then play a Division I school that isn't as good, maybe another 1-AA (former NCAA classification, now called FCS) so really by maybe the fourth week of the year, fifth week of the year now we're able to get into conference. It typically happens, knock on wood we didn't have it this year, but typically you're going to get a knee (injury), you're going to get a shoulder (injury) and all of a sudden now our goal becomes getting a guy back for conference. But in terms of a season-ender, in my 10 or 11 years of doing this, FCS or FBS, I don't know if I've ever had a true season-ender (Participant AT – 4).

AT – 6 supported AT – 2's comments regarding injuries that may occur in a guarantee game, and how those injuries may start an injury that may progress as the season wears on:

No I wouldn't say that. As I mentioned games earlier in the season tend to see fewer season-ending injuries because there is no cumulative effect at that point. But what can happen is that a player could get hit pretty hard, and because you play the next week he can't heal properly and that injury becomes longer term. He may progressively get worse and eventually that injury ends up knocking him out for the season, but that may come several weeks later, much later than right after or during the FBS game (Participant AT – 6).

AT – 8 felt that season-ending injuries can occur at any point during the season, and against any opponent. "No. My answer would be no to that. Season-ending injuries can happen to our football players in our conference games just as often, against their fellow FCS level athletes. So it has no correlation to that" (Participant AT – 8).

**Career-ending injuries.** Injuries defined as career-ending was the next classification, several participants responded with “no” answers (AT – 1 & AT – 5), while others offered narratives supporting their responses:

These (guarantee games) are usually at the beginning of the year when our people are usually in their best shape. I don’t think there’s any more of an increase of career-ending injuries than there would be at any time of the season (Participant AT – 2).

AT – 3 acknowledged that injuries that could be categorized as severe can occur, but those injuries have not ended a student-athlete’s football career, regardless of who the opponent is:

No, I don’t think that there is . . . you may have a substantial injury that may limit someone or that may take them out for a while, but as far as a career-ending injury or an injury that would require an extended rehab situation or anything like that, I don’t think there’s any difference between playing one division school against another division school (Participant AT – 3).

AT – 4 revisited a prior response to a question discussing head injuries some football student-athletes suffered in a guarantee game. While not saying that the head injuries ended a career, the participant did discuss a specific area of injury, and a significant one from a health standpoint:

No, I’ve been lucky, haven’t had those, haven’t had a career ender following those games. But another point of reference kind of popped in my head - a couple of years ago at the school I’m at now, we had one of those (guarantee) games and we ended up with about three or four . . . I think we ended up with like four diagnosed concussions in that game. We’ve talked about that as a medical staff - is that related to the size

differential, speed differential? We're down 50...is that the easiest way for that guy to get out of the game that day, and hey I just want my day to be over. We don't know but, yeah, we had four heads (injuries) in a particular game (Participant AT – 4).

While AT – 6 also provided information confirming no increase in career-ending injuries, this trainer feels injuries defined as career-ending are down across the sport:

No, I can say that I haven't seen that. And we have played several of these games, usually two a year. I can tell you though that career-ending injuries are down for us in all aspects. Part of that can probably be attributed to rules that are designed to keep players safer, better coaching regarding not leading with the helmet, and those types of things. Plus players are just smarter overall and they are constantly reminded to keep their heads up, keep blockers off their legs, and that type of thing (Participant AT – 6).

Similar to the answer provided by AT – 8 regarding season-ending injuries, career-ending injuries were also not related to the competition on the field:

No and for the same reasons, too. I don't see a correlation to the level of schools that we play and if a career-ending injury may have occurred. It's still the same. Football is just as violent in every level (Participant AT – 8).

**Catastrophic injuries.** Catastrophic, or life-alter injuries (those resulting in quadriplegia, paraplegia, or death) happen so infrequently in college football that the numbers are not even reported by the NCAA (NCAA Injury fact sheet, 2010). The FCS athletic trainers confirmed this as well as all eight participants agreed that guarantee games

had not caused an increase in catastrophic injuries. AT – 4 did mention that the full effects of an injury suffered during a college football career may not be known until many years later:

We haven't had any spinal cord injuries. We've never had any quadriplegic or paraplegics. You know the instance I talked about the four concussions, you never know on those. Those guys all came back and played within a week or two so they didn't miss extended time, but we all know now the unknown variable of long-term health and safety. We'll have to get back to that question in about 20 years. I don't know (Participant AT - 4).

The next set of questions that followed were related to schools that played multiple (at least two) guarantee games each season, and if those games were conducted over consecutive weeks. This topic was the reasoning behind the second research question of the study.

**Research Question (2).** When playing multiple games between FBS member universities and FCS member universities, is there an increased chance of injury?

**Research Question (3).** When playing consecutive (back-to-back) games between FBS member universities and FCS member universities, is there an increased chance of injury?

The athletic trainers all answered the questions related to this topic in a very similar manner, which in turn provided the basis for the emergence of the fourth theme of the study.

#### **Theme 4 – Increases in Injuries Following Multiple and Consecutive FBS Opponents**

The fourth theme that emerged from the study is related to seasons where an FCS school played multiple FBS opponents in the same season, and participants were asked about playing FBS opponents in consecutive weeks as well. The reason for this question was to

determine if the cumulative effect of playing FBS opponents led to an increase in injuries of all types.

If an athletic trainer responded that there was evidence of an increase in injuries when multiple FBS opponents were played, a follow up question was asked by the researcher. That question was if the athletic trainers thought multiple games or consecutive games against FBS opponents was a positive scheduling practice as it related to potential injuries? Only those trainers responding that they did see an increase in injuries following multiple or consecutive games are listed. Five of the eight athletic trainers (62.5 %) answered the question opposing multiple and consecutive games against FBS member school. All agreed that multiple games can increase the risk of injury, and if they had their way, consecutive games would not be scheduled:

It is the fatigue and the depth issue. We just don't have the depth and the skill level is higher so the FBS schools just seem to be able to . . . if we had to play two big schools like that in a row, it does wear you out; wears you out pretty bad. I think the factor of wearing down and just the physical ability is the difference in the two levels. We're more susceptible to injuries just because of the fact of getting worn out. We just don't have the numbers; we just don't have the depth of the FBS schools. Consequently, we have to stretch things to be able to try and compete. It gets tough. You know, we've had a few (multiple/consecutive) FBS games. I guess we've just been strictly overmatched and have had some injuries . . . I can't say for sure if it would be any different if they were playing in the regular league. It seems like if a kid has some difficulties or is prone to injuries though they come out quicker in the beginning of the season when you're playing the FBS schools. On the whole, I would

much rather that we didn't play consecutive FBS opponents so we can get our guys healthy after one, but the way this program is structured, we are going to play two each year. Sometimes the schedule dictates when we have to play them. If I had my way, and if I had a vote, I would say preferably not to multiple games and definitely no to consecutive games (Participant AT – 5).

AT – 4 noted the fatigue and lack of depth and how an FCS school might be competitive with the FBS team for part of the game, but as the game wears on, injuries may occur more often and the thinking of the coaches, down through the rest of the staff, changes from having an opportunity to have success to one of just getting out with minimal damage:

I have. One school that I worked at in a different institution, we did play two or three and, yeah, it's exactly that. I mean you get a few of those scheduled some years.

You get a guy that can't leave a game when he should in the first game so you can't get him into the second game because of an injury from the first. Or maybe it's one of those fifty-fifties; you can get him in, he doesn't last the whole second game. Yeah, those certainly happen. You get out of half-time and I've had a few where we actually might be winning, or we should be up going into half-time and I don't know if it's coaching adjustments, or reality sets in and before you know it, it's survival mode.

Once again, it's more a cumulative effect of hey . . . you just kind of go into it with the athletic training staff, medical staff even maybe coaches and say I just hope we get out of this thing healthy. Big picture, let's just get out of it healthy. I would say if I went back and pulled stats and stuff out of those games, I bet that next day those Sunday injury reports are probably a little longer. Typically Sundays are long days anyway. Coming in I always call them car wreck days – everybody's sore, everybody

hurts, but I bet if you really put the screws to it that our lists are a little longer on those days. Once again, is that a combination that we really got beat up because they were bigger, faster, and stronger? As an athletic trainer, I would recommend not playing consecutive opponents because they are simply bigger, faster, and stronger. The susceptibility for injuries is increased (Participant AT – 4).

AT – 5 emphasized the size differential between the student-athletes on his FCS team compared to the student-athletes the FBS schools put on the field. That size differential can also be a contributing factor to the injuries that have been suffered in these games:

I believe so. I think size plays the bigger part in that. The couple of games that come to mind, the athletes were significantly larger especially at their inside positions – they're offensive and defensive line, linebackers. Those athletes were significantly larger than the athletes that we were putting on the field. Moving at about the same rate of speed, but just much, much bigger than what we're used to seeing. Playing in those play-up games against the larger opponents, I think they are more at risk. I think they do have an increased risk when going up against those larger athletes than what they're normally seeing on a week-to-week basis once we get into our league and at our level. However, most of the injuries that I'm thinking of that come from our play-up games are actually from the skill positions, kind of refreshing my memory on these and kind of thinking back, most of them are from the . . . like the more serious and more significant injuries that we've suffered are actually in our skill positions. A couple of them have been wrong place, wrong time. A couple of them could be attributed to the larger size. When you play those games, you know that the majority of the time they have a better caliber athlete. You hope that the risk isn't

there, but there are increased risks when you're playing those types of schools. In general, we have more sprains in ligaments. We have more muscle contusions, more of the contact-type of injuries. It's not the non-contact ankle sprains or anything like that. They are generally when somebody rolled up on a knee, somebody twisted an ankle, contact with helmets and shoulder pads or helmets and thighs and things like that. We generally have an increase in those. In my opinion (playing multiple or consecutive FBS opponents), based on injuries – no. You're putting your athletes at a lot more risk to me for those play-up games. Playing those larger athletes two to three weeks in a row, you're putting your athletes at risk for more significant injuries and more injuries in general (Participant AT – 5).

AT – 6 agreed that multiple and consecutive games is not the best approach to try and keep the student-athletes from suffering increased soreness, but understands why it happens and doesn't see it changing:

I'm not sure if we've done that. Let me think.....shoot actually we did it this year. One of the games we played that team did a lot of low blocking, not cheap shots by any means, but their players weren't as big so they tended to block lower and we did have a lot of shin bruising and sore lower legs, some quads too. The next week we played a much bigger and more physical team and I would say that had the week two opponent been another FCS school we would have probably been a bit healthier overall after the week two game. Again though, there is nothing that I would classify as major, but it is probably fair to say that we are more banged up and more sore than normal. I wouldn't say that there are season-ending injuries typically. Season-ending injuries typically occur regardless of the opponent and regardless if you've played

several tough opponents in the same season. If I had a say in the matter I would suggest it not be done on a regular basis, but I certainly understand why it is, and I don't see it changing unless the FBS schools decide not to play FCS schools. If that happens a lot of revenue that helps schools like ours will be gone and that will hurt us financially (Participant AT – 6).

### **Theme 5 – No Real Lowering of Self-esteem, Morale, and No Fear of Injury Among FCS Student-Athletes**

Following the questions related to actual injuries based on season, career, or catastrophic classifications, and after the questions about multiple and consecutive BCS opponents, participants were asked whether they had observed a lowering of self-esteem and morale among their student-athletes following guarantee games. The athletic trainers were also asked whether they ever sensed fear from their student-athletes as it related to the potential of getting injured in a guarantee game.

The theme that emerged is that while none of the athletic trainers said they could identify fear of injury among their student-athletes, most said they had observed differing levels of apprehension and anxiety before, during, and after some of these games.

I wouldn't say fear, but I've certainly noticed just that kind of wide-eyed look a little bit. You know, they come out of the tunnel, they got 70,000 cheering against them and you're like – oh, goodness. No, I wouldn't say that it's fear. I mean on some level these are 19, 20, and 21-year old indestructible human beings or so they think. For them to admit, hey, I'm scared; hey, I'm worried; hey, I'm nervous, I don't know if you'll ever get them to admit that. Now what's really going on in their head? Who knows, but I think they're also smart enough to know, hey, they're the number five,

the number 10 team in the nation for a reason and I'm a smaller FCS school for a reason. I think they know that. I think they know cumulatively across the board there's a separation in talent. They're smart enough, they keep up. They probably keep up better than we do (Participant AT – 4).

AT – 3 dismissed the fear question based on the attitude of the student-athletes in the program, and how the team aspect helps alleviate some of those potential concerns:

First of all to answer the end of your question – no. There is no fear. That's where team building and all those things come into place. One of the differences between a 40-year old and an 18 to 22-year old is a 22-year old person lives in the moment and when you put enough of them together, they believe that they can accomplish far more than what anybody else of an older age could ever expect. We're gonna go out here and we're gonna fly this plane, and we're gonna see how hard we can fly it, we're gonna see how fast we can fly it, and we're going to see how far we can fly it without any gas in it. All those kind of things. That's their attitude (Participant AT – 3).

AT – 5 also suggests that the student-athletes don't experience fear but have expressed some levels of apprehension based on the physical size of the opponent:

There's always a couple that make a comment here and there about, after seeing them on film, they may be a little bit more concerned about the size of the athlete they're going up against. I don't know about true fear about being injured, just concerns about the size differential that we had talked about before (Participant AT – 5).

Additionally trainers discussed some tendencies toward apprehension and performance-based anxiety from some of their student-athletes. Both dismissed calling it fear, but did discuss some levels of angst they have witnessed:

I can say that I've never sensed a real fear from one of our players, but you certainly can see some apprehension in their eyes, and you can hear them talk about how good the other guys are. I haven't observed that (fear), but I don't think kids think that way (Participant AT – 6).

AT – 6 used the term anxiety in the interview as it related to the question of fear: I'm not sure you would call it fear, but I would say there is game anxiety. Yes, it does happen. I think that is based on the athlete from a lower division FCS school when they face those athletes from the BCS (referring to FBS opponents), they look at them as bigger, they look at them as more experienced and also some of that thinking of oh wow, the camera is on me. I'm playing in front of a big crowd and this guy may want to show how good he is. So they go through that. Sometimes we, as athletic trainers, we hear them discuss things like man that guy is good or you see them play on TV and now I'm going to face him, so that tends to put a little bit of anxiety in their heart. But, again, the coaches try to do a good job of trying to say listen, that's not what the game is all about. You have to go there and perform so trying to take that anxiety off them prior to them going out there. . . but those that don't know how to deal with it, they may tend to mess up and that's when injuries could occur, but not because our athletes are scared or in fear of them (Participant AT – 8).

As mentioned, participants were asked follow up questions based on whether they sensed any loss of morale from the football team as a whole before, during, or immediately following these games. The point of consideration is that the teams self-identified as high level FCS schools seemingly approached these games with opportunities to come out with a win, or at least stay in a close game. AT – 1 epitomized this, while AT – 7, a self-identified mid-level team supported it:

Our guys go into every single game, regardless of our opponent, and expect to win.

That's the mentality here and we've had a lot of success both playing FBS opponents and in our conference and against other FCS schools. So if our guys suffer any loss of morale it's because of the loss overall, not because of who we lost to. Thankfully we've just been really, really good and this has not been an issue at all (Participant AT – 1).

AT – 7 also felt that a loss is a loss, regardless of the opponent, and has not observed any additional loss of morale after losing to an FBS opponent:

No. I think if we lose, our athletes are upset; they want to win every game but I don't think there's any increase in emotion if they lose to an FBS school or FCS school.

The only difference I can see if it was because they didn't make it to (the FCS) play-offs or to win the (conference or national) championship. I think we've been lucky because we, most of the time, when we play these games, we haven't been blown out; we keep it pretty close and have been close to winning several of them. I think that probably helps. We did get blown out one time since I've been here and there wasn't any change from being blown out by anybody else (Participant AT – 7).

The other athletic trainers who identified as low to mid-level schools also didn't necessarily see a loss of overall team morale, but they did offer a different observation as compared to AT's 1 and 7.

Typically hey, we just got beat by 50 so everybody's morale is down. You just feel bad about yourself. Typically those games, too, you're flying throughout the night trying to get back home at 4 a.m. Everything hurts on those days, and I would say those days are longer days for sure (Participant AT – 2).

No but I would like to win one eventually (laughter). 'Cause you wanna talk about the opposite, about a spike in morale, you know, talk about Appalachian State beating Michigan; North Dakota State beat K-State a couple of years ago. You wanna talk about getting your year started off right. I was on a staff that we played ... I was at a different, even a smaller budgeted FCS team and we played a Big 10 school and they had to put together a big two-minute drive to beat us and we were two minutes away. I mean that's career defining right there, not only as a coach, but as a staff. You'll talk about that 20 years later. Not only are you getting the paycheck, but you're getting paid for that win (Participant AT – 4).

AT – 6 has not noticed any loss of morale because the FCS school was defeated by an FBS opponent. According to this athletic trainer, the student-athletes know that a loss is likely. Rather there have been instances of a student-athlete simply not executing a play that could lead to morale dipping:

You know after a really bad game score-wise, or where a kid might have gotten burned bad, or had a big turnover, you see some dropping of the head. I don't know that it wouldn't be the same in any game though. I would say that getting beaten

really bad by an FBS team may have short term affect but kids bounce back pretty quickly. I've seen more (loss of morale) when we lose a big rivalry game, or get knocked out of the playoff running. In these guarantee games the kids know the deal and they know why they are at the school they are, and why those guys are at the schools that they are, so it is more expected that we can get blown out in these games (Participant AT – 6).

## **Summary**

The findings of the study were presented via a narrative approach by the researcher and followed the overall script of the interview questions. This allows readers to follow a structured approach to the responses provided by the participants and provides a comprehensive flow to the themes that emerged.

A brief profile of each of the eight participants was provided at the beginning of the chapter. The profiles were intentionally left brief because the topic of athletic injuries can be a delicate one, and athletic trainers and their respective universities were ensured of their anonymity in this study.

The researcher found that the answers to the interview questions were very similar from all trainers, with some variations based on levels of success on the playing field. Because of the consistency in answers, five themes emerged from the research questions and subsequent interview questions. To reiterate, the five themes were: 1) The Positive Benefits of FCS Schools Playing FBS Schools; 2) A Decline in Overall Health of FCS Football Student-Athletes Following Games Against FBS Member Schools; 3) No Increase in Season-Ending, Career-Ending, and Catastrophic Injuries During FCS vs. FBS Football Games; 4) Increases in Injuries Following Multiple and Consecutive FCS vs. FBS Football Games; 5)

No Real Lowering of Self-Esteem, Morale, and No Fear of Injury Among FCS Football Student-Athletes.

Chapter 5 will further discuss the significant findings of the study, implications of the study, and relevance to college football guarantee games in today's athletic environment. The study's limitations will also be presented in chapter five, as well as recommendations for further research.

## **Chapter 5 – Discussion and Conclusion**

The primary purpose of this study was to determine if football student-athletes who participate at the NCAA Football Championship Subdivision (FCS) level suffered a higher rate of overall football injuries when their team played guarantee games against members of the Football Bowl Subdivision (FBS). To explore this topic, data for the study were collected from athletic trainers at the FCS schools based on their observations, injury-prevention methods, and injury-treatment practices.

As noted extensively in Chapter 2 of this study, academic literature on this topic is virtually non-existent, and industry literature has largely been related to the payouts offered by FBS schools, particularly those in the often-referred to power conferences that will likely qualify their conference champion teams for the College Football Playoff (CFP). While the literature does mention the positive aspects of the games related to the financial payout, many of the same articles make mention of perceived increased potential for injuries in these games. None of the articles though supported those claims related to injury. This study was aimed at providing never-reported data to support or refute those claims.

The significant outcomes in the study were presented via five themes that emerged following the interviews with the participants. There were several unanimous responses from the athletic trainers adding to the reliability of the study. All the trainers felt the games offered more positives than negatives as the financial gain for the FCS school offset the risk of increased injury potential. While sports industry media have hinted at the possibility that guarantee games can lead to increases in injuries, the results of this study showed that only minor, or moderate levels of injuries have occurred, and the athletic trainers who participated

in the study agree that the positive financial benefits thus far have offset any negative aspects related to severe or life-altering injuries.

While the majority of the athletic trainers from low to mid-level FCS schools reported observing an increase in minor injuries related to contusions, sprains, and some head-related incidents, none of the trainers reported that there was an increase in season-ending injuries, career-ending injuries, or catastrophic injuries. The observations describing some perceived increase in injuries were in timeframes labeled as during, immediately after, or a few days after these games were played. Football athletic trainers at schools self-identified as high to mid-level did not report any increase in injuries when their team played a guarantee game against an FBS opponent. Athletic trainers who self-identified their school as a low to mid-level program did report that they had observed an increase in overall soreness, and in terms of being *banged up*.

Some athletic trainers identified certain positions as being more susceptible to injuries during these games. AT – 2 felt the offensive and defensive line positions were the first to feel fatigue that could lead to increased injury potential. This athletic trainer also felt the offensive positions of quarterback and running back were most vulnerable against a superior opponent, while AT – 4 mentioned the skill position players (defined as non-linemen, non-linebackers) may also be at increased risk. This somewhat contradicts the NCAA Sport Injury fact sheet (2010) which identified the linebacker position as the most-often injured football position. None of the other athletic trainers mentioned injuries by position.

Athletic trainers who self-identified as being at a low to mid-level school did report that playing multiple FBS games in the same season was not a positive scheduling practice based solely on increased risk of injuries. The athletic trainers in this study also felt that

playing FBS opponents in consecutive weeks was a problematic scheduling strategy based on potential overall injuries.

The research also showed the athletic trainers did not feel like their student-athletes went into the guarantee games with a fear of being injured, or a fear of the student-athlete on the other team. There were mentions of apprehension and possible anxiety over how their student-athletes may approach a game against physically bigger players, with a huge crowd, and likely television audience. Those are areas that are atypical for the vast majority of FCS schools.

While this study captured the perspective of athletic training professionals, future research could include data collection from former FCS student-athletes who played in these games. Comparing the responses of the athletic trainers to the responses of the former student-athletes could provide perspectives that the athletic trainers had no way of articulating. Additional research of former FCS student-athletes from different time eras could be explored and differences could be noted between the scheduling practices after 2006 (when the NCAA allowed a 12<sup>th</sup> regular-season game) and how those student-athletes approached and reported feeling following guarantee games, compared to student-athletes prior to 2006. These years would be appropriate because following the addition of the 12<sup>th</sup> game, the number of FCS vs. FBS games increased dramatically.

Several athletic trainers felt the talent difference between FBS and FCS student-athletes has diminished in recent years due to better coaching from youth leagues through high school. One trainer also noted how many professional football players are coming out of FCS level schools. This is an important example of how the talent gap may be narrowing and

gathering data from former student-athletes who played during different eras at the same school would offer different perspectives depending on when FBS schools were played.

This narrowing of talent between FBS and FCS schools, especially those FCS schools that would be defined as having high levels of success on the playing field, is an important consideration. According to the athletic trainers, this is significant because the trainers felt that games against FCS and FBS member schools have not produced severe, long-term injuries. Rather long-term injuries, according to the athletic trainers, are injuries that could have happened against any opponent at any time. Some trainers referred to these as *wrong-place, wrong-time* injuries.

At the time of this writing, the NCAA FBS schools are split between what are now called Power 5 conferences. In total these conferences consist of 64 teams plus Notre Dame (a football independent). While these leagues (Atlantic Coast Conference and its 14 teams; the Big 10 Conference and its 14 teams; the Big XII Conference and its 10 teams; the PAC 12 Conference and its 12 teams; and the Southeastern Conference and its 14 teams) make up the Power 5 conferences, all have bottom-feeder schools that are experiencing only marginal success in terms of wins. With that, when an FCS school can get on the schedule of a poorly performing school from one of the power conferences, they likely will not only jump at the opportunity to do so, they will realistically have a shot at winning the game, as well as collecting a check that will likely be significant related to the overall athletic budget at the FCS school.

The five conferences (American Athletic Conference and its 11 teams; Conference USA and its 13 teams; the Mid-American Conference and its 13 schools; the Mountain West Conference and its 12 schools; and the Sun Belt Conference and its 11 schools) that are also

classified as FBS leagues, consist of teams that may not be significantly better (if at all) than many FCS schools. Because these schools don't get as large a share of the CFP revenue, they are also negotiating games with members of the Power 5 conferences in order to potentially increase their revenues as well. Consequently the ability to get on the schedule of a school from a power conference may get more difficult in upcoming years.

This is important as it relates to this study because as guarantee games can provide crucial revenue to FCS schools, the competition to negotiate a way into these games could get more competitive (Temple, 2013). As mentioned earlier in this study, the Big 10 Conference voted to end all games with members of the FCS in order to add increased conference games when the league expanded to its current 14-member size. Big 10 Conference officials also felt that not playing games against FCS schools would enhance the power ratings of its league members as they compete for a spot in the new four-team CFP.

If other FBS Power 5 leagues follow the same route as the Big 10 Conference, fewer and fewer games are going to be available for the FCS schools, and that has made it extremely crucial to start negotiating and finalizing FBS games several years in advance.

If opportunities for FCS schools to schedule FBS teams diminish, the paydays will likely be significantly reduced and instead of the FCS schools dictating what the paydays are, the pendulum shifts back in the FBS schools' favor to determine the price. If that happens, FCS schools could see a shift in scheduling philosophy that may not include playing these games. Athletic Directors at FCS schools may have to determine if it would be worth a reduced payday to try and get on an FBS schedule and risk the types of injuries that athletic trainers identified as having occurred during these games, or determine if it would be more

beneficial to schedule FCS opponents with the goal of staying healthier for the school's conference season?

This is an area for future research as the overall dollars being exchanged between FBS and FCS member schools could be explored to determine trends in price as the number of schools willing and available to play in these games continues to rise. If the FBS Power 5 schools start looking to play more FBS non-Power 5 schools in order to elevate their strength of schedule, games against FCS schools may decline.

The overall findings of this project marginally supported the original hypothesis of the study, that these games did raise the potential for increased injuries. While the majority of athletic trainers interviewed reported that they saw an increase in minor injuries (those that did not cause student-athletes to miss significant playing time), they did not see an increase in injuries that could be classified as severe (season-ending, career-ending, or catastrophic).

The majority of athletic trainers also observed an increase in minor injuries when playing multiple or consecutive FBS opponents, and those that did see an increase in injuries also suggested that playing FBS opponents in consecutive weeks did increase the potential for more serious injuries. The participants also noted that multiple FBS games, while not desirable from an injury treatment and prevention perspective, were better for their student-athletes if played with time off between the games, or if the in-between game was contested against a fellow FCS member school.

This study was somewhat limited due to privacy laws regarding the release of medical information for college student-athletes. It would have been preferable to gain actual reports of injuries suffered in specific games so the severity of those injuries could have been compared to the opponent. One athletic trainer also mentioned that there was no way to track

the long-term effects of injuries, especially those related to the head and potential for future concussions. AT – 4 noted to “check back in 20 years” to see if those head injuries may eventually prove to be life-altering.

Still another area of potential research of particular interest to the researcher is to gain perspective of the football coaches from the FCS schools, whether they are current coaches or former ones. The reason this study would be of interest lies in the belief that the coaches in these games likely did not possess a strong desire to schedule games against FBS opponents, particularly against those FBS schools in the Power 5 leagues. Knowing they had little chance for success, gaining the perspective from coaches as to what impacts guarantee games had on their teams could provide valuable academic and industry knowledge. Because of the time spent with their student-athletes in practice and meetings, coaches may observe information not yet offered.

Coaches are also judged by wins and losses. Playing guarantee games against physically superior teams typically results in losses. Perhaps those losses against FBS opponents set a negative tone for the remainder of the season, or perhaps a valuable player did suffer an injury in one of these games and lost significant playing time. The research would be valuable to gain insight from coaches who may feel like they were never given a chance to succeed because of poor scheduling practices. Coaches may offer a completely different view of guarantee games unrelated to injuries, but how they can impact a coach’s career.

Typically if a head coaches loses a job, all the assistant coaches on the staff lose theirs as well. When one considers how many coaches, spouses, and children are potentially affected by one decision to fire a coach, the havoc and drastic changes a family goes through

could be extraordinary. A study from the perspective of spouses and children could offer a tremendously unique story.

This is the first study that has looked at the practice of playing guarantee games from the perspective of the professionals who see the injuries, treat the injuries, work hard to prevent future injuries, and can offer rich, descriptive narratives as to their experiences in the field. It is hoped that this research can help clarify the injury statements made by sports writers and sports media personalities without supportive factual data. While more research on this subject can be expanded to include the comments of former and current student-athletes playing the games, this study can serve the academic community by providing a baseline, or foundation to build upon.

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## Appendices

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## **Appendix A**

### **Initial Recruitment Email**

Dear Football Championship Subdivision Athletic Trainer,

My name is Daniel E. Ballou. I am doctoral student at the University of New Mexico in the Sport Administration program. I am in the process of completing my dissertation titled “TO WHAT EXTENT IS THE SAFETY OF COLLEGE FOOTBALL STUDENT-ATHLETES COMPROMISED BY PLAYING GUARANTEE GAMES AGAINST SUPERIOR OPPONENTS?”

As an FCS Football Athletic Trainer, you have been chosen to participate in this study if you are willing and able. The study will consist of a telephone recorded interview. Based on pilot testing the interview takes between 30 and 45 minutes. The questions are open-ended and are asked so that the researcher may obtain the perspective of athletic trainers regarding experience and evaluation of your student-athletes. You qualify for the study because football schedules since 2006 show that your school has played against opponents who are members of the Football Bowl Subdivision.

The principal investigator in this study is Dr. Todd Seidler, Department Chair for the Sport Administration program at the University of New Mexico. Dr. Seidler is also my dissertation committee chairperson.

Know that if you agree to participate in this study, your name and university will remain completely anonymous. You and the university will be provided pseudonyms and will only be referenced that way. You are also free to withdraw from the study at any time with no consequences and any information obtained from you at the time of withdrawal will be destroyed.

You will not be asked any questions related to specific injuries, nor will you be asked questions related to a specific opponent. This qualitative study will be based on gathering information based on your experience treating and evaluating injuries.

It is my hope that you are willing to participate in the study and that you will find the information gathered from you and your colleagues of benefit.

If you choose to participate, the interviews will be set around your schedule and they will not interfere with your work day. Again, test interviews have shown that the interviews take between 30 and 45 minutes to complete.

Please respond via email to [dballou@unm.edu](mailto:dballou@unm.edu) if you are able to participate in the study. I can also be reached via phone at 505-270-6010. Dr. Seidler can be reached via email at [tseidler@unm.edu](mailto:tseidler@unm.edu) and via telephone at 505-277-2783.

Thank you very much for your consideration.

**Appendix B**  
**Consent Form**

Dear Football Championship Subdivision Athletic Trainer:

You are invited to participate in a dissertation research study conducted by Daniel E. Ballou, PhD candidate from the University of New Mexico Sport Administration Department. The goal of this study is to determine if football athletic trainers at Football Championship Subdivision schools report a higher rate of injury when FCS games are played against teams from the Football Bowl Subdivision (FBS). You were selected as a possible participant in this study because you work with FCS football student-athletes to prevent injuries, and you treat injuries once they occur.

If you decide to participate you will be involved in a telephone interview and the interview will be recorded. Initially, you will be contacted via email to determine if you are willing to participate in the study. Once you are willing to partake in the study, a pre-determined interview time will be arranged. You will receive a phone call from the researcher and you will be given notice as to when the recording starts.

It is the hope of the researcher to determine if FCS vs. FBS college football games result in higher rates of injury to FCS football student-athletes. If that is the case, this research could potentially benefit those football student-athletes at FCS school. However, I cannot guarantee that you personally will receive any benefits from this research. You will not be financially compensated for your time in doing this interview.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Subject identities will be kept confidential by having you select a name and university that are fictitious

Your participation is voluntary. Your decision whether or not to participate will not affect your relationship with the University of New Mexico's Sport Administration Department. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time.

If you have any questions, please feel free to contact me at 505-270-6010 or via email at [dballou@unm.edu](mailto:dballou@unm.edu). The mailing address is Daniel E. Ballou, 909 Tijeras Avenue NW, #318, Albuquerque, NM 87102.

The Principal Investigator for this study is Dr. Todd Seidler, Dissertation Committee Chair and Department Chair, Sport Administration Department, University of New Mexico. Dr. Seidler's phone number is 505-277-2783, and his email is [tseidler@unm.edu](mailto:tseidler@unm.edu).

If you have questions regarding your rights as a research subject, please contact the University of New Mexico Institutional Research Board. The Institutional Review Board can be reached at 505-277-2644, or at [irbmaincampus@unm.edu](mailto:irbmaincampus@unm.edu), irb.unm.edu.

You will be given a copy of this form to keep in your records.

Your signature indicates that you have read and understand the information provided above, that you are 18 years of age or older, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, that you have received a copy of this form, and that you are not waiving any legal claims, rights or remedies.

During the transcription phase of the study, any recordings will be kept secure in a locked file cabinet at the researcher's office.

Please also note that after transcription of recorded interviews, all recordings will be destroyed in order to further insure privacy and anonymity.

**Print Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Investigator:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

## Appendix C

### IRB Approvals

From: Cecilia Brooke Cholka <[no-reply@irbnet.org](mailto:no-reply@irbnet.org)>  
Sent: Wednesday, October 15, 2014 7:39 PM  
To: Daniel Ballou; Todd Seidler  
Subject: IRBNet Board Action

Please note that University of New Mexico (UNM) IRB Main Campus has taken the following action on IRBNet:

Project Title: [607717-1] TO WHAT EXTENT IS THE SAFETY OF COLLEGE FOOTBALL STUDENT-ATHLETES COMPROMISED BY PLAYING GUARANTEE GAMES AGAINST SUPERIOR OPPONENTS?

Principal Investigator: Todd Seidler, PhD

Submission Type: New Project  
Date Submitted: August 19, 2014

Action: APPROVED  
Effective Date: October 2, 2014  
Review Type: Expedited Review

Should you have any questions you may contact Cecilia Brooke Cholka at [cbcholka@unm.edu](mailto:cbcholka@unm.edu).

Thank you,  
The IRBNet Support Team

[www.irbnet.org](http://www.irbnet.org)

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From: Cecilia Brooke Cholka <[no-reply@irbnet.org](mailto:no-reply@irbnet.org)>  
Sent: Wednesday, October 15, 2014 7:47 PM  
To: Daniel Ballou; Todd Seidler  
Subject: IRBNet Board Document Published

Please note that University of New Mexico (UNM) IRB Main Campus has published the following Board Document on IRBNet:

Project Title: [607717-1] TO WHAT EXTENT IS THE SAFETY OF COLLEGE FOOTBALL STUDENT-ATHLETES COMPROMISED BY PLAYING GUARANTEE GAMES AGAINST SUPERIOR OPPONENTS?  
Principal Investigator: Todd Seidler, PhD

Submission Type: New Project  
Date Submitted: August 19, 2014

Document Type: Approval Letter  
Document Description: Approval Letter  
Publish Date: October 15, 2014

Should you have any questions you may contact Cecilia Brooke Cholka at [cbcholka@unm.edu](mailto:cbcholka@unm.edu).

Thank you,  
The IRBNet Support Team

[www.irbnet.org](http://www.irbnet.org)

Please note that University of New Mexico (UNM) IRB Main Campus has published the following Board Document on IRBNet:

Project Title: [607717-1] TO WHAT EXTENT IS THE SAFETY OF COLLEGE FOOTBALL STUDENT-ATHLETES COMPROMISED BY PLAYING GUARANTEE GAMES AGAINST SUPERIOR OPPONENTS?

Principal Investigator: Todd Seidler, PhD

Submission Type: New Project

Date Submitted: August 19, 2014

Document Type: Stamped Document

Document Description:

Publish Date: October 15, 2014

Should you have any questions you may contact Cecilia Brooke Cholka at [cbcholka@unm.edu](mailto:cbcholka@unm.edu).

Thank you,  
The IRBNet Support Team

[www.irbnet.org](http://www.irbnet.org)

## Appendix D

### Athletic Trainer Interview Questions

1. As an athletics industry professional, what are your thoughts on member schools from the Football Championship Subdivision playing games against member schools of the Football Bowl Subdivision?
  - a. My thoughts are that this question will bring the guarantee dollars into play, and with that I would follow up with:
2. You mentioned the money that can be captured by FCS schools, in your role as an athletic trainer do you see any signs of that money being used to help the athletic training department at your school?
3. From a standpoint purely related to safety of football student-athletes, how would you describe the overall health and the most common type of injuries to your football team after competing against a member school of the Football Bowl Subdivision?
4. In your experience following these games, have you observed an increase in injuries that would be described as season ending when compared to games contested against fellow FCS opponents?
5. In your experience following these games, have you observed an increase in injuries that would be described as career ending when compared to games contested against fellow FCS opponents?
6. In your experience following these games, have you observed an increase in injuries that would be described as catastrophic (life altering) when compared to games contested against fellow FCS opponents?
7. In your experience related to guarantee games, have you observed an increase in injuries of all types when your FCS team plays multiple FBS opponents in the same season?
8. In your experience related to guarantee games, have you observed an increase in injuries of all types when your FCS team plays FBS opponents in consecutive weeks?
9. In your experience related to guarantee games, does the date of the game affect all types of injuries that you may have observed?
10. Is there anything else you would like to add to this interview related to FCS schools playing FBS member schools?

Other potential topics for discussion based on responses to original questions:

1. Self-esteem of individual student-athletes
2. Overall sense of demoralization in the locker room
3. Sensing fear from student-athletes prior to FBS games
4. Realness of injuries prior to and during FBS games?