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## A Description and Comparison of the Perceptions of NCAA Division II and Division III College Presidents regarding the Impacts of Intercollegiate Athletics at their Institutions

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A Description and Comparison of the Perceptions of NCAA Division II  
and Division III College Presidents regarding the Impacts of  
Intercollegiate Athletics at their Institutions

Aaron C. Huffman

Dissertation submitted to the  
College of Education and Human Services  
at West Virginia University  
in partial fulfillment of the requirements  
for the degree of

Doctor of Education  
in  
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Morgantown, West Virginia  
2013

Keywords: College President, Intercollegiate Athletics, Higher Education,  
National Collegiate Athletic Association, NCAA, Division II, Division III

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## Abstract

### A Description and Comparison of the Perceptions of NCAA Division II and Division III College Presidents regarding the Impacts of Intercollegiate Athletics at their Institutions

Aaron C. Huffman

The purpose of this study was to describe and compare the perceptions of NCAA Division II and NCAA Division III college and university presidents regarding the impacts of intercollegiate athletics at their institutions. The data were collected with an anonymous online survey instrument developed by the researcher and sent via email using *SurveyMonkey*. The survey included Likert-type items that were divided into four subscales constructed from phenomena that were gleaned from the literature: (1) Financial Impact subscale, (2) Enrollment Impact subscale, (3) Marketing Impact subscale, and (4) Student Impact subscale.

The survey was emailed to the entire population of all NCAA Division II and NCAA Division III college and university presidents (N=760). When data collection was complete, 323 responses (42.5%) were determined to be usable—147 NCAA Division II responses and 176 NCAA Division III responses. Four separate independent samples t-tests were used to compare the presidents' perceptions regarding the impacts of athletics on each of the four subscales.

The t-tests revealed that statistically significant differences do not exist between the two groups on the Financial Impact subscale and the Student Impact subscale, but a statistically significant difference between the two groups does exist for both the Enrollment Impact subscale ( $p=.014$ ) and for the Marketing Impact subscale ( $p<.001$ ).

Descriptive statistics revealed that both the NCAA Division II presidents and the NCAA Division III presidents perceive that intercollegiate athletics impacts their institutions positively. The items from each subscale to which the presidents responded most strongly are also reported. Descriptive statistics also revealed that the presidents' perceptions do not always align with the literature regarding athletics in higher education. Finally, descriptive statistics revealed that the NCAA Division III presidents' perceptions are more divided regarding these issues than the NCAA Division II presidents. Implications for practice and future research are provided.

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## **Chapter One: Introduction and Statement of the Problem**

Colleges and universities are unique institutions that face complex challenges. They exist in an increasingly competitive environment that produces winners and losers. They face the ongoing and cyclical challenge of spending revenue to fulfill their missions while simultaneously generating revenue to finance those expenditures. In this way, the decisions made at most colleges and universities are based on the perceived impact of the decision on significant aspects of the institution such as students, finance, enrollment, and marketing (Weisbrod, Ballou, & Asch, 2008).

Although decisions in higher education are made by various institutional administrators, presidents are the primary leaders of colleges and universities. As the chief executive officers of their institutions, they are the key decision-makers. They wear many hats and are trusted with the leadership, strategy, financing, and compliance of their institutions (Eckel & Kezar, 2011). They spend their time fundraising, budgeting, building community relations, and strategic planning (ACE, 2012). According to Fisher, Tack, and Wheeler (1988), “the position of campus president is arguably the toughest job in America, as well as one of the most important” (p. 112).

One of the components of their institutions for which presidents are responsible and for which their decisions are often scrutinized is intercollegiate athletics (Duderstadt, 2000; Estler & Nelson, 2005). Intercollegiate athletics is deeply embedded in the culture of most colleges and universities (Chu, 1989; Duderstadt, 2000). “From its humble student-controlled beginnings, college sports in the United States has grown into a central place in higher education” (Chu, 1989, p. 7). Athletics impacts nearly every aspect of higher education, including students, finances, enrollments, and marketing (Getz & Siegfried, 2012). However, the manner in which intercollegiate athletics impacts these areas is disputed. Pope & Pope (2009) explain that “since

the beginning of intercollegiate sports, the role of athletics within higher education has been a topic of heated debate” (p. 750). Moreover, even the scholarly research regarding the impacts of college athletics is contradicting (Getz & Siegfried, 2012). Thus, intercollegiate athletics represents an area of higher education in which decisions are complex and answers are not obvious. As a result, Estler and Nelson (2005) point out that many presidents are “caught in the dilemmas presented by athletics decision-making” (p. 6). Because of this, it is important to understand what college presidents think about the impacts of athletics at their institutions. This includes how presidents perceive that athletics impacts the students, finances, enrollments, and marketing on their campuses.

### **Statement of the Problem**

The problem is that little is known about what college and university presidents think about the impacts of intercollegiate athletics on their campuses. This is especially the case for presidents of small to mid-sized colleges and universities—many of which belong to the National Collegiate Athletic Association (NCAA) Division II and Division III (Schuman, 2005). There are three primary reasons for this. First, there is an overall “disproportionate lack of higher education research on intercollegiate athletics” (Hirko, 2008, p. 14). Second, the vast majority of existing higher education research on intercollegiate athletics is narrowly focused on “big time” NCAA Division I institutions (Baucom & Lantz, 2001; Coakley, 2008; Easter, 1997, p. 3; Emerson, Brooks, & McKenzie, 2009; Nite, 2012; Robst & Keil, 2000) which generally contain the largest institutions and budgets, the highest paid coaches, the finest facilities, the most commercialism, and the most scandal (Clotfelter, 2011; Thelin, 1994; Tsitsos & Nixon, 2012; Weisbrod et al., 2008, pp. 218-277; Zimbalist, 1999). Despite the fact that 69% of NCAA institutions and 62% of NCAA student-athletes are affiliated with the Division II and Division III

levels (NCAA, 2010), only limited inquiries have been made for the study of Division II and Division III athletics (Bandré, 2011; Baucom & Lantz, 2001; Coakley, 2008; Easter, 1997, p. 3; Emerson et al., 2009; Feezell, 2009; Nite, 2012; Robst & Keil, 2000). Third, most of the investigations of perceptions of college presidents involve presidents' perceptions about what is right, wrong, or needs to be reformed about intercollegiate athletics (Branch, Watson, & Lubker, 2008; Knight Commission, 2009; Planek, 2008; Rose, 1993) rather than what presidents think about the impacts of athletics at their institutions.

Specifically, there is almost nothing known about what NCAA Division II and Division III college presidents think about the impacts of intercollegiate athletics. This is an important literature gap to fill because the 760 Division II and Division III institutions expend about 3% to 7% of their overall institutional budgets on intercollegiate athletics. This amounts to about \$2 million to \$4 million per institution yearly (Fulks, 2012b, 2012c). Also, because these schools annually spend about \$5,100 to \$14,500 per athlete on athletic expenditures (Fulks, 2012b, 2012c), it is important to learn what presidents think about the impacts of this investment. This is especially important today as higher education leaders are under increased scrutiny and pressure to keep costs down and be more accountable with finances (Field, 2013).

Moreover, because there are various financial, demographic, and operational differences between NCAA Division II and NCAA Division III institutions, it is important to compare the perceptions of Division II presidents with the perceptions of Division III presidents regarding the impacts of intercollegiate athletics at their institutions. Division II institutions are generally larger and spend more on athletics than Division III institutions (Fulks, 2012b, 2012c; NCAA, 2011, 2012g). Also, NCAA rules permit Division II institutions to award athletic scholarships while they prohibit Division III schools from doing so (NCAA, 2012l, 2012m). Division III

institutions are more likely to be private and contain higher percentages of student-athletes on their campuses (NCAA, 2011, 2012g). Administrative reporting structures also differ between the divisions in that Division II athletic directors usually report directly to their presidents while the most prevalent direct report for Division III athletic directors is a student affairs vice president (Sanders, 2004). Division II rules permit longer sports seasons and more off-season sport-related demands on student-athletes while Division III rules are designed for greater accommodation of academics by reducing potential conflicts between athletics and academics (Covell & Barr, 2010, pp. 35-36; NCAA, 2012l, 2012m)..

Despite these and other differences between NCAA Division II and NCAA Division III institutions, only Garrett (1985) has performed research on presidents' perceptions of athletics that distinguishes and compares the perceptions of NCAA Division II presidents and NCAA Division III presidents. His low sample size of 22 Division II presidents and 16 Division III presidents found very little significant differences between the perceptions of Division II and Division III presidents toward the values of athletics. Therefore, almost nothing is known about how the perceptions of Division II presidents and Division III presidents differ regarding the impacts of athletics at their institutions.

### **Purpose of the Study**

The purpose of this research study was to describe and compare how NCAA Division II and NCAA Division III college presidents perceive the impacts of intercollegiate athletics at their institutions. Specifically, this study investigated and compared how the presidents perceive that intercollegiate athletics impacts the students, finances, enrollments, and marketing at their institutions.

## Research Questions

This research study was guided by the following four research questions (RQs):

RQ1: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the financial impacts of intercollegiate athletics at their institutions?

RQ2: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the enrollment impacts of intercollegiate athletics at their institutions?

RQ3: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the marketing impacts of intercollegiate athletics at their institutions?

RQ4: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the student impacts of intercollegiate athletics at their institutions?

Each of the four research questions was addressed with quantitative null hypothesis testing using an independent samples t-test (Agresti & Finlay, 2009; Field, 2009). The four t-tests analyzed and compared the presidents' perceptions regarding the impacts of athletics on four overall areas of higher education gleaned from the literature: (1) financial impact, (2) enrollment impact, (3) marketing impact, (4) student impact. To measure the presidents' perceptions, an anonymous internet survey (Dillman, Smyth, & Christian, 2009) was created by the researcher, including 26 randomized Likert-type items gleaned from the literature. The survey was sent to the entire population of college and university presidents of NCAA Division

II and NCAA Division III institutions (N=760). Thus, the attempt was made to study the entire population.

### **Significance of the Study**

The various impacts of intercollegiate athletics in higher education are very debated and disputed. Even the empirical evidence is contradicting regarding the impacts of athletics on finances, enrollments, marketing, and students in higher education. For every study that shows a positive effect, another shows no effect. For every scholar that makes a conclusion, another offers a rebuttal. Thus, because the impacts of athletics are so ambiguous and debated, it is important to know what the primary decision-makers think regarding the impacts of intercollegiate athletics at their institutions. This is especially important considering the substantial investments that many institutions make in their intercollegiate athletic programs (Fulks, 2012b, 2012c). As state funding for public higher education continues to decrease (Kelderman, 2012; Vedder, 2012) and as many private colleges struggle with financial resources, more and more stakeholders want to know how funds are being allocated as well as the impacts that these funds have upon the institutions. Because of this, the results of this study could be used to inform institutional decisions or NCAA policy in the future.

Furthermore, this study fills a gap in the higher education literature on intercollegiate athletics. It is unique because it investigates an understudied group of institutions and leaders—NCAA Division II and Division III college and university presidents. It is also unique because, unlike most other athletic research involving college presidents, this study investigated the presidents' perceptions of the impacts of athletics at their institutions rather than inquiring about athletic reform. Although multiple anecdotal reports of presidential opinion exist regarding intercollegiate athletics, this study is the first to systematically quantify the perceptions of NCAA

Division II and NCAA Division III presidents regarding the impacts of college athletics. In this way, learning about what the primary leaders of these small to mid-sized institutions think about the impacts of athletics contributes to the higher education literature on intercollegiate athletics and also informs future research.

In addition, because there are several distinguishable differences between NCAA Division II and NCAA Division III, comparing the perceptions of NCAA Division II and Division III presidents is useful to guide institutional priorities, division-specific priorities, or NCAA divisional membership decisions. Thus, the Division II and Division III comparisons contribute to filling a need observed by Coakley (2008) for research that can make “decision makers at Division III institutions confident about staying where they are or [about] making a move to Division II” (p. 23). Also, the perceptions of college presidents “may be helpful to institutional leaders exploring the possibility of initiating, expanding, or terminating intercollegiate athletic programs” (Williams & Pennington, 2006, p. 95). In short, presidents can benefit from learning about the opinions of their fellow Division II and Division III presidents and any differences that exist between them.

### **Terms and Concepts**

Although defined more extensively throughout this document, the following list provides a concise and convenient alphabetized summary of some important terms and concepts of this study:

- Academic clustering – “the grouping or clustering of a disproportionate percentage of athletes into selected [academically less challenging] majors when compared to the overall university percentage in the same major” (Case, Greer, & Brown, 1987, p. 48).

- Applicant pool – the group of all prospective students who have applied for admission to a specific college or university.
- Athletic Director – (or Director of Athletics and AD are interchangeable) – administrative position within a college or university that is usually delegated the vast majority of responsibility for the leadership, management, and oversight of the athletic department. The position reports either directly to the president or to another institutional administrator such as a vice president or dean.
- Athletic scholarship – any amount of scholarship, financial award, or financial aid that is “based in any degree upon athletics ability” (NCAA, 2012l, p. 153) or considers “athletic leadership, ability, participation, or performance as a criterion” (NCAA, 2012m, p. 110).
- Athletic subculture – (or “athletic divide” (Bowen & Levin, 2003) is interchangeable) – the notion that athletes socially self-isolate from the rest of the student body and in doing so, form their own “subculture” that may be out of alignment with the institutional mission and can negatively affect academic performance (Shulman & Bowen, 2001).
- “Crowding out” – the notion that fundraising for athletics takes away from fundraising for the overall general fund of the institution.
- Direct financial impacts – financial impacts of athletics that appear directly on financial reports such as revenue from ticket sales, television contracts, logo royalties, guarantees, bowl game pay-outs, NCAA tournament pay-outs, and corporate sponsorships as well as expenses from salaries, athletic scholarships, team travel, recruiting, equipment, supplies, medicine, administrative, and capital expenditures.
- Diversity – the degree to which the student body is comprised of students from differing socioeconomic backgrounds, races, cultures, ethnicities, sexes, and countries.



- Enrollment management – an institutional effort to control and enhance the size (quantity) and characteristics (quality and diversity) of the student body through recruiting, marketing, retention, pricing, and financial aid.
- “Flutie Factor” – a marketing or branding effect in which an institution is able to use its athletic success and athletic visibility to bring about an increase in the number of admission applications.
- “Front door” – (or “front porch” is interchangeable) – a metaphor in which a higher education institution is analogous to a house while the institution’s athletic department is analogous to the house’s front door. In this way, the front door is the most visible part of the house from which people make judgments about what is inside the house. Thus, the metaphor supports the notion that many people make judgments about the overall quality of a college or university based on what they see as the quality of its athletic programs (Toma & Cross, 1998).
- Full athletic scholarship – an athletic scholarship that covers all college expenses for a student-athlete—including tuition, mandatory fees, room, board, and books.
- Indirect financial impacts – financial impacts of athletics that do not directly appear on financial reports, but nonetheless will ultimately affect an institution’s finances. Examples are advertising, public relations, and marketing that can enhance enrollment, fundraising, and donations.
- Intercollegiate athletics – (or college athletics, athletics, athletic programs, intercollegiate sports, and college sports are interchangeable) – amateur athletics or sports in which teams and individuals from different colleges or universities compete against each other

while the rules and eligibility of the participating students is governed by a national athletic body—such as the NCAA.

- NCAA – (National Collegiate Athletic Association) – the largest and most prominent national governing body of intercollegiate athletics for four-year colleges and universities. Comprised of three overall competitive divisions—Division I, Division II, and Division III.
- NCAA Division I – the highest competitive level of the NCAA. The “big-time” level that generally contains the largest institutions and budgets, the highest paid coaches, the finest facilities, the most commercialism, the most athletic scholarships, and the most scandal. Is divided into three subdivisions—FBS, FCS, and No Football Subdivision.
- NCAA Division I-FBS – (Football Bowl Subdivision) – highest competitive subdivision of NCAA Division I in which a postseason system of bowl games is used to determine its national football champion rather than a traditional postseason tournament. Formerly known as—and often still referred to as—Division I-A.
- NCAA Division I-FCS – (Football Championship Subdivision) – subdivision of NCAA Division I that determines its national football champion with a postseason championship elimination tournament rather than a system of bowl games. Formerly known as—and often still referred to as—Division I-AA.
- NCAA Division I-No Football Subdivision – subdivision of NCAA Division I in which the institutions do not compete in the intercollegiate sport of football.
- NCAA Division II – considered the “intermediate-level division of competition” (NCAA, 2012c, para. 1) of the NCAA because many Division II student-athletes receive partial athletic scholarships to help pay for their college expenses and a few receive full athletic

scholarships that cover all of their college expenses. About half of Division II institutions are private and the average undergraduate enrollment is 4,236. Division II institutions spend about \$4 million (5% to 7% of their overall budgets) per year on athletics which amounts to about \$12,400 to \$14,500 per athlete.

- NCAA Division III – the lowest division of competition of the NCAA because (1) athletic scholarships are not permissible, (2) very little off-season activities are permissible, and (3) the athletic seasons are the shortest of the three divisions. The vast majority of Division III institutions are private and the average undergraduate enrollment is 2,625. Division III institutions spend about \$2 million (3% to 4% of their overall budgets) per year on athletics which amounts to about \$5,100 to \$5,600 per athlete.
- Non-athlete student – a college or university student that is not participating in intercollegiate athletics and is not a member of one of the institution's intercollegiate athletic teams.
- Non-athletic scholarship – a scholarship that is not based in any way on “athletic leadership, ability, participation, or performance” (NCAA, 2012m, p. 110).
- Partial athletic scholarship – an athletic scholarship that covers a portion of the full cost of college, leaving the student-athlete to finance the remaining college costs through other sources.
- President – (or college president, university president, and chancellor are interchangeable) – the primary leader and chief executive officer (CEO) of an American college or university. Usually reports to some type of board—a board of trustees, a board of regents, or a board of governors.

- Prospective student – someone with a realistic interest, expectation, potential, or possibility of becoming a college or university student in the near future.
- Responding presidents – the survey respondents of this study; the college/university presidents and chancellors who responded to the survey for this study and thus are the participants of this study (see Chapter Four).
- Retention – the rate at which current students at a college or university persist or are retained by continuing their enrollment at the same institution from one year to the next or from one term to the next.
- Student-athlete – a college or university student that is participating in intercollegiate athletics and is a member of one of the institution's intercollegiate athletic teams.
- Student body – refers to all students in attendance at a specific college or university.
- Student development – “the ways that a student grows, progresses, or increases his or her developmental capabilities as a result of enrollment in an institution of higher education” (Rodgers, 1990, p. 27)—including personal, cognitive, intellectual, social, moral, ethical, psychosocial, physical, leadership, and communication development as well as any other that may enhance the student's quality of life beyond college.
- Student quality – a characteristic of enrollment management that usually refers to the academic quality of students as measured by SAT scores, ACT scores, grade point averages, and class ranks.
- Student quantity – a characteristic of enrollment management referring to the number or headcount of students within an applicant pool or within a student body.

### **Organization of the Study**

This dissertation is organized into five chapters. The research study begins in Chapter One and provides an introduction of the topic, the statement of the problem, the purpose of the study, the four research questions, the significance of the study, a list of important terms, and the overall organization of the study. Chapter Two is an extensive review of the most relevant literature pertaining to (1) the differences between NCAA Division II and NCAA Division III institutions, (2) the impacts of intercollegiate athletics in higher education, and (3) college presidents and their relationships with intercollegiate athletics in higher education. Chapter Three describes the research design and method that was employed in the study, including a description and justification of the instrument, data collection procedures, statistical analyses, and limitations of the study. Chapter Four presents the results and analyses of the data collected from the respondents. The research questions are addressed and descriptive data are also provided. Chapter Five discusses the conclusions, relates those conclusions to previous research, provides implications for practice, and provides implications for future research.

## **Chapter Two: Review of Literature**

### **NCAA Divisions**

There are various national governing bodies for athletics in higher education—both for two-year colleges and four-year colleges. For four-year institutions, the primary associations are the National Collegiate Athletic Association (NCAA), the National Association for Intercollegiate Athletics (NAIA), the National Christian College Athletic Association (NCCAA), and the United States Collegiate Athletic Association (USCAA) (Staurowsky & Abney, 2010; USCAA, 2012). By far the largest and most prominent national governing body of intercollegiate athletics for four-year colleges and universities is the NCAA (Covell & Barr, 2010; Ridpath & Abney, 2012; Staurowsky & Abney, 2010).

The NCAA was founded in 1906 with 28 charter institutions (Crowley, 2006; Falla, 1981). Since then, it has grown to a size of 1,079 full active members (NCAA, 2012b, 2012c, 2012d). The mission of the NCAA is “to govern competition in a fair, safe, equitable sportsmanlike manner, and to integrate intercollegiate athletics into higher education so that the educational experience of the student-athlete is paramount” (NCAA, 2012n, p. 9). Since 1973, the NCAA has been divided into three divisions—Division I, Division II, and Division III (Crowley, 2006, pp. 88-89; Falla, 1981, p. 181). Divisional classification depends on several factors including the number of sports sponsored, the size of the athletic department budget, home game attendance, seating capacity, and whether or not an institution offers athletics scholarships (Covell & Barr, 2010, pp. 50-52, 98-100; Ridpath & Abney, 2012; Staurowsky & Abney, 2010). The NCAA’s largest division is Division III with 442 members, comprising 41% of NCAA institutions. NCAA Division I is the second-largest division with 335 members,

comprising 31% of NCAA institutions. Finally, Division II is the smallest division with 302 institutions, comprising 28% of NCAA members (NCAA, 2011, 2012g).

**NCAA Division I.** There are 335 Division I member institutions. They are typically very large and include many giant state land-grant and flagship institutions. The average undergraduate enrollment is about 11,500 (NCAA, 2010). A total of 171,575 student-athletes participate at this level—which is 38% of all NCAA student-athletes (NCAA, 2011). Division I is broken down into three subdivisions—Division I-Football Bowl Subdivision (Division I-FBS), Division I-Football Championship Subdivision (Division I-FCS), and Division I-No Football. At this level, the vast majority of athletic directors report directly to their presidents (Duderstadt, 2000; Sanders, 2004)

***Division I-Football Bowl Subdivision (FBS).*** The highest competitive subdivision of NCAA Division I is the Football Bowl Subdivision (FBS). The FBS was formerly known as—and is often still referred to as—Division I-A. This subdivision is called the Football Bowl Subdivision because a postseason system of bowl games is used to determine its national football champion rather than a traditional postseason tournament. The financial payouts for institutions whose football teams appear in bowl games are gigantic. Because of this, FBS institutions tend to invest heavily in their athletic programs, hoping to increase their football success to levels that might land an appearance in a football bowl game (Clotfelter, 2011). Division I-FBS institutions typically have the largest student enrollments, the largest crowds, the most well-known athletes, the highest paid coaches, the most lavish facilities, and the largest football stadiums. The athletic expenses at this level are staggering as the median amount spent per athlete is \$97,000 per year (Fulks, 2012a). But, the millions of dollars in revenue from ticket sales, bowl game payouts, television contracts, and logo licensing are equally impressive. For example, the two institutions

that participated in the 2010 Fiesta Bowl each received a \$17 million payout to share with the other members of their respective athletic conferences (Clotfelter, 2011, p. 86). There are 120 member institutions within Division I-FBS and the median number of student-athletes at these institutions is 616 (Fulks, 2012a).

***Division I-Football Championship Subdivision (FCS).*** The second subdivision of NCAA Division I contains 118 institutions and is called Division I-Football Championship Subdivision (Division I-FCS). Formerly known as Division I-AA, it is called the Football Championship Subdivision because unlike the FBS, the FCS determines its national champion with a postseason championship elimination tournament. At this level, institutions are typically large, but not as giant as the Division I-FBS division. Also, without the lure of giant financial payouts from bowls as in the FBS division, institutions within the FCS do not generate nearly as much revenue, have smaller crowds, and have less expenditures than FBS institutions. However, operating a FCS athletic department is still very expensive as the median athletic expense per athlete is \$35,000 per year (Fulks, 2012a). FCS institutions have a median of 505 athletes at each institution.

***Division I-No Football subdivision.*** The third subdivision of NCAA Division I is called Division I-No Football and it contains 97 members. Institutions belonging to this subdivision do not compete in the sport of football. The median Division I-No Football institution has 356 student-athletes and is also very costly to operate with a median of \$41,000 per athlete per year of athletic expenses (Fulks, 2012a).

**NCAA Division II and Division III.** NCAA Division II and Division III are vastly different than Division I. There are no bowl game payouts. The institutions are usually much smaller and the lengths of the competitive seasons are shorter (Covell & Barr, 2011, pp. 35-36).



There is drastically less ticket revenue and almost no corporate sponsorships. There are comparatively small numbers of spectators and many Division III institutions do not even charge for admission to athletic events (Bandré, 2011). Television coverage usually requires the member institutions to find sponsors to pay for television time in order to put games on the air. Also, while the focus of Division I athletics is on entertainment and the spectator experience, Division II and Division III athletics focuses more on incorporating athletics and sport participation experiences into the overall college environment (Bandré, 2011; Lee & Bang, 2011; Staurowsky & Abney, 2011; Watt & Moore, 2001). In this way, Division II and Division III student-athletes usually participate for the love of their sports and they value the way athletic participation enhances their college experience. They usually compete in front of small crowds comprised of family and friends while often traveling to away competitions in vans (Kuska, 2008; Moore, 2000).

Reflecting this, the positioning statements of NCAA Division II and Division III are very similar. The Division II positioning statement is titled "Life in the Balance" (NCAA, 2012q).

According to the statement,

Higher education has lasting importance on an individual's future success. For this reason, the emphasis for the student-athlete experience in Division II is a comprehensive program of learning and development in a personal setting. The Division II approach provides growth opportunities through academic achievement, learning in high-level athletic competition and development of positive societal attitudes in service to the community. The balance and integration of these different areas of learning provide Division II student-athletes a path to graduation while cultivating a variety of skills and knowledge for life ahead. (NCAA, 2012q, p. 20)

The Division III positioning statement is titled “Follow your passions and discover your potential” (NCAA, 2012n, p. 9). According to this statement,

The college experience is a time of learning and growth—a chance to follow passions and develop potential. For student-athletes in Division III, this happens most importantly in the classroom and through earning an academic degree. The Division III experience provides for passionate participation in a competitive athletics environment, where student-athletes push themselves to excellence and build upon their academic success with new challenges and life skills. Student-athletes are encouraged to pursue the full spectrum of opportunities available to them during their time in college. In this way, Division III provides an integrated environment for student-athletes to take responsibility for their own paths, follow their passions and their potential through a comprehensive educational experience. (NCAA, 2012n, p. 9)

The Division II “Life in the Balance” platform contains six key attributes—learning, service, passion, sportsmanship, resourcefulness, and balance (NCAA, 2012f, 2012q). Similarly, Division III platform utilizes six brand attributes—balance, learning, spirit, character, fair-play, and community (NCAA, 2012n).

The percentage of student-athletes on a Division II or Division III campus is usually much greater than the percentage of student-athletes on a Division I campus. This is partly because Division II and III institutions are often enrollment-driven and thus they may use athletics in much different strategic ways than Division I institutions. Moreover, the amount of research on Division II and III athletics is very limited compared to the quantity of Division I research that exists (Bandré, 2011; Baucom & Lantz, 2001; Easter, 1997, p. 3; Feezell, 2009; Nite, 2012; Robst & Keil, 2000).

*Division II and III differences.* Although NCAA Division II and Division III are similar in many ways, they have several notable differences. First, the most fundamental difference that separates Division II and Division III is the provision against Division III institutions awarding athletic scholarships. It is a violation of NCAA rules for Division III institutions to offer any type of financial aid or scholarship that is based on athletics ability in any way (NCAA, 2012m). Thus, when this rule is followed, Division III athletes receive only need-based financial aid and non-athletics academic scholarships to help pay for college. However, many Division III institutions bend this rule and thereby gain a competitive advantage by offering various leadership scholarships that ostensibly have nothing to do with athletics, but in fact are related to athletic ability (Sander, 2011; Sperber, 1990, p. 103). The NCAA reported that between 2005-06 and 2010-11, 55 Division III institutions—or 13% of Division III—had violated financial aid awarding rules. Also, 38% had financial aid awarding totals suspicious enough to prompt the NCAA to review their financial aid awarding procedures (Brown, 2011b).

At Division II however, athletic scholarships are permitted. Thus, in addition to need-based financial aid and academic scholarships, many Division II athletes also receive partial athletic scholarships and a few receive full athletic scholarships (NCAA, 2012e). Although these scholarships have been found to increase male enrollment, ethnic diversity, geographic diversity, and student volunteerism (Hardwick-Day, 2008), they also represent a significant financial obligation for Division II colleges and universities. Because of this expense, multiple scholars have argued for the end of athletic scholarships altogether (Bok, 2003, p. 135; Bowen & Levin, 2003, pp. 314, 330; Duderstadt, 2000, pp. 279, 295; Gerdy, 1997, pp. 139-141; Sack & Staurowsky, 1998, pp. 129-145; Shulman & Bowen, 2001, pp. 301-302). The median Division

II athletic scholarship award is about \$4,400 for institutions with football and about \$6,000 for institutions without football (Fulks, 2012b).

A second notable difference between Division II and III is enrollment size. Division II institutions are typically larger than Division III institutions, although size differences vary. At Division II, six institutions have enrollments greater than 15,000 and the vast majority range between about 1,500 to 7,000 students. At Division III, the largest institution enrolls 22,097 while the smallest enrolls just 329. Overall, the average Division II institution enrolls 1.6 times more students than the average Division III institution. Specifically, the average Division II enrollment is 4,236 while the average Division III enrollment is 2,625 (NCAA, 2011, 2012g). Third, there is a substantial difference in the control of Division II and Division III institutions. At Division II, 52% of institutions are public and 48% are private. But, at Division III, only 19% are public while 81% are private (NCAA, 2011, 2012g).

Fourth, even though Division II institutions are generally larger than Division III institutions, there are nonetheless more athletes on a typical Division III campus than on a typical Division II campus. That is, more students per campus participate in intercollegiate athletics at Division III than at Division II. Specifically, Division III institutions with football have an average of 511 athletes on their campuses. At these institutions, athletes comprise 24% of the overall student body. Despite their overall larger enrollments, Division II football playing institutions have an average of only 409 athletes per campus, comprising about 10% of the student population. Moreover, at institutions without football, Division III campuses average 271 athletes—about 12% of the student body—while Division II campuses average 251 athletes—about 8% of the student body (Fulks, 2012b, 2012c).

*Financial differences.* Financially, there are several noteworthy differences between Division II and Division III. First, as previously mentioned, Division II schools must fund athletic scholarships whereas Division III institutions do not (Hardwick-Day, 2008). In part because of this, Division II colleges and universities spend about twice as much on athletics as Division III schools. Specifically, Division II yearly athletic expenses are about \$4 million per institution while the median Division III college spends about \$2 million (Fulks, 2012b, 2012c; NCAA, 2010). These expenditures consume about 5% to 7% of total institutional budgets at Division II schools and about 3% to 4% at Division III schools. In addition, each year Division II institutions spend about \$12,400 to \$14,500 per athlete on athletic expenditures while Division III institutions spend only about \$5,100 to \$5,600 per athlete (Fulks, 2012b, 2012c). It is noteworthy that these athletic expenses pale in comparison to those of Division I where institutions spend about \$97,000, \$35,000, and \$41,000 per athlete yearly in the FBS, FCS, and No Football subdivisions, respectively (Fulks, 2012a).

*NCAA revenue allocation differences.* NCAA Division II institutions receive slightly more funding from NCAA revenue allocations than Division III institutions. When the NCAA earns revenues from “big time” Division I television contracts, marketing rights, and championships, it distributes those operating revenues to each NCAA division. The vast majority of this money goes back to Division I where it was originally generated, but Division II and Division III are also guaranteed to receive at least 4.37% and 3.18%, respectively, of the association’s annual general operating revenue (Covell & Barr, 2010, pp. 160-162; NCAA, 2012k, 2012l, 2012m). In 2011-2012, of the NCAA’s \$777 million of general operating revenue, Division II and Division III allocation percentages came to \$35 million and \$25 million, respectively, and were used to pay for their championships, grants, and other initiatives (NCAA,

2012n, 2012o). At Division II, part of this money is assigned to an enhancement fund—from which 75% is distributed to Division II conference offices based on how many sports each conference sponsors and 25% is split equally among Division II active member institutions (NCAA, 2012p). In 2011-2012, Division II assigned \$5.2 million to its enhancement fund—from which each conference office received about \$150,000 and each individual member institution acquired about \$5,500 (NCAA, 2012o).

*Other differences.* Other differences between NCAA Division II and Division III exist between their practice and playing season rules, their member institutions' athletic department mission statements, and the reporting structures of the member institutions. Although the Division II and Division III positioning statements both emphasize the academic growth of their student-athletes (NCAA, 2012n, 2012q), Division III rules are designed for greater accommodation of academics by reducing potential conflicts between athletics and academics. For example, at Division III, the athletic playing seasons are shorter and during the off-season, coaches have much stricter limitations on the time they are permitted to spend with their teams (Covell, 2010, pp. 35-36; NCAA, 2012l, 2012m). According to the NCAA (2012h), "Division III athletics provides a well-rounded collegiate experience that involves a balance of rigorous academics, competitive athletics, and the opportunity to pursue the multitude of other co-curricular and extra-curricular opportunities offered on Division III campuses" (p. 2). The mission statements of Division III institutions' athletic departments also place more emphasis on students' personal development than Division II—albeit not statistically significantly more. Moreover, Division II institutions place statistically significantly more emphasis on public relations and complying with NCAA rules than Division III institutions (Ward & Hux, 2011). Finally, the most common reporting structure for Division II athletic directors is a direct report to

the president while at Division III, a direct report to a vice president or dean of student affairs is most common (Sanders, 2004). Table 1 summarizes the salient differences between NCAA Division II and NCAA Division III.

Table 1

*Differences between NCAA Division II and NCAA Division III*

Characteristic	NCAA Division II	NCAA Division III
Number of active member institutions	302	442
Permissible to award athletic scholarships?	Yes	No
Average undergraduate enrollment	4,236	2,625
Composition of public and private institutions within division	52% public 48% private	19% public 81% private
Average number of athletes per institution	409 (251)	511 (271)
Athletes as a percentage of overall student body	10% (8%)	24% (12%)
Average yearly athletic expenses per institution	\$4 million	\$2 million
Average athletic expenditures as a percentage of the overall institutional budget	7% (5%)	4% (3%)
Average athletic expenditures per athlete	\$14,500 (\$12,400)	\$5,600 (\$5,100)
General lengths of athletic playing seasons	Longer	Shorter
Off-season athletic demands placed on student-athletes	More	Less
Athletic departments' emphasis on public relations	More	Less
Athletic departments' emphasis on rules compliance	More	Less
Most common Athletic Director direct report	President	Student affairs VP
Annual divisional NCAA operating revenue allocation	4.37% \$35 million	3.18% \$25 million

*Note.* The data within the table are from various 2011 and 2012 references cited in the text of Chapter Two. Parentheses ( ) refer to institutions without intercollegiate football.

### **Financial Impacts of Intercollegiate Athletics**

The financial impact of intercollegiate athletics in higher education is typically described in terms of direct and indirect revenue and expenses. Direct revenue sources appear on financial reports and consist of ticket sales, television contracts, logo royalties, guarantees, bowl game pay-outs, NCAA tournament pay-outs, and corporate sponsorships. Typical expenses consist of salaries, athletic scholarships, team travel, recruiting, equipment, supplies, medicine, administrative, and capital expenditures. Indirect revenue does not appear on financial reports, but nonetheless generates money for an institution. They pertain to advertising, public relations, and marketing effects that can enhance enrollment, fundraising, and donations (DeSchrive & Johnson, 2012; Duderstadt, 2000; Frank, 2004; Goff, 2000; Getz & Siegfried, 2012; Sperber, 1990; Weisbrod, Ballou, & Asche, 2008, pp. 218-250; Zimbalist, 1999).

**Direct financial impact.** The direct financial impact of intercollegiate athletics at colleges and universities is disputed among scholars and economists. “Indeed, the most debated question among sports economists with respect to collegiate sports is whether colleges make or lose money on these programs” (Sandy & Sloane, 2004, p. 89). Aggregated financial reports from the NCAA demonstrate that athletics—like most college endeavors—lose money (Fulks, 2012a, 2012b, 2012c). Many scholars agree that intercollegiate athletics is pervasively unprofitable and loses money at every institution at every level except for a small handful of the Division I-FBS institutions (Gerdy, 2000; Grant, Leadley, & Zigmont, 2008; Noll, 1999; Sperber, 1990; Weisbrod et al., 2008; Zimbalist, 1999). Specifically, Zimbalist (1999) explained that “in Division II and III, none generates more revenues than expenses. That is, they all run deficits” (pp. 149-150). Similarly, using aggregated data from the U.S. Department of Education, Office of Postsecondary Education (OPE), Weisbrod et al. (2008) found that the only



Division III sport that does not lose money is men's basketball—showing a negligible average yearly gain of just \$2,157 per school (pp. 223-224). However, accounting practices—such as how institutions specifically report their revenues and expenses—have considerable effects on the way athletics shows profits and deficits (Getz & Siegfried, 2012, p. 352; Weisbrod et al., 2008, pp. 227-228, 240-250). Borland, Goff, and Pulsinelli (1992), Goff (2000), and Skousen and Condie (1988) showed that revenues and expenses typically reported by institutions in aggregate lead to overestimates of expenses and under-estimates of revenues because data are crudely submitted in highly aggregated formats. According to Skousen and Condie (1988), “traditional accounting and reporting methods, even those recommended by the NCAA, do not allow institutions to make a complete analysis” (p. 49). For example, using detailed information from internal university accounts, Borland et al. (1992) found that Western Kentucky University's athletic department actually lost only \$300,000 rather than the widely reported loss of \$1.2 million from aggregated institutional figures. Similarly, Skousen and Condie (1988) showed that Utah State University athletics actually profited \$366,000 as opposed to the \$680,000 of reported losses from aggregate reports.

Furthermore, collegiate athletic administrators have criticized NCAA data-collecting methods, arguing that they fail to include revenue attributable to athletics such as parking, merchandise, and concessions. Also, they argue that athletics should receive fiscal credit for providing students with free admission to home athletic events because athletic events serve as campus entertainment that otherwise would cost the school money to provide (Kelderman, 2008). Goff (2000), Skousen and Condie (1988), and Borland, Goff, and Pulsinelli (1992) assert that the only way to get a true financial analysis is to obtain detailed institutional-level data that

accurately accounts for revenues and expenses that are attributable to athletics but not reported as such on aggregate-level reports. But,

because the data required to make the appropriate adjustments exists only in very detailed university accounts, and gathering it requires intimate knowledge of a university's accounting conventions, arriving at such detailed estimates for a few, or even for one, athletic department is a daunting challenge. (Goff, 2000, p. 88)

Overall, the direct financial impact of athletics varies considerably among NCAA divisions and among individual institutions. For example, the median amount of money that institutions spend per athlete varies greatly from the Division I-FBS level to the NCAA Division III level. The median per athlete expenditures each year are \$97,000, \$35,000, and \$41,000 for the Division I-FBS level, the Division I-FCS level, and the Division I without football level, respectively (Fulks, 2012a). This differs greatly from what institutions spend per athlete at the smaller levels. For example, at Division II, institutions with football spend \$12,400 per athlete and institutions without football spend \$14,500 (Fulks, 2012b). At Division III, institutions with football spend \$5,600 while institutions without football spend \$5,100 per athlete (Fulks, 2012c). Moreover attendance for NCAA Division I football and men's basketball greatly exceeds the combined attendance of the National Football League (NFL) and the National Basketball Association (NBA), generating total ticket revenues comparable to such professional sports leagues (Sandy & Sloane, 2004). Conversely, Division III institutions typically have small numbers of spectators and often do not charge admission to athletic events (Bandré, 2011).

According to Noll (1999), "in Division II and III, sports are relatively low-cost activities. Most schools use part-time coaches, play only nearby competitors and give few athletic scholarships" (p. 26). However, for NCAA Division II institutions that sponsor football, athletic

expenditures are about \$5.1 million yearly and take up about 7% of the overall institutional budget. Division II schools that do not sponsor football cost about \$3.6 million and occupy about 5% of an institution's budget (Fulks, 2012b). Also, in an empirical study of panel data commissioned by the NCAA, Orszag and Orszag (2005b) found that additional athletic spending at NCAA Division II, regardless of sport, results in statistically significant budget losses.

Specifically, they concluded that

On average, each additional operating dollar that a Division II university spends on athletics is associated with between 20 and 60 cents of additional revenue. The implication is that increases in operating spending on athletics within Division II trigger a modest increase in revenue, but the increase in revenue is insufficient to offset the increase cost. As a result, net revenue falls. (Orszag & Orszag, 2005b, p. 4)

At Division III, expenditures for athletics programs with football are \$2.6 million—or about 4% of the overall institutional budget—and expenditures for programs without football are \$1.3 million—or about 3% of an institution's budget (Fulks, 2012c).

The primary financial difference between NCAA Division II and Division III institutions pertains to the awarding of athletic scholarships (Wartell, 2012). While Division III colleges and universities are not permitted to offer scholarships of any kind based on athletic ability (NCAA, 2012m), Division II institutions do offer athletic scholarships (NCAA, 2012l) and thus take on additional expenses not incurred by Division III institutions (Wartell, 2012). Hardwick-Day (2008) found that, excluding athletic scholarship costs, Division II athletic programs actually cost less to operate than Division III athletic programs because of the higher revenues generated at the Division II level. Specifically, each year Division II institutions with football award about \$4,400 per athlete on athletic scholarships and about \$6,000 per athlete at institutions without

football (Fulks, 2012b). Several scholars have proposed that athletic scholarships should be eliminated (Bok, 2003, p. 135; Bowen & Levin, 2003, pp. 314, 330; Duderstadt, 2000, pp. 279, 295; Gerdy, 1997, pp. 139-141; Sack & Staurowsky, 1998, pp. 129-145; Shulman & Bowen, 2001, pp. 301-302), especially at Division II where the athletic scholarship expenses are not accompanied by the higher levels of ticket revenue and exposure of Division I (Wartell, 2012). However, at Division II, most athletes actually receive either no athletic scholarship or a partial athletic scholarship (Hardwick-Day, 2008; NCAA, 2012e). In addition, several scholars and economists have pointed out that the actual cost of an athletic scholarship to a college or university is not nearly as much as indicated on financial reports (Borland et al., 1992; Getz & Siegfried, 2012; Goff, 2000; Noll, 1999; Weisbrod et al., 2008, pp. 248-249). Specifically,

if a university is not at its maximum enrollment, the incremental cost of adding scholarship athletes is likely to be significantly less than the full-tuition scholarship that is reflected in the university's books as an accounting cost, because the athletes will fit into existing classes, without hiring additional instructional staff, and will live in housing that may otherwise have stood vacant. Even if a recruited athlete did displace another student, the net average cost of losing that other student may be less than the cost of the athlete. (Getz & Siegfried, 2012, p. 352)

Furthermore, it is noteworthy that athletic scholarships awarded at the NCAA Division II level may enhance other desirable, mission-related aspects of higher education such as academic achievement (Milton, Freeman, & Williamson, 2012), male enrollment, ethnic diversity, geographic diversity, and student volunteer community service (Hardwick-Day, 2008). In summary, due to the complicated nature of financial accounting and reporting practices, the direct financial impacts of athletics at Division II and Division III institutions is unclear.

**Indirect financial impact.** Because indirect revenues and expenses do not directly appear on financial reports, the indirect financial impact of intercollegiate athletics in higher education is even more ambiguous than its direct impact. These effects pertain to how athletics and athletic success create advertising and marketing effects that may ultimately bring revenue to a higher education institution through increased prestige, enrollment, or donations (Frank, 2004; Goff, 2000; Getz & Siegfried, 2012; Sperber, 1990; Weisbrod, Ballou, & Asche, 2008, pp. 218-250; Zimbalist, 1999). Although they do not directly appear on financial reports, they nonetheless can have financial impacts on a college or university. For example, if athletics can produce marketing effects that enhance the reputation of an institution, then this could lead to an enrollment increase which ultimately generates revenue from student tuition and fees. Likewise, if athletics provides sport participation opportunities to prospective college students who want to participate in athletics during college, then tuition revenue could be generated through increases in enrollment. These indirect effects can be significant because revenue generated from student tuition and fees is one of the primary sources of revenue in higher education (Brewer, Gates, & Goldman, 2002, pp. 51-66; Kretovcis, 2011, p. 66-69; Weisbrod, Ballou, & Asch, 2008, p. 77). Furthermore, if athletic successes generate excitement and pride among alumni or boosters, then they might be more motivated to donate which would ultimately lead to increased revenues from the increased donations. Indirect financial effects from athletics have been studied by many researchers, but few conclusions can be reached by examining the preponderance of research. Summarizing the confounding research, Frank (2004) explained that “perhaps the only firm conclusion that can be drawn from a review of the empirical literature on the indirect effects of athletic success is that each of the competing claims regarding these relationships is likely to be true under at least some circumstances” (p. 11).

*Impact of athletics on donations.* One of the most researched aspects of intercollegiate athletics is the purported impact of athletics on donations. According to Weisbrod, Ballou, and Ashe (2008), colleges and universities “depend heavily on donations” (p. 102). Charitable gifts constitute one of the primary sources of revenue for colleges and universities (Brewer et al., 2002; Kretovics, 2011, p. 66) and funded 6.5% of higher education expenditures in 2011 (Council for Aid to Education, 2012). The importance of fundraising in higher education is increasing and has placed pressure on some college administrators—especially presidents, some of whom are now evaluated on their ability to fundraise (Kretovics, 2011, p. 75). The extent to which intercollegiate athletics plays a role in fundraising has been studied by multiple researchers with an array of implications and conflicting results. The research on intercollegiate athletics and fundraising has investigated (1) how athletic participation affects students’ future giving behavior after college, (2) the effects of athletic success (winning) on donations to athletics, (3) the effects athletic success (winning) on donations to academics, and (4) whether donations to athletics take the place of (“crowd out”) donations to academics.

*Effects of athletic participation on giving after college.* The literature demonstrates that participation in intercollegiate athletics has impacts on students that affect their giving behavior after college. For example, the research is fairly agreed that former student-athletes generally contribute more back to their alma maters than former non-athletes (Clotfelter, 2003; Holmes, Meditz, & Sommers, 2008; Monks, 2003; Wunnava & Lauze, 2001). The experience of participating in athletics can generate intense institutional loyalty (Adler & Adler, 1988) and can lead to a higher propensity to give after college. This is especially true at lower NCAA levels, but perhaps not at the high-profile Division I-FBS level (Shulman & Bowen, 2001, pp. 205-212, 266). Moreover, at the Division III level, Holmes et al. (2008) found that former college athletes

who are younger donate more than former athletes who are older. Also, Meer and Rosen (2009) found that males who were members of conference championship teams will donate substantially more. Specifically, winning a conference championship as a senior is associated with a statistically significant 8% increase in donations each subsequent year. However, this effect was not found in females.

*Effects of athletic success on donations to athletics.* The literature strongly suggests that athletic success and winning—particularly in Division I football and men's basketball—is associated with increased giving to athletics (Coughlin & Erekson, 1984; Daughtrey & Stotlar, 2000; Humphreys & Mondello, 2007; McCormick & Tinsley, 1990; McEvoy, 2005; Sigelman & Bookheimer, 1983; Stinson & Howard, 2004; Stinson & Howard, 2007; Stinson & Howard, 2008; Weisbrod, Ballou, & Asch, 2008, pp. 106-129, 304-308). The only study that found opposing evidence is Covell (2005) who found that winning in football is not related to athletic donations for Division I season ticket-holders in the academically prestigious Ivy League. Thus, the literature has established a consistent relationship between athletic success and giving to athletics. However, as previously noted, these studies have almost exclusively focused narrowly on football and men's basketball at the NCAA Division I level. Only Daughtrey and Stotlar (2000) and Weisbrod et al. (2008) used Division II and Division III institutions in their samples and only the former differentiated the results at the divisional level.

*Effects of athletic success on donations to academics.* The question that is much more in dispute is whether or not athletic success affects overall donations to the entire institution—not just to athletics. Martz (1934) was the first to attempt to examine this issue, finding that schools that emphasized football had lower endowment growths than schools that did not emphasize football. Since then, numerous opinions and more sophisticated empirical studies have brought

forth a series of contradicting results. At the Division I level, Grimes and Chressanthis (1994), McCormick and Tinsley (1990), Stinson and Howard (2008), and Tucker (2004) all found small but statistically significant evidence that athletics does enhance overall institutional giving. However, at least twice as many other studies have shown no relationship between winning and overall institutional donations (Gaski & Etzel, 1984; Humphreys & Mondello, 2007; Litan, Orszag, & Orszag, 2003; Orszag & Orszag, 2005a; Orszag & Orszag, 2005b; Sack & Watkins, 1985; Shulman & Bowen, 2001; Sigelman & Bookheimer, 1983; Sigelman & Carter, 1979; Stinson & Howard, 2004; Stinson & Howard, 2007; Turner, Meserve, & Bowen, 2001; Weisbrod et al., 2008, pp. 106-129, 304-308) while Turner et al. (2001) even found evidence that winning is negatively associated with donation amounts. Still other researchers have found mixed results (Brooker & Klastorin, 1981; Rhoads & Gerking, 2000).

Furthermore, the specific evidence from Division II and Division III is very limited. Holmes et al. (2008) used data from a single Division III institution over 14 years and found a negative association for football success and a positive association for hockey success with overall institutional giving. Daughtrey and Stotlar (2000) found that at Division II, winning a national football championship is associated with decreases in university donations and the number of donors to the university. At Division III, they found that winning a national football championship is associated with large increases in overall college donations but a decrease in the numbers of donors to the college. Orszag and Orszag (2005b) used panel data from the NCAA and the U.S. Department of Education and found that winning and spending in Division II football has no significant relationship on alumni giving.

*Athletic donations “crowding out” academic donations.* Complicating the debate regarding the relationship between donations and athletic success is the notion that athletic



donations replace donations that would have otherwise been made to the overall general fund and thus used for academic purposes. In short, the debate focuses on whether or not athletic donations “crowd out” academic donations. For example, some scholars claim that any increase in donations that might exist due to athletic success “comes at the expense of giving to the general fund” (Zimbalist, 1999, p. 168) and “actively undermines efforts to raise money from alumni for educational programs” (Sperber, 2000, p. 259). Stinson and Howard (2004, 2007) and Turner et al. (2001) found evidence supporting this. However, McCormick and Tinsley (1990), Shulman and Bowen (2001, pp. 214-216), Sigelman and Bookheimer (1983), and Stinson and Howard (2008, 2010) found evidence that refutes the notion that athletic donations crowd out academic donations. It is noteworthy that Stinson and Howard’s findings from 2004 and 2007 suggest a “crowd-out” effect, yet their findings from 2008 and 2010, albeit different methods and samples, contradict their earlier findings and suggest a “symbiotic” effect.

### **Enrollment Impacts of Intercollegiate Athletics**

**Enrollment management.** “Student enrollment is the lifeblood of the overwhelming majority of higher education institutions. Students are the reason for their very existence” (Brewer, Gates, & Goldman, 2002, p. 16). The term “enrollment management” came into popularity in the 1980s (Hossler & Bean, 1990; Penn, 1999). In his seminal book on the subject, Hossler (1984) defined enrollment management as “a process, or an activity, that influences the size, the shape, and the characteristics of a student body by directing institutional efforts in marketing, recruitment, and admissions as well as pricing and financial aid” (pp. 5-6). Although it is a comprehensive concept involving numerous constituencies within a higher education institution, the areas of primary importance are recruiting, marketing, and retention (Dolence, Miyahara, Grajeda, & Rapp, 1988; Hossler, 1984; Hossler & Bean, 1990; Huddleston, 2000).

The overriding objectives of enrollment management are (1) to control the characteristics of the student body and (2) to control the size of the student body (Hossler & Bean, 1990, pp. 4-5). Controlling the characteristics of the student body generally refers to enhancing the quality and the diversity of student enrollments. Quality is usually defined by attributes such as Scholastic Aptitude Test (SAT) scores, American College Testing (ACT) scores, high school grades, or high school class rank. For example, institutions that successfully enroll students with high SAT scores and strong high school grades are considered to have high quality student bodies. Diversity refers to the degree to which enrollments contain students from differing socioeconomic backgrounds, races, cultures, ethnicities, sexes, and countries. It has been theorized and shown that diversity enriches the college educational experience for all students (Evans et al., 2010; Gurin, Dey, Hurtado, & Gurin, 2011; Pascarella & Terenzini, 2005; Smith, 2011; Weisbrod et al., pp. 88, 95-96). Shulman and Bowen (2001) showed that athletics only has very small effects on student body diversity (pp. 50-58, 135-140, 261).

Controlling the size of the student body generally refers to increasing the quantity of enrolled students. The vast majority of colleges and universities—regardless of size, type, control, or NCAA level—seek to increase the size of their student bodies and in doing so, utilize a variety of innovative enrollment management strategies (Holley & Harris, 2010). This is because tuition and fees from student enrollment is the principal source of revenue for most institutions (Brewer et al., 2002, pp. 51-66; Kretovics, 2011, pp. 66-69; Weisbrod, Ballou, & Asch, 2008, p. 77). This is especially the case for smaller colleges and universities (Chabotar, 2010; Peterson, 2008, pp. 28-30), many of which are members of the NCAA Division II and III (Schuman, 2005). For many of these colleges, enrollment size drives their institutional budgets

and is “critical not only for financial stability” (Humphrey, 2006, p. 11), but is also “a matter of economic survival” (Volkwein, 1999, p. 13).

**College choice.** For prospective college students, the process of choosing a college is complicated and includes various factors. Prospective students generally go through three stages in the college choice process—predisposition, search, and choice. During the predisposition stage, the student decides whether or not to attend college. Next, in the search stage, the student searches for information about colleges in order to select a list of potential colleges from which to choose. Finally, in the choice stage, the student chooses the institutions to which to make application and ultimately which to attend (Hossler & Gallagher, 1987). From the institutional perspective, this process has been likened to a “recruiting funnel” in which the institution begins with large numbers of potential applicants in the early funnel stage. Then, as the prospective students go through the stages of the college choice process and narrow their potential college choices, the funnel becomes increasingly narrow until a given number of applicants remain in the funnel and ultimately matriculate to the institution (Sevier, 2000).

During the college choice process, there are many influencing factors that a prospective student considers. The most influential college choice factors are academics, programs of study, tuition, cost, financial aid, atmosphere, job placement, facilities, friends, and safety (Broekemier & Seshadri, 1999; Warwick & Mansfield, 2003). Although prospective students in general see athletics as a significantly more important college selection factor than their parents, athletics has nonetheless been shown to be an overall unimportant college choice factor by both general students and their parents (Broekemier & Seshadri, 1999; Warwick & Mansfield, 2003). Also, although one-third of African American prospects consider a strong athletic reputation to be at least somewhat or very important in their college choice, they also rate academic reputation

much higher than athletic reputation in college choice (Braddock & Hua, 2006). This evidence indicates that intercollegiate athletics has little effect on the recruiting aspect of enrollment management.

However, research on prospective students who intend to participate in intercollegiate athletics shows that their choice factors are different than non-athletes and that the NCAA level also makes a difference (Finley & Fountain, 2008; Gabert, Hale, & Montalvo, 1999; Goss, Jubenville, & Orejan, 2006; Johnson, Jubenville, & Goss, 2009; Jordan & Kobritz, 2011; Konnert & Giese, 1987; Letawsky, Schneider, Pedersen, & Palmer, 2003; Mathes & Gurney, 1985; Pauline, Pauline, & Allen, 2008; Slabik, 1995). Overall, students who intend to participate in athletics use a balance of academic and athletic factors in their college decisions (Gabert et al., 1999; Goss et al., 2006; Konnert & Giese, 1987; Mathes & Gurney, 1985; Pauline et al., 2008; Slabik, 1995). The opportunity to play and the college coach for whom they will be playing are very important factors as well (Finley & Fountain, 2008; Johnson et al., 2009; Jordan & Kobritz, 2011; Konnert & Giese, 1987; Letawsky et al., 2003; Mathes & Gurney, 1985; Pauline et al., 2008; Slabik, 1995). Also, the college choice factors for male and female student-athletes are very similar (Gabert et al., 1999) with athletic factors being slightly more influential for males and academic factors being slightly more influential for females (Goss et al., 2006; Johnson et al., 2009; Mathes & Gurney, 1985).

Athletic factors are more influential at the NCAA Division I level than at the NCAA Division II and Division III levels. Also, academic factors are more important to Division II athletes than Division I athletes (Gabert et al., 1999; Pauline et al., 2008). NCAA Division III student-athletes' college choice factors are very similar to those of non-athletes with the addition of some athletic factors (Goss et al., 2006; Konnert & Giese, 1987; Pauline et al., 2008). For

these Division III prospects, in addition to academics, the opportunity to play has been shown to be a very important college choice factor (Konnert & Giese, 1987; Pauline et al., 2008; Slabik, 1995). Also, social atmosphere is more important at the Division III level than for the Division I and Division II levels (Pauline et al., 2008).

**Enrollment enhancement via athletic participation opportunities.** Based on the aforementioned literature, it is evident that athletics plays an influential role in college choice for prospective students who desire to participate in intercollegiate athletics. Of particular importance is the repeated finding that the opportunity to play is a highly influential college choice factor for prospective students who are interested in participating in intercollegiate athletics (Johnson et al., 2009; Jordan & Kobritz, 2011; Konnert & Giese, 1987; Pauline et al., 2008; Slabik, 1995). This is especially important at the NCAA Division II and Division III levels where a substantial proportion of the overall student body is often represented by student-athletes. At Division II, the student-athlete percentage of the overall student body is 10% for institutions with football and 8% for institutions without football (Fulks, 2012b). At Division III, student-athletes make up 24% of the overall student body at football-playing institutions and 12% at institutions without football (Fulks, 2012c)—and this percentage can be as high as 50% at some institutions (NCAA, 2012h). Also at these institutions, “it is not unusual for as many as 25 to 35 percent of new freshmen and transfers to be participating in athletics... Often these institutions will add new sports as a key element in achieving enrollment growth” (Kurz, Scannell, & Veeder, 2007, p. 25). In this way, athletics has been used to enhance small-college enrollments, generate revenue from tuition, and in some cases, transform institutions (Moltz, 2009; Weatherall, 2006).

There are numerous documented anecdotal reports of this practice. Greenville College, which is now NCAA Division III, added football and increased enrollment from 634 to 711 (Lederman, 1987). Queens College in New York City, now NCAA Division II, added intercollegiate athletics as part of an institutional transformation (Lederman, 1990). LaGrange College, NCAA Division III, added football in fall of 2006 which led to (1) an enrollment quantity increase from 900 to 1,100 without compromising student quality, (2) an increase of enrollment diversity, and (3) yearly football ticket sales of \$40,000 (Gulley, 2007; Moltz, 2009). Moreover, Shenandoah University, the University of Mary Hardin-Baylor, and Utica College—of NCAA Division III—and Seton Hill University of NCAA Division II, have each enhanced the quantity and diversity of their enrollments through adding football (Pennington, 2006).

Furthermore, the institutional transformation and enrollment boon of NCAA Division III Adrian College—as a result of radical athletic program expansion—has been well documented. From 2006 to 2012, through massive expansion of athletic facilities, roster sizes, and sport offerings, Adrian College went from an enrollment of 840, fiscal shortfalls, and deferred maintenance problems to a 1,670 enrollment, a doubled operating budget, an increase in selectivity, and a *U.S. News & World Report* ranking (Cohen, 2012; Feezell, 2009; Sander, 2008). Also, Alderson-Broadus College of NCAA Division II, in its first year of utilizing Adrian's strategic model (Cohen, 2012), brought in its largest class of incoming students in school history (Alderson-Broadus, 2012).

Two other NCAA Division II institutions, Mansfield University and for-profit Post University, recently enhanced their enrollments with the addition of the rare intercollegiate sport of “sprint football”—which employs the unique requirement that all participants weigh no more than 172 pounds. This provides institutions with a recruiting incentive for prospects who are

interested in playing college football but otherwise could not. Also, because athletic scholarships and off-campus recruiting are prohibited, sprint football costs drastically less to operate (Moltz, 2009; Steinbach, 2012; Timm, 2010; Thompson, 2008). The trend of adding sport playing opportunities to augment enrollment is not unique to NCAA institutions. For example, in recent years, even community colleges are adding sports in order to attract students (Ashburn, 2007; Jenkins, 2009). Moreover, the possibility exists that students who select an institution for the opportunity to participate in athletics may also attract friends who want to attend the same institution due their friendship (Sandy & Sloane, 2004, p. 89; Warwick & Mansfield, 2003).

Two studies have attempted to empirically explore the effects of using athletics to enhance enrollment through sport participation opportunities at the NCAA Division II and III levels. The *NCAA Division II Values Study* (Hardwick-Day, 2008), which included a study of 18 NCAA Division II institutions, concluded that athletic scholarships—awarded through Division II athletics—boost enrollment quantity and diversity without compromising academic quality. Feezell (2009) used multiple years of data from the U.S. Department of Education Equity in Athletics Disclosure Act (EADA) to examine three NCAA Division II and three NCAA Division III institutions that added football in 2002 or 2003. Although the identities of the institutions were not provided and the exact quantitative results were not specified, Feezell's overall observation was that adding football created initial enrollment spikes, but that the boons were short-lived and within a few years, enrollments fell nearly to their original pre-football levels. He also unsurprisingly observed that adding football increased the percentages of men at the institutions—something that is typically desirable for diversity due to the lack of males in higher education (Weaver-Hightower, 2010).

As previously noted, enrollment management includes controlling both the quantity and quality of the student body (Hossler & Bean, 1990, pp. 4-5; Hossler, 1984). However, when institutions use athletics to increase student body quantity, they simultaneously risk reducing student body quality. This is due to the common and growing practice that colleges and universities admit students—who do not meet institutional admission criteria—to their schools based on athletic ability. This occurs within all sports and across all NCAA divisions, including academically selective institutions (Bowen & Levin, pp. 57-94; Espenshade, Chung, & Walling, 2004; Shulman & Bowen, 2001, pp. 40-50; Zimbalist, 1999, p. 169) and thus results in reduced enrollment quality. The literature clearly demonstrates that overall, intercollegiate athletes enter college academically less prepared than non-athletes and bring with them weaker academic qualifications. Student-athletes have consistently been shown to have lower SAT scores, ACT scores, grade-point averages, and class ranks than their non-athlete counterparts. This has been found at all levels, from NCAA Division I (Aries, McCarthy, Salovey, & Banaji, 2004; Bowen & Levin, 2003, pp. 57-94; Fazel & Smaby, 2004; Hood, Craig, & Ferguson, 1992; Maloney & McCormick, 1993; Purdy, Eitzen, & Hufnagel, 1985; Shulman & Bowen, 2001, pp. 40-50; Sigelman, 1995) to NCAA Division III (Aries et al., 2004; Blaich, 2003; Bowen & Levin, 2003, pp. 57-94; Holmes, Meditz, & Sommers, 2008; Robst & Keil, 2000; Shulman & Bowen, 2001, pp. 40-50), including academically selective institutions (Aries et al., 2004; Bowen & Levin, 2003, pp. 57-94; Espenshade et al., 2004; Holmes et al., 2008; Shulman & Bowen, 2001, pp. 40-50). Thus, using athletics to grow student body size may enhance enrollment quantity, but may simultaneously hinder enrollment quality.

**Impact of athletics on retention.** Retention is a critical piece of enrollment management (Bean, 1990; Dolence, Miyahara, Grajeda, & Rapp, 1988; Hossler, 1984;



Huddleston, 2000). This is in large part because it is much cheaper for a college or university to retain currently enrolled students than to recruit new ones (Bean, 1990). The student behaviors of college withdrawal and persistence are complex and include various backgrounds, organizational, academic, social, environmental and attitudinal factors (Bean, 1990). Tinto (1993) proposed that student retention is a function a student's overall academic integration and social integration within an institution. Primarily at NCAA Division I institutions, studies have examined the impact of athletics on student retention. DesJardins, Ahlburg, and McCall (1994), DesJardins, Ahlburg, and McCall (1999), and Leppel (2006) each found evidence that students who participate in athletics are significantly more likely to be persist at their institutions. However, they are also more likely to withdraw after year four, when their athletic eligibility is exhausted (DesJardins et al., 1994). Also, female Division I student-athletes have significantly higher retention rates than male Division I student-athletes, while individual sport student-athletes have significantly higher retention rates than team sport student-athletes (Le Crom, Warren, Clark, Marolla, & Gerber, 2009).

Mixon and Treviño (2005) found empirical evidence that athletic success in NCAA Division I football is positively and significantly associated with overall institutional retention rates. In another Division I study, Jones (2010) found a small but statistically significant relationship between an institution's football game attendance and retention. These studies suggest that student involvement (Astin, 1984) with athletics as spectators increases their academic and social integration within the institution, thereby increasing the probability that they will persist at the institution (Tinto, 1993). Harshaw (2009) found evidence supporting Tinto's (1993) model at the NCAA Division III level. Specifically, he investigated the perceptions of deans of students at 88 Division III institutions and found that they believe that athletics at their

institutions helps facilitate students' sense of community, sense of belonging, and supportive social networks among student-athletes, faculty, and staff.

### **Marketing Impacts of Intercollegiate Athletics**

The vast majority of colleges and universities compete feverishly for students, resources, and prestige (Brewer, Gates, & Goldman, 2002; Weisbrod, Ballou, & Asch, 2008). Thus, marketing is vital for colleges and universities and is also closely related to the enrollment management process (Hossler, 1984; Huddleston, 2000; Penn, 1999). This is especially the case for many NCAA Division II and Division III schools that are often small to mid-sized, enrollment-driven, receiving limited state and federal support, and may have limited resources (Felicetti, 2001; Johnson, Jubenville, & Goss, 2009; Peterson, 2008; Schuman, 2005; Weisbrod et al., 2008). Especially for these institutions, "athletics can play an important role in the marketing to and recruiting of prospective students" (Johnson et al., 2009, p. 2).

Marketing in higher education pertains to building awareness and positive perceptions of an institution (Kretovics, 2011, pp. 161-194). According to Lee, Miloch, Kraft, and Tatum (2008), "perception is vital to marketing the brand image of universities" (p. 180). This is accomplished by establishing a reputation, building a brand, increasing visibility, and promoting the image for the institution (Brewer et al., 2002, pp. 25-49; Kretovics, 2011, pp. 179-181). A strong, visible reputation is a valuable asset for a college or university and can "attract a broader and more talented pool of applicants, more tuition revenue, and more donations" (Weisbrod et al., 2008, p. 175). However, in higher education, it is often difficult to determine institutional quality and thus a prospective student's perception of quality may be derived only from the institution's reputation. "To find a trustworthy school, the student will often rely heavily on the school's reputation" (Weisbrod et al., 2008, p. 184).

**“Front door” metaphor.** Intercollegiate athletics has been viewed as a way to build an institution’s reputation and brand, increase its visibility, and promote its image (Brewer et al., 2002; Lee et al., 2008). This is because, regardless of the NCAA level, athletics is often the most visible part of the institution. Even at smaller institutions, intercollegiate athletics is seen and discussed in newspapers, magazines, television, radio, and on the internet through stories, pictures, images, and headlines. Toma and Cross (1998) used the metaphor of a “front door” or “front porch” to describe the visibility of intercollegiate athletics. In the metaphor, the institution is analogous to a house and the institution’s athletic program is analogous to the house’s front door. Thus, the front door (the athletic program) is what people on the outside are able to see. Regardless of what is actually inside the house (the institution), people on the outside make judgments about the house (the institution) based on their opinions of the front door (the athletic programs) that they can see.

According to Toma and Cross’ (1998) front door metaphor, one would expect people on the outside to believe that institutions with successful athletic programs also have high quality academic programs. In short, people will equate athletic success with institutional quality. There are in fact, several studies that provide some support for this notion. Boyer (1987) found that 31% of high school students and 17% of high school parents believe that colleges with outstanding athletic programs usually have above-average academic programs (pp. 12-13). Also, Lovaglia and Lucas (2005), Goidel and Hamilton (2006), and Clopton and Finch (2012) found statistically significant evidence that the public perceives a connection between institutional athletics and institutional prestige. Goidel and Hamilton (2006) also found that less-educated people are more likely to make this connection. They concluded that, “athletic success may or

may not directly affect academic quality, but the public largely believes such a link exists and those beliefs have important implications for higher education” (p. 851).

**The “Flutie Factor.”** Another example of the college athletic visibility effect in higher education has been dubbed the “Flutie Factor.” On Thanksgiving weekend of 1984, Boston College competed against a heavily favored University of Miami in a nationally televised NCAA Division I football game. In the final seconds of the game, Doug Flutie, the quarterback for Boston College, successfully completed a dramatic “Hail Mary” touchdown pass to win the game. This event—captured on national television and thus highly visible—was one of the athletic highlights of the decade. Also, at the end of the season, Doug Flutie was awarded the Heisman Trophy for the top offensive football player in the country. In the year following Flutie’s heroics, the number of applications to Boston College was reported to have skyrocketed (Clotfelter, 2011, pp. 144-146; Sperber, 2000, pp. 60-61). Thus, the effect of visible athletic success on an institution’s admissions applications has become known as the “Flutie Factor” or the “Flutie Effect” (Braddock & Hua, 2006; Clotfelter, 2011, pp. 144-146; Jones, 2009; Litan, Orszag, & Orszag, 2003, p. 8; McEvoy, 2005; McEvoy, 2006; Mixon, Treviño, & Minto, 2004; Pope & Pope, 2009; Smith, 2008; Sperber, 2000, pp. 60-61). Smith (2008) calls this an “advertising effect” referring to “a successful branding in which the college or university has been able to translate its sporting prowess into tangible benefits for the school’s academic mission” (p. 387). Others have called this effect “free advertising”—although the extent to which the effect is “free” is debatable because of the contributory costs associated with procuring the effect to begin with (Weisbrod et al., 2008, pp. 179-182, 246-248).

***Anecdotal evidence of the “Flutie Factor.”*** Since the 1980s, there have been numerous anecdotal reports supporting the notion of a “Flutie Factor” type of advertising effect but they

involve primarily NCAA Division I football and men's basketball. In football, Clemson University's 1981 national championship reportedly came with an 18% application increase the following year (Litan, Orszag, & Orszag, 2003). In 1985, the University of South Carolina enjoyed a 23% application boost after its best football season in school history (McCormick & Tinsley, 1987). Penn State University's applicant pool was enhanced by 15% following its 1995 Rose Bowl victory (McEvoy, 2005). The next year, Northwestern University's unlikely appearance in the 1996 Rose Bowl was followed by a 30% applicant spike (Weisbrod et al., 2008, p. 179; Zimbalist, 1999, p. 170). Also, a 20% application increase followed Oregon State University's Fiesta Bowl victory in 2001 (Mixon et al., 2004).

In men's basketball, an application boon of 40% followed North Carolina State's 1983 national championship (McCormick & Tinsley, 1987; McEvoy, 2005). Also, in the early 1980s, Georgetown University enjoyed a 45% application enhancement during their run to three NCAA Final Four appearances (McEvoy, 2006). In the 1990s, the NCAA tournament success of George Washington University and Gonzaga University came with application increases of 23% and 59%, respectively (McEvoy, 2006; Zimbalist, 1999, p. 170). Michigan State University's 2000 national championship was followed by 1600 more applications than the previous year (Mixon et al., 2004). In 2006, George Mason University's unexpected run to the NCAA Final Four is reported to have quadrupled the size of the application pool (Thomaselli, 2007). In 2010 and 2011, Butler University's overachieving trips to consecutive NCAA national championship games came with a 43% application increase (Wall, 2012). In 2013, when Florida Gulf Coast University became the first 15-seed to advance to the NCAA Sweet Sixteen, the school reported increases in unique visitors to its admissions webpage from 2,280 to 42,793 (Dosh, 2013). In addition, Evans, Evans, and Evans (2002) have reported that historically black colleges and

universities (HBCUs) increase their enrollments when their athletic teams succeed, particularly in football, baseball, track and field, and several minor sports.

*Empirical evidence of the “Flutie Factor.”* The aforementioned reports, although individually impressive, are anecdotal and have been challenged by other reports that refute the Flutie Effect. For example, in 1986, Wichita State University’s enrollment increased after dropping football (Sperber, 1990, p. 73). In 1993, after eight straight losing seasons and a history of competitive obscurity, the University of Wisconsin football team completed a historical 10-1-1 season, including a trip to the highly visible Rose Bowl, but this had no effect on admission applications (Zimbalist, 1999, p. 170). Furthermore, even the accuracy of the storied Boston College applicant increase of the 1980s—the Flutie Factor genesis—is ambiguous and debated (McDonald, 2003).

To address this debate, several studies have sought to statistically investigate the empirical effects of athletic success and visibility on the quantity and quality of admission applications. When examining quantity, researchers have attempted to discern whether or not an institution’s athletic success and visibility results in a larger pool of applicants. When examining quality, researchers have attempted to determine whether or not an institution’s athletic success and visibility results in a pool of applicants with stronger academic credentials—such as higher SAT scores, ACT scores, high school grade point averages, and class ranks.

*Marketing effects on applicant pool quantity.* The preponderance of empirical literature on the marketing effects of athletic success and visibility in higher education is mixed. Also, it is noteworthy that nearly every empirical investigation of this effect has focused on the NCAA Division I level. Overall, these studies seem to indicate that applicant pool size is slightly but positively affected by athletic success and visibility, but the effects are usually small and various

researchers have found conflicting results. Borland, Goff, and Pulsinelli (1992), Jones (2009), McEvoy (2006), Mixon and Hsing (1994), Mixon and Ressler (1995), Murphy and Trandel (1994), Perez (2012), Pope and Pope (2009), Sandy and Sloane (2004), and Zimbalist (1999, pp. 171, 240) all found small, but statistically significant positive effects of athletic success and visibility on the quantity of admission applications. Pope and Pope (2012) found a large positive effect that football and men's basketball success significantly increases the number of inquiries received from prospective college students. Furthermore, Toma & Cross (1998) found that the effect of the high-level Division I athletic success lasts for at least three years and is "somewhat lasting" (p. 655). Some other studies on applicant pool size have found mixtures of positive significant effects and non-significant effects across various success variables (Castle & Kostelnik, 2011; Chressanthis & Grimes, 1993; McEvoy, 2005; Weisbrod, Ballou, & Asch, 2008, pp. 115-118, 182-184). Jain (2004) found a mixture of statistically positive and negative effects from athletic success. The negative effects were associated with some of the football and men's basketball success factors in NCAA Division III. Also, admission yield has only been investigated by two researchers—Zimbalist (1999, pp. 171, 240) who found no effect and Jones (2009) who found only a very small significant positive effect. Thus, altogether it appears that application pool quantity is marginally augmented by athletic success and visibility, but conclusions are inconclusive.

*Marketing effects on applicant pool quality.* The empirical research results pertaining to the effect of athletic success and visibility on applicant pool quality are even more dubious and debated, but suggests an overall weak positive effect. The researchers have typically measured quality with SAT scores, ACT scores, high school grade point averages, and class ranking. McCormick and Tinsley (1987), Mixon (1995), Mixon, Treviño, and Minto (2004), Sandy and

Sloane (2004), Smith (2009), and Tucker (2005) each found statistically significant evidence that athletic success and visibility yield higher SAT scores in the applicant pool. Also, Pope and Pope (2009) concluded that because extra applicants yielded from athletic success and visibility consisted of equally high and low SAT scores, institutions can increase selectivity which in turn, increases quality. The studies of Castle and Kostelnik (2011), Tucker and Amato (1993), and Tucker and Amato (2006) each found mixed results—some success variables produced significant results while others had no effect. Bremmer and Kesselring (1993), Litan, Orszag, and Orszag (2003), Orszag and Orszag (2005a), Smith (2008), and Zimbalist (1999, pp. 171, 240) found no significant effects of athletic success and visibility on applicant pool quality. Orszag and Orszag (2005b) found that NCAA Division II football spending does not have a significant effect on the SAT scores of incoming students. Jain (2004) found that success and visibility in Division I sports has no significant effect, but at Division III, success in baseball had a significantly positive effect while success in basketball had a significant negative effect.

Despite the empirical nature of these studies, there exists ongoing debate among them. For example, the original study on this effect by McCormick and Tinsley (1987)—the first to find a positive empirical effect—has been described by Pope and Pope (2009) as a “seminal work” (p. 753). However, Zimbalist (1999, pp. 171, 240) criticized it for its statistical significance level and Bremmer and Kesselring (1993) described it as “seriously flawed” (p. 417). Such opposing interpretations exemplify the ongoing debate that exists regarding this effect.

*Marketing effects at Division II and Division III.* As previously mentioned, the vast majority of research regarding marketing effects involve NCAA Division I institutions. Very few of the aforementioned studies have incorporated Division II or Division III institutions into



their analyses. Although Mixon and Hsing (1994), Sandy and Sloane (2004), Weisbrod et al. (2008, pp. 115-118, 182-184, 306-308) used some Division II and Division III schools in their analyses, they did not distinguish the Division II and III institutions in their methods or results. Thus, only three studies (Castle & Kostelnik, 2011; Jain, 2004; Orszag & Orszag, 2005b) provide empirical analyses related to this effect directed toward NCAA Division II and III institutions. Jain (2004), the only study to empirically report on marketing effects of athletics on applicant pools at NCAA Division III institutions, used data from 18 Division III colleges from 1993 to 2002 in four men's sports—football, basketball, baseball, and soccer. These sports were chosen because they contained the largest number of student-athletes. She found statistically significant positive effects of baseball success on student quality (SAT scores), but negative effects of football winning percentage on matriculation rates and negative effects of basketball playoff success on the number of applications and SAT scores. She found no significant effects in the sport of soccer. Orszag and Orszag (2005b) used panel data from the NCAA and the U.S. Department of Education Integrated Postsecondary Education Data System (IPEDS) to investigate the effects of spending on athletics at NCAA Division II institutions. They found that athletic spending has no significant effect on the SAT scores of incoming students.

Castle and Kostelnik's (2011) study is the lone empirical investigation of the marketing effects of NCAA Division II athletic success on the quantity and quality of applicant pools. It is also novel because it was the first to examine the effects of overall athletic success—not just success in football and men's basketball. For their analyses, they used data from 14 NCAA Division II colleges within the state of Pennsylvania from 1995 to 2004 in all sports. Their overall findings suggest that athletic success at the Division II level has some small, fragmented positive effects on incoming student quantity and quality, but the results are inconsistent across

the various measures of success investigated. They found that the number of admissions applications is positively and significantly correlated with overall all-sports conference standings and with post-season success, but not with winning percentage. A surprising finding was that women's winning percentage correlates higher than men's winning percentage. Also, SAT scores are positively and significantly correlated with post-season success, but not with all-sports conference standings nor with winning percentage. These findings led Castle and Kostelnik to conclude "that with some variables, success in athletics had a significant positive effect at selected universities in terms of attracting more students to apply to the university and improving the quality of the students that enroll to the university as first time freshmen" (p. 425).

**Marketing effects of athletics via the internet and social media.** Another way that colleges and universities use athletics to market their institutions is through internet technology and social media (Clavio, 2011; Cooper & Pierce, 2011; Robinson, 2010; Weaver, 2011). Because of the overwhelming popularity of smart phones and mobile applications (Pew Research Center, 2012), "it is becoming increasingly important for college athletic departments to embrace social media. In an age of ever-tightening athletic budgets and increasing diffusion of traditional media audiences, social media provides a comparatively inexpensive personal connection" (Clavio, 2011, p. 310). Especially at NCAA Division II and Division III institutions—that have smaller budgets and cannot compete with Division I and professional sports teams for print space in newspapers and magazines—social media tools such as Facebook, Twitter, and YouTube provide a free way to get their positive stories, images, name, and brand into the public's eye (Cooper & Pierce, 2011; Robinson, 2010; Weaver, 2011). According to Weaver (2011), using this kind of "technology has leveled the playing field for large and small colleges and universities" (p. 206).

**Marketing effects of athletics via conference affiliation.** Nearly every college and university that participates in intercollegiate athletics belongs to an athletic conference. Athletic conferences usually consist of about eight to 14 member institutions. There are 23 NCAA Division II conferences (NCAA, 2012o) and 42 NCAA Division III conferences (NCAA, 2012n). According to Sweitzer (2009), the three primary reasons why colleges belong to specific athletic conferences are (1) grouping with similar institutions, (2) geographic proximity, and (3) prestige enhancement. Grouping with institutions of common mission, size, and academic profile is a very common reason for conference alignment at all NCAA levels. Geographic proximity is very important at the NCAA Division II and Division III levels because of efforts to minimize traveling costs and missed class time for student-athletes (Sweitzer, 2009). The NCAA promotes geographic proximity at the Division II and Division III levels by rewarding institutions that compete against in-region institutions rather than traveling out-of-region for contests (Brown, 2012a; NCAA, 2012j).

Conference alignment to enhance prestige is more common at Division I, but can also occur to lesser extents at Division II and Division III (Sweitzer, 2009). McCormick and Tinsley (1987), Bremmer and Kesselring (1993), Tucker and Amato (2006), and Smith (2009) found mixed results when examining the extent to which NCAA Division I athletic conference affiliation affects the quality of incoming students. Although no empirical investigations have been undertaken regarding this aspect at Division II and Division III colleges, Sweitzer (2009) suggested that membership in certain Division II or Division III conferences can increase exposure, academic prestige, and reputation of its member institutions and can “boost the overall academic reputation of the conference” (Sweitzer, 2009, p. 61). He specifically cited academically prestigious Division III conferences such as the University Athletic Association

(UAA), the New England Small College Athletic Conference (NESCAC), and the Landmark Conference. At the Division II level, he noted that the addition of Gannon University and Mercyhurst College—both private institutions holding *U.S. News & World Report* rank—to the all-public Pennsylvania State Athletic Conference (PSAC) has enhanced the PSAC's academic reputation (Sweitzer, 2009).

### **Student Impacts of Intercollegiate Athletics**

One of the major themes contained within the mission statements of college athletic departments at all levels involves the promotion of the personal, social, and academic development of student-athletes and others—including the development of leadership, teamwork, citizenship, discipline, character, and life skills (Ward & Hux, 2011). The preponderance of research demonstrates that college students can be affected in various ways by participating in or interacting with intercollegiate athletics (Chu, 1989; Gayles, 2009; Howard-Hamilton & Sina, 2001; Pascarella & Terenzini, 2005; Sanford, Borgstrom, & Lozoff, 1973; Terenzini, Pascarella, & Blimling, 1996; Watt & Moore III, 2001). However, the specific ways in which intercollegiate athletics participation affects students has been shown by individual researchers to be quite ambiguous, conflicting, and mixed. Summarizing the overall effects, Sanford et al. (1973) pointed out that “participation in sports can favor development of the whole person” (p. 55) while Chu (1989) explained that “athletics seem to be one of the primary means through which the college may effect change in students” (p. 162).

**Student development.** Student development is a broad term that does not have a specific, universally accepted definition (Evans, Forney, Guido, Patton, & Renn, 2010). According to Jones & Abes (2011), “the term *student* refers to one who is enrolled in a higher education setting, and *development* suggests that some kind of positive change occurs in the

student” (p. 153). Thus, in general, student development describes or refers to desired positive growth of a student as a result of that student’s college experiences. It pertains to the cognitive, intellectual, social, moral, ethical, psychosocial, or physical dimensions of a student. It also has to do with other specific student characteristics and skills—such as leadership, communication, occupational potential—that may impact the student’s quality of life beyond college (Evans et al., 2010; Jones & Abes, 2011; Pascarella & Terenzini, 2005). “The concept usually implies or presumes growth, or the potential for growth, toward maturity” (Pascarella & Terenzini, 2005, p. 17). Succinctly, Rodgers (1990) defined student development as “the ways that a student grows, progresses, or increases his or her developmental capabilities as a result of enrollment in an institution of higher education” (p. 27). He also noted that student development implies a holistic view of how college students develop, stressing “the development of the whole student” (p. 27). Supporting this overall holistic notion, Evans et al. (2010) explained that “it is important to acknowledge that cognitive development cannot be separated from affective and interpersonal development” (p.135).

**Student involvement.** A popular theory of student development that is commonly included in the literature pertaining to intercollegiate athletics is Astin’s (1984) Theory of Student Involvement. This simple yet pragmatic theory postulates that students who are “involved” in college are more likely to develop in positive ways. More specifically,

*Student involvement* refers to the quantity and quality of the physical and psychological energy that students invest in the college experience. Such involvement takes many forms, such as absorption in academic work, participation in extracurricular activities, and interaction with faculty and other institutional personnel. According to the theory, the greater the student’s involvement in college, the greater will be the amount of student

learning and personal development. From the standpoint of the educator, the most important hypothesis in the theory is that the effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. (Astin, 1984, p. 307)

The student involvement resulting from intercollegiate athletics can contribute to student development. Astin (1977) explained that “involvement in athletic activities during the undergraduate years shows a pattern of effects on student development that closely parallels the pattern associated with academic involvement” (p. 223). Furthermore, Chu (1989) suggested that “school sport, not only for the athlete but also for the spectator, remains a particularly American means of gaining student involvement in the life of the college” (p. 161).

*Non-athletes' involvement with athletics.* The impacts of athletic involvement are not limited to student-athletes only, but can also pertain to non-athlete spectators as well (Clopton, 2009b). For example, the involvement of non-athlete students as fans or spectators “exists as a legitimate form of social involvement” (p. 52) that follows from Astin’s Theory of Student Involvement (Clopton, 2009a). Empirically, after controlling for multiple individual student factors, Schurr, Wittig, Ruble, and Henriksen (1993) found a small but significant effect that students involved with athletics as fans have higher grade point averages and graduation rates than students who are not involved with athletics at all. Similarly, Wann and Robinson (2002) found weak but statistically significant positive correlations between non-athletes’ psychological attachment to their institution’s sports teams and their overall integration into their institutions—including involvement and persistence.

Clopton (2009a) used controlled hierarchical regression models and found conflicting results regarding the impact of involvement in athletics for non-athlete spectators. On one hand,

he found a significant relationship predicting that the more non-athlete spectators identify as fans of their institution's athletic programs, the lower their grade point averages will be. On the other hand, he found a modest, but significant relationship predicting that the more non-athlete spectators identify as fans of their institution's athletic programs, the greater the level of academic and social integration.

**Athletic subculture.** Several scholars have suggested that intercollegiate athletes form a separate "athletic subculture" on college campuses that may be out of alignment with the institutional mission and can negatively affect the academic performance of not only the athletes, but other non-athletes as well. They also contend that the heavy time commitments placed on student-athletes intensify the effects of this sub-cultural phenomenon (Adler & Adler, 1991, pp. 117-120, 152, 177-178; Bowen & Levin, 2003; Parham, 1993; Pascarella, Truckenmiller, Nora, Terenzini, Edison, & Hagedorn, 1999; Shulman & Bowen, 2001; Sperber, 1990; Sperber, 2000). Bowen and Levin (2003) dub this phenomenon the "athletic divide." Shulman and Bowen (2001) also assert,

More generally, it appears that a distinct "athletic culture" is appearing in essentially all sports and at all levels of play, including the Division III coed liberal arts colleges. This culture tends to separate athletes from other students and exacerbates the problems of academic performance. (p. 82)

Part of this athletic subculture appears to also include excessive alcohol consumption and binge drinking behaviors. Not only is athletic participation associated with increased alcohol consumption (Astin, 1977, pp. 81-82), research consistently shows that athletes consume significantly more alcohol and binge drink significantly more than non-athletes (Brenner &

Swanik, 2007; Leichter, Meilman, Presley, & Cashin, 1998; Nelson & Wechsler 2001; Yusko, Buckman, Helene, White, & Pandina, 2008).

Aries, McCarthy, Salovey, and Banaji (2004) investigated the phenomenon of an “athletic subculture” at two highly selective institutions—one NCAA Division I and one NCAA Division III. The only evidence found that supported the notion of an athletic subculture was heavy drinking of alcohol. The investigation of other factors such as time studying, ambitiousness, grade consciousness, concern about the future, and isolation from rest of student body did not support the notion of a separate athletic subculture.

***Academic clustering.*** Academic clustering was first explicitly defined by Case, Greer, and Brown (1987) as “the grouping or clustering of a disproportionate percentage of athletes into selected majors when compared to the overall university percentage in the same major” (p. 48). This notion that athletes tend to group together in less challenging academic majors contributes to the athletic subculture that several authors have maintained (Bowen & Levin, 2003; Shulman & Bowen, 2001). Other studies have not only confirmed the existence of academic clustering among athletes (Adler & Adler, 1991, pp. 63-64; Fazel & Smaby, 2004; Fountain & Finley, 2011; Lederman, 2003; Otto, 2012; Schneider, Ross, & Fisher, 2010; Suggs, 2003), but have also shown a higher level of academic clustering within minority athletic populations (Fountain & Finley, 2009).

**Effects of athletic participation on academic/cognitive development.** Reports from the NCAA have continuously demonstrated that student-athletes at NCAA Division II and NCAA Division III institutions consistently graduate at higher rates than their student-body counterparts (Brown, 2011a, 2012b; NCAA Research Staff, 2011; Pickle, 2012). The most recent NCAA Division II report shows that the federal graduation rate of Division II student-



athletes is 7% higher than the rate of the overall student body (Pickle, 2012). Likewise at Division III, athletes graduate at 6% higher rates than students at large (Brown, 2012b). Beyond this, multiple empirical studies have been performed examining the relative educational impacts of intercollegiate athletic participation on college students. The results are mixed at best and do not reveal a consistent theme elucidating the overall effects of athletic participation on academic and cognitive development. Also, it is noteworthy that the vast majority of empirical studies pertain to NCAA Division I institutions, rather than Division II or III.

Ryan (1989) found modest but significant evidence that participation in athletics enhances overall satisfaction with college, motivation to earn a degree, interpersonal skills, and leadership skills. Pascarella and Smart (1991) were among the first to incorporate a variety of control variables such as pre-college student characteristics and institutional characteristics into their analysis. They found modest but significant evidence that athletic participation enhances several educational outcomes including academic achievement in Caucasian men as well as college social involvement and degree completion in both African American and Caucasian men. Long and Caudill (1991) similarly found, controlling for other factors, that athletic participation has a positive effect on graduation rates for both males (4%) and females (percentage not given).

By comparing NCAA Division I athletes to matching non-athletes in gender, ethnicity, college entrance exam scores, and residency, Hood, Craig, and Ferguson (1992) found no significant difference in the academic achievement between the athletes and their non-athletes matches. Astin (1993) found, after controlling for precollege characteristics, that athletic participation has negative effects on performances on standardized tests while Maloney and McCormick (1993) found that only participation in football and men's basketball has a significant negative effect on academic success.

In two comparable studies that controlled for various student and institutional covariates at NCAA Division I, II, and III institutions, Pascarella, Bohr, Nora, and Terenzini (1995) and its follow-up by Pascarella, Truckenmiller, Nora, Terenzini, Edison, and Hagedorn (1999), both found mutually supporting evidence that participation in men's basketball and football had numerous significant negative cognitive effects after the first year of college (Pascarella et al., 1995) and even more pronounced negative effects after the second and third years of college (Pascarella et al., 1999). Neither study found any significant cognitive effects for men who played other sports. For women, the results of the studies mutually supported each other as neither found much evidence that participation in athletics negatively affects women. Also, it is noteworthy that the net effects of athletic participation in these studies were just as pronounced at Division II and III institutions as at Division I institutions.

Amato, Gandar, Tucker, and Zuber (1996) found that graduation rates of NCAA football student-athletes are negatively associated with on-field football success at the Division I-A level and are not associated with on-field football success at the Division I-AA level. However, in a follow-up study, Amato, Gandar, and Zuber (2001) found that a 1986 NCAA rule pertaining to initial freshmen eligibility has eliminated the negative association between Division I football graduation rates and on-field success that was found by Amato et al. (1996).

In a single university study, McBride and Reed (1998) found that athletes, regardless of gender, score significantly lower than their non-athlete counterparts on standardized tests measuring critical thinking skills, cognitive skills, and dispositions toward critical thinking. Using a sample from a variety of institution types, Wolniak, Pierson, and Pascarella (2001) found, controlling for pre-college factors, that participation in men's sports other than football and men's basketball inhibited the importance students placed on learning and academic

experiences that increase self-understanding. Football and men's basketball participants however did not show any significant differences in learning orientations as compared to their non-athlete counterparts.

Using an NCAA Division III institution that does not sponsor the sport of football, Robst and Keil (2000), after controlling for pre-college academic ability, found a small but significant effect that athletes academically outperform non-athletes in terms of grade point averages, course difficulty, and graduation rates. Shulman and Bowen (2001) found, after controlling for SAT scores, academic major, and socioeconomic status, that athletes academically underperform compared to students at large (pp. 65-70). They also found that the six-year graduation rates of athletes are higher than those of the non-athletes who are not involved in extracurricular activities, but lower than the non-athletes who are involved in extracurricular activities (pp. 59-62).

Researchers at the Center of Inquiry in the Liberal Arts used data from 12,835 NCAA Division III students from eleven NCAA Division III liberal arts colleges and found that despite slightly lower SAT scores, athletes performed academically as well or better than non-athletes and better graduation rates (Blaich, 2003). Fazel and Smaby (2004) investigated sports team academic performances at a large NCAA Division I-FBS institution, controlling for SAT scores and curricular choices, and found the underperforming groups to be football, women's field hockey, and men's fencing while women's swimming participants were found to be above-average academic performers. Using two selective institutions—one NCAA Division I and one NCAA Division III—Aries, McCarthy, Salovey, and Banaji (2004) found no significant differences in academic performance between athletes and non-athletes with similar SAT scores and demographic backgrounds.

In a national study using 57,308 undergraduate students from 395 four-year institutions of all NCAA levels that controlled for many pre-college, individual, and institutional contexts, Umbach, Palmer, Kuh, and Hannah (2006) found that student-athletes are just as academically involved and engaged in educationally effective activities as their non-athlete counterparts, regardless of the institutional NCAA level. They found a small effect showing that female student-athletes engage in more educationally effective activities than female non-athletes. The one significant finding showing a negative effect from athletic participation was that male student-athletes reported significantly lower grades than male non-athletes, even after controlling for pre-college covariates. It is noteworthy that this negative effect was most pronounced at the NCAA Division III and NAIA levels. Overall, their findings led them to conclude that “on balance, student-athletes across a large number of colleges and universities do not differ greatly from their peers in terms of their participation in effective educational practices. In most instances, when differences do exist, they favor athletes” (Umbach et al., 2006, p. 727).

Melendez (2006) found that student-athletes score significantly higher than non-athletes regarding freshmen and sophomore year academic adjustment and institutional attachment. Using the 2004 NCAA Division I graduation rates report, Matheson (2007) showed that when the differences in racial composition between athletes and non-athletes are accounted for, the graduation rates for male student-athletes are higher than for non-athletes. After controlling for pre-college academic ability, Yunker (2009) found no significant differences in the academic performances among highly committed athletes, moderately committed athletes, and general population students at a selective NCAA Division I institution. Symonds (2009) found NCAA Division II athletes to be as academically engaged as non-athletes after controlling for pre-college ACT scores. In another study focused on Division II athletes, Milton, Freeman, and

Williamson (2012) found that both male and female Division II scholarship athletes have statistically significantly higher grade point averages than non-scholarship athletes. They also found that female athletes academically outperform male athletes for both scholarship and non-scholarship categories.

*In-season and off-season impact on academic/cognitive development.* Although student-athletes at an NCAA Division III institution perceive that they manage their time more efficiently during their competitive seasons (Heuser & Gray, 2009), research has shown that student-athletes perform poorer academically during their seasons. Maloney and McCormick (1993) found that participation in NCAA Division I football and men's basketball has negative effects on academic performance during the in-season, but not during the off-season. For other sports, they did not find this negative effect. Moreover, Scott, Paskus, Miranda, Petr, and McArdle (2008) found a small but statistically significant effect that student-athletes—at NCAA Division I, II, and III—perform better during the off-season than during the in-season. Both studies indicate that student-athletes not only earn better grades during the off-season, but they also earn more credits.

**Effects of athletic participation on post-college outcomes.** The development of skills and traits that can aid students later in life is a desired aspect of college student development (Carodine, Almond, & Gratto, 2001). According to Carr and Bauman (2002), “a primary focus of university athletic departments should be to facilitate the life skills development of their student-athletes” (p. 281). A few researchers have looked at the potential impact that intercollegiate athletic participation has on enhancing life after college. Dubois (1985) found no significant difference between the occupational prestige or earnings of athletes and non-athletes after controlling for several individual student background characteristics. However, in another

study that controlled for personal factors, Long and Caudill (1991) found that male athletes earn about 4% higher incomes than their male non-athlete counterparts when they reach about age 28 to 30. They did not find this effect for females. Pascarella and Smart (1991) found modest but significant evidence that athletic participation enhances occupational status and social self-esteem nine years after initial college enrollment in both African American and Caucasian men. Henderson, Olbrecht, and Polacheck (2006) performed a follow-up to Long and Caudill's work, controlling for self-perceived student motivation, ambition, and drive. They found that athletes, on average, earn higher post-college wages than non-athletes. However, the effect was not found to be uniform because their findings showed more than half of the athletes earn less than non-athletes. Specifically, they found that athletes earn higher salaries in fields such as business, military, and manual labor, but lower wages in high school teaching professions. Shulman and Bowen (2001) found that former athletes earn higher lifetime salaries than students at large and that this effect is most pronounced for NCAA Division III athletes (pp. 95-112).

**Effects of athletic participation on social/civic development.** Although student-athletes tend to identify more with their athletic teams than with the overall campus community (Shulman & Bowen, 2001; Warner & Mixon, 2011) and although they are less involved with their residence hall communities and interact less frequently with non-athletes (Diaz, Gonyea, Junck, & Ward, 1998), their involvement in intercollegiate athletics typically results in overall positive effects on community, multiculturalism, and openness to diversity (Howard-Hamilton & Sina, 2001). Hirko (2009) contends that "for those participating in athletics, college sports offers unparalleled opportunities on campus to experience multiculturalism" (p. 96). Levine and Cureton (1998) found that, due to their interdependence resulting from their unique student experiences, the two most racially and ethnically integrated student groups are those involved in athletics and

theater (pp. 85-87). Wolf-Wendel, Toma, and Morpew (2001) found supporting qualitative evidence, noting that participation in athletics creates a “remarkably strong sense of community” (p. 376) that acts to “link students across most differences, including race, socioeconomic status, and geographic background” (p. 376). Controlling for several pre-college factors, Wolniak, Pierson, and Pascarella (2001) found that participation in nonrevenue men’s sports (those sports other than football and men’s basketball) tended to reduce openness to diverse values and perspectives. Participation in football and men’s basketball had no such negative effect. Using a sample from NCAA Division I, II, and III institutions, Rudd and Stoll (2004) found that social character scores were higher for team sport athletes than for individual sport athletes and that the scores of individual sport athletes were higher than non-athletes. Also, Hirko (2007, 2009) found evidence suggesting that student-athletes themselves believe that their athletic experiences provide “quality interracial interaction” that enhances their overall educational experience.

Astin (1993) found that participation in intercollegiate athletics positively affects satisfaction with campus life but negatively affects participation in voting in a presidential election. He also found that participation in football and men’s basketball negatively affects student attitudes supporting Feminism.

**Effects of athletic participation on moral/character development.** Much of the study of moral and character development within college students has its foundation in the theories of Kohlberg (1971), Rest (1979), and Gilligan (1982). There is considerable debate about what impact, if any, participation in intercollegiate athletics has in the development of student character and moral growth (Doty, 2006; Edmundson, 2012). There has been a long-standing common belief, supported by many anecdotal accounts, that character is developed through the challenges and unique experiences of college sport (Bredemeier & Shields, 2006; Chu, 1989;

French, 2004; Gaines, 2012; Ogilvie & Tutko, 1985; Stevenson, 1985; Stoll & Beller, 2000). Furthermore, athletic departments commonly provide their student-athletes with multiple community service opportunities (Andrassy & Bruening, 2011; Jarvie & Paule-Koba, 2012). These activities have been linked to moral and character development (Delve, Mintz, & Stewart, 1990; Hellman, Hoppes, & Ellison, 2006; Schultz, 1990). However, despite proclamations of moral and character development through college athletic participation, the preponderance of evidence is mixed at best and does not support such claims (Bredemeier & Shields, 2006; French, 2004; Lumpkin, Stoll, & Beller, 1999; Ogilvie & Tutko, 1985; Stevenson, 1985; Stoll & Beller, 2000).

In a small, single-institution study using 48 students, Baldizan and Frey (1995) found that athletes scored slightly but significantly lower than non-athletes in moral judgment. In another study, utilizing four NCAA Division III institutions, Beller, Stoll, Burwell, and Cole (1996) found that team sport athletes scored significantly lower than both individual sport athletes and non-athletes in principled moral reasoning. Rudd and Stoll (2004) found very similar results in their study utilizing 595 athletes from NCAA Division I, II, and III. Their moral character score results indicated that team sport athletes rate significantly lower than individual sport athletes and that individual sport athletes rate significantly lower than non-athletes. But, because neither Baldizan and Frey (1995), Beller et al. (1996), nor Rudd and Stoll (2004) controlled for pre-college characteristics, it is unclear whether the lower moral scores are an effect of athletic participation or a covariate resulting from students' pre-college characteristics.

Bredemeier and Shields (1986) compared moral reasoning among basketball athletes, swimming athletes, and non-athletes. They found that basketball players scored significantly lower in moral reasoning than non-athletes and the swimmers, but the non-athletes and the



swimmers did not differ significantly. McCabe and Treviño (1997) found that, although athletic participation correlated significantly with academic dishonesty, when individual difference factors are controlled, athletic participation does not have a significant effect on academic dishonesty. Nixon (1997) found that athletes are no more likely than non-athletes to aggressively or physically harm or injure someone in a fight or dispute outside of sport, but athletes participating in contact sports are more likely than athletes participating in individual sports to show aggressive behavior. Also, for males only, team sport athletes are more aggressive than individual sport athletes. Williamson (2010) investigated the moral judgment of NCAA Division III men's and women's basketball players but found no statistically significant results.

Although the research results are mixed and point toward an overall negative effect of athletic participation on moral and character development, several scholars have noted that character may be developed through sport if administered purposefully (Bredemeier & Shields, 2006; Doty, 2006; Feezell, 2004, pp. 141-142; Gaines, 2012; Jones & McNamee, 2003, pp. 50-51; Stoll & Beller, 2000). For example, Bredemeier and Shields (2006) explain, "sport *can* build character, but only if coaches deliberately seek to do so and are adequately informed regarding the educational process required" (p. 6). Also, while on one hand Stoll and Beller (2000) explain that sport participation "does not appear to develop character" (p. 24), they submit on the other hand that sport participation could enhance it. Doty (2006) also supports this notion, postulating that participation in collegiate athletics alone does not build character; but, "character can be taught and learned in a sports setting. A sport experience can build character, but *only if* the environment is structured and a stated and planned goal is to develop character" (p. 6).

**Effects of athletic participation on leadership development.** In the last 20 years, college student leadership development has become an increasingly emphasized student outcome within higher education (Komives, Dugan, Owen, Slack, & Wagner, 2011; Kouzes & Posner, 2008). Overall, student participation in extracurricular and co-curricular group activities has been shown to be valuable to student leadership development (Dugan, 2011b) and is strongly tied to the work of Astin (1993). However, the literature describing the extent to which intercollegiate athletics impacts student leadership development is mixed.

Some researchers have shown that participation in intercollegiate athletics is associated with leadership enhancement among college students (Astin, 1993; Pascarella & Smart, 1991; Ryan, 1989). In addition, athletes themselves seem to perceive that they possess enhanced leadership abilities (Aries, McCarthy, Salovey, and Banaji, 2004; Astin, 1993, pp. 233, 387; Shulman & Bowen, 2001, pp. 183-186) and that their participation in athletics has enhanced their leadership skills (Potuto & O'Hanlon, 2007). Also, the community service experiences provided to many college athletes through their athletic participation (Andrassy & Bruening, 2011; Jarvie & Paule-Koba, 2012) have been shown to enhance leadership development (Dugan, 2011a; Jarvie & Paule-Koba, 2012). However, Extejt and Smith (2009) and Shulman and Bowen (2001) found virtually no actual leadership differences between college athletes and non-athletes. In addition, Yunker (2009) found, after controlling for pre-college leadership attributes, that highly committed student-athletes scored significantly lower on leadership performance scores than general population students. Moreover, in a study of NCAA Division III athletes for one season, Grandzol, Perlis, and Draina (2010) showed that participation in intercollegiate athletics did not enhance leadership, but participation as a team captain did encourage a significant level of

leadership development. Interviews conducted by Dupuis, Bloom, and Loughhead's (2006) support the notion that leadership may be developed through team captain experiences.

**Effects of athletic success on academic performance of the entire student body.** A few researchers have examined the impact of athletic success on the academic performance of the entire student body. These studies involve NCAA Division I football and men's basketball and the results are quite conflicting. Tucker (1992) found that football success is negatively correlated with overall student graduation rates while men's basketball success has no correlation with overall student graduation rates. Mangold, Bean, and Adams (2003) found similar results, however the findings for football and basketball were flip-flopped. That is, they found that the effects of basketball success are negative while the effects of football success have no significance. Tucker (2004) and Mixon and Treviño (2005) on the other hand, used an extension of Tucker's (1992) work and found that success in Division I football is positively associated with higher institutional graduation rates. Finally, Rishe (2003) found that athletic success has no statistical effects on graduation rates of the overall student body.

### **College Presidents and Intercollegiate Athletics**

**College presidents.** The primary leader of an American college or university is its president. According to Fisher, Tack, and Wheeler (1988), "the position of campus president is arguably the toughest job in America, as well as one of the most important" (p. 112). For simplicity, the term "president" is usually used by higher education scholars to describe the head or chief executive officer of a college, university, or university system—regardless of whether the official title is president, college president, university president, chancellor, rector, or other designation (ACE, 2012, p. ix; Cohen & March, 1974, p. 1; Davis & Davis, 1999; Eckel & Kezar, 2011, p. 280; Kaufman, 1980, p. 2; Kretovics, 2011, p. 32).

***Demographics of presidents.*** The typical college president is a 61-year-old, married, white, Christian, male with children, holding a doctoral degree in education or higher education. Specifically, 74% of college presidents are male and 26% are females. Eighty-seven percent are white while 13% are minorities. The vast majority of presidents are married (85%), have children (85%), and have a Christian religious preference (78%). The average age of a college president is 60.7 years and they have spent an average of seven years presiding at their current institutions. Fifty-eight percent are older than the age of 60. Also, 77% of presidents hold a doctorate—the majority of which (38%) have earned their highest degree in education or higher education. Seventy percent of presidents are former faculty members and 52% have worked their entire professional careers in higher education. Immediately prior to their current positions, most presidents (34%) were chief academic officers such as provosts or vice presidents of academic affairs. Others were either senior executives (23%), presidents of other institutions (19%), or working in positions outside of higher education (20%) (ACE, 2012).

***Duties of presidents.*** The president is perhaps the most influential individual at a college or university. Presidents wear many hats and are trusted with the leadership, strategy, financing, and compliance of their institutions (Eckel & Kezar, 2011). Their specific reporting structures can vary depending on the type and control of their institutions (Kretovics, 2011, pp. 26-32). Typically, the president has hierarchical authority within the institution and oversees an administrative cabinet. Although this varies by institution, a typical president's cabinet usually contains some combination of vice presidents or deans of major campus divisions such as academic affairs, student affairs, enrollment management, finance, institutional advancement, athletics, and human resources (Eckel & Kezar, 2011; Kretovics, 2011, pp. 26-32).

***Presidents and governing boards.*** Presidents usually report to some type of board—a board of trustees, a board of regents, or a board of governors (Eckel & Kezar, 2011; Fisher & Koch, 1996; Kaufman, 1980; Kretovics, 2011; Pierce, 2012). The president's relationship with the board is both unique and critical for several reasons. First, the members of such governing boards usually come from professions outside of higher education. Consequently, board members “are generally unaware of the complexities of running a college or university” (Pierce, 2012, p. 38) and thus must be educated by the president about intricacies of college operations and environment (Kaufman, 1980, pp. 52-62; Pierce, 2012, p. 38-42). Pierce (2012) explains that presidents and their boards are “inextricably intertwined because presidents recommend the institutional mission, priorities, policies, and budget to the board” (p. 23). Yet, “it is the boards that hire, and in unfortunate circumstances, fire, presidents” (p. 23). In this way, the president's position is unique because it is the only one that “serves at the pleasure of the board” (Kaufman, 1980, p. 1). That is, the president is the only employee directly hired and fired by the governing board (Kaufman, 1980, p. 1). Therefore, a president's power and effectiveness largely depends on a president's relationship with and support from the board (Fisher, 1984; Kaufman, 1980; Pierce, 2012).

***Presidents and other constituents.*** In addition to their boards, presidents are also responsible to, and have relations with, a broad range of stakeholders and constituents. According to Thwing (1926), “the relations which the American college president holds are more numerous, diverse, and complex than those of any other educational officer” (p. 10). Specifically, presidents report the greatest challenges when dealing with faculty, legislators, boards, and donors (ACE, 2012). They also report that they spend most of their time on budgeting, fundraising, community relations, strategic planning, personnel issues, governing

board relations, and enrollment management. Many of these responsibilities take place outside of campus and these “external demands on the position are growing” (Eckel & Kezar, 2011, p. 282). As presidents focus more externally, presidents usually delegate much of the on-campus leadership responsibilities to the chief academic officer such as the provost or vice president for academic affairs (Eckel & Kezar, 2011).

***Presidents' organization contexts.*** Presidents lead within a unique and complex organizational environment. First, as previously noted, presidents are hired and fired by board members who actually understand less about higher education than the presidents that report to them (Kaufman, 1980, pp. 52-62; Pierce, 2012, p. 38-42). Second, authority in higher education comes from two sources that are often competing—bureaucratic authority from top-down administrative and positional structure—and academic authority from shared knowledge and scholarly research within academic disciplines. For example, the bureaucratic authority of a president or other campus leader sometimes runs counter to the academic authority of a tenured professor. Third, there exists weak central coordination within colleges and universities because individual units within the institutions are loosely connected (Birnbaum, 1988; Eckel & Kezar, 2011). Fourth, higher education institutions are “organized anarchies” with ambiguous goals, power bases, and measures of success (Cohen & March, 1974). Similarly, Stoke (1959) described the presidency as “full of paradoxes” (p. 20) in which “every decision of the president will be scrutinized” (p. 53).

***Presidential leadership styles and strategies.*** Within the complex higher education organizational environment, presidents utilize a variety of leadership styles and strategies (Birnbaum, 1988, 1992; Bolman & Gallos, 2011; Fisher & Koch, 1996; Fisher and Koch, 2004; Fisher, Tack, & Wheeler, 1988). Despite Fisher and Koch's (2004) claim that “no definitive,

agreed-upon definition of presidential effectiveness exists” (p. 38), Birnbaum (1988, 1992) and Cohen and March (1974) claim that “transactional” leadership practices (Burns, 1978)—utilizing give-and-take relationships between leader and follower—are most effective for college presidents. They contend that because colleges are organized anarchies and inherently resistant to change, presidents have little control to establish meaningful lasting change and should focus instead on being good managers—administering budgets, priorities, and structures. In this way, they see effective college presidents as collegial managers, skilled at minimizing crises by making ongoing adjustments that keep their institutions moving forward efficiently. Conversely, other scholars (Fisher et al., 1988; Fisher & Koch, 1996; Fisher & Koch, 2004) argue that effective presidents are “transformational” leaders (Bass, 1985). They believe that transformational presidents are charismatic leaders that effectively use their power to establish deep, cultural, and long-lasting change within their institutions. Moreover, they contend that effective presidents are energetic visionaries who motivate and inspire their constituents by conveying strong and compelling visions. Pierce (2012) endorses a middle-ground, asserting that effective presidents need to be energetic and decisive, yet appreciative of institutional ambiguities and complexities, tolerant of institutional politics, comfortable listening to criticism without being overwhelmed by it, and have a sense of humor (p. 139).

***Presidential leadership at small colleges.*** Although college size varies considerably within each NCAA division, the institutions belonging to NCAA Division II and III are much smaller on average. Specifically, the average undergraduate enrollments of Division II and III schools are 4,236 and 2,625, respectively while the average Division I enrollment is about 11,500 (NCAA, 2010, 2012h). Schuman (2005) defined a “small college” as a four-year institution with an enrollment of about 500 to 3,000 full-time students. Thus, most NCAA

Division II and III colleges and universities are typically considered small to mid-sized institutions. Accordingly, the presidency at these smaller colleges can be very different than at large universities and “the failure to recognize the uniqueness of smallness means missing important opportunities for leadership” (Peterson, 2008, p. 29).

Small colleges are generally more personal, more vulnerable, and more responsive than larger institutions. They are usually enrollment-driven and the availability of financial resources is pervasively problematic. Because of their smaller sizes, faculty, staff, and administrators have more face-to-face relationships often resulting in stronger emotional bonds and deeper loyalties. Because of this, the president’s personality and relationships with faculty and staff are more critical. Also, small college presidents receive more formal authority from the governing boards. Moreover, at smaller colleges, employees across campus are usually more aware of issues affecting the entire institution rather than just within their individual units. This sense of collective responsibility can make it easier to set the direction of the institution as a whole. Similarly, faculty members are usually more loyal at smaller institutions because they are typically less likely to have national reputations that can shift their focus externally. Consequently, the personal and less bureaucratic nature of smaller colleges makes it more possible for presidential leadership to be more impactful and its effect to be more immediate (Felicetti, 2001; Peterson, 2008; Sammartino, 1982; Schuman, 2005).

**Presidential control of intercollegiate athletics.** Fundamentally, it is college and university presidents who control intercollegiate athletics—at the institutional level, at the conference level, and at the national level. At the institutional level, according to NCAA Constitutional Bylaw 2.1.1 (NCAA, 2012l, 2012m),



It is the responsibility of each member institution to control its intercollegiate athletics program in compliance with the rules and regulations of the Association. The institution's president or chancellor is responsible for the administration of all aspects of the athletics program, including approval of the budget and audit of all expenditures. (p. 3)

Thus, at their individual institutions, presidents are ultimately responsible to ensure that all aspects of athletics are properly managed, administered, financed, monitored, audited, and emphasized (Covell & Barr, 2010, p. 31; Ridpath & Abney, 2012). In order to accomplish this, presidents delegate the vast majority of athletic management and oversight to their athletic directors. In doing so, many presidents utilize a reporting structure in which their athletic directors report directly to them (Duderstadt, 2000, p. 60; Ridpath & Abney, 2012; Sanders, 2004). The NCAA prefers this type of reporting structure because it maximizes the athletic director's access to the president which purportedly increases institutional control (NCAA, 2008). At Division II, it is the most common reporting structure. But, at Division III, presidents usually make use of a structure in which the athletic director reports directly to a vice president or dean of student services (Sanders, 2004). Regardless to whom the athletic director reports, the relationship between the president and the athletic director is vital to controlling intercollegiate athletics at the institutional level (Duderstadt, 2000).

At the conference level, presidents also control athletics. While intercollegiate athletic conferences are usually staffed with a commissioner who functions as the lead administrator, the commissioner reports directly to the presidents of the conference institutions. The commissioner manages the daily conference operations and may occasionally offer direction for the conference, but it is the presidents that who actually vote and "have the ultimate power and responsibility to formulate conference vision, mission, and policies" (Covell & Barr, 2010, p. 76).

At the national level, it is the presidents who create the legislation, vote on the rules, and set the direction of the NCAA. The national governance structures of NCAA Division II and Division III are each headed by their own Presidents Councils—comprised of 14 and 15 presidents, respectively. These committees oversee, plan, and strategize the direction of their respective divisions. Furthermore, during the NCAA's official voting proceedings that take place each January at the annual NCAA Convention, each institution is entitled one vote. It is the president of each institution that votes—or otherwise appoints an institutional delegate to vote—on NCAA rules and legislative bylaws (Bok, 1985; Covell & Barr, 2010, pp. 39-45; NCAA, 2012l, 2012m, 2012r, 2012s).

However, although presidents ostensibly control intercollegiate athletics, this control is not as straightforward as it appears on paper. For example, the fact that NCAA presidents have the power to vote at NCAA conventions does not necessarily translate into presidential control of the NCAA in reality. Many presidents are too busy to attend NCAA conventions where voting occurs. Many others do not have time to study the minutiae of athletic matters such as proposed NCAA rules changes. “Because most proposals coming before the convention are technical and involve matters of purely athletic significance, few chief executives take the time to study the proposals with care or to instruct their representatives how to vote” (Bok, 1985, p. 210). Consequently, in reality much of the voting is driven by athletic directors, coaches, and faculty athletic representatives—not presidents (Bok, 1985, p. 210; Thelin & Wiseman, 1989, p. 69).

Furthermore, presidential control of athletics is compromised because colleges and universities are anarchical and political organizations with fundamental ambiguities such as imprecise goals, competing sources of authority, and complex sources of power (Cohen & March, 1974; Estler & Nelson, 2005; Thelin & Wiseman, 1989). “Nowhere is this ambiguity

more striking for presidential authority than in intercollegiate athletics” (Thelin & Wiseman, 1989, p. 79). In this political environment, presidents can be overpowered by governing boards, boosters, community leaders, alumni, and even by their athletic directors or coaches. Governing boards, to which most presidents directly report, have a long and well-documented history of over-involvement in athletic matters, many times vetoing their own presidents (Bok, 2003, pp. 36-37, 51-53; Byers, 1995, pp. 37-38; Duderstadt, 2000; Estler & Nelson, 2005; Sack & Staurowsky, 1998, pp. 21-26; Smith, 1988, pp. 213-218; Thelin & Wiseman, 1989, pp. 63-83).

**Presidential perceptions of intercollegiate athletics.** Several scholars have studied presidents' perceptions of intercollegiate athletics. However, the vast majority of the inquiries have focused on NCAA Division I presidents and what they think is right, wrong, or needs to be reformed about intercollegiate athletics (Branch, Watson, & Lubker, 2008; Knight Commission, 2009; Planek, 2008; Rose, 1993). Also, a few studies have investigated community college presidents' perceptions of athletics (Burgess, 2006; Williams, Byrd, & Pennington, 2008; Williams & Pennington, 2006). But, very little is known about what NCAA Division II and Division III presidents think about athletics and even less is known about how they think athletics impacts their campuses. Green, Jaschik, and Lederman (2012) included several items about athletics in their *Inside Higher Ed* survey of 1,002 presidents. However, Division II and III presidents were not identified in their study, thus making it impossible to differentiate the specific perceptions of the Division II and Division III college presidents.

Only Garrett (1985) has performed research on presidents' perceptions of athletics that specifically studies and distinguishes the perceptions of NCAA Division II and Division III presidents. As part of his study, he administered a survey containing 31-item Likert scale items, including six subscales, to 22 Division II presidents and 16 Division III presidents. No

statistically significant difference was found between the overall attitudes of Division II presidents and Division III presidents towards the values of athletics. Both groups indicated overall positive attitudes toward intercollegiate athletics. When the six individual subscales were analyzed, only one subscale differed statistically. Division II presidents perceived that athletics affected aspects of tradition, school spirit, and college life statistically significantly more positively than Division III presidents. On the other five subscales, the Division II and Division III presidents' perceptions did not differ significantly. The other five subscales included items measuring presidents' perceptions of how intercollegiate athletics impacts (1) the institution's academic integrity, (2) athletes' academic integrity and personality traits, (3) athletes' moral and character development, (4) athletes' life preparation, sportsmanship, and physical health, and (5) the institution's finances.

### **Summary**

This chapter has contained an extensive review of relevant literature pertaining to NCAA Division II and Division III institutions, the impacts of the athletics in higher education, and college presidents' dealings with intercollegiate athletics. Among the three divisions of the NCAA, Division II and Division III are very understudied. The overwhelming majority of research on athletics within higher education involves NCAA Division I. NCAA Division II and Division III are quite similar, but yet many differences exist between them as well.

Much has been written and studied about the impact of intercollegiate athletics within higher education—albeit mostly focused on the NCAA Division I level. The literature seems to contain an overall clustering of four primary areas of impact of athletics in higher education—impact on finance, enrollment, marketing, and students. The literature pertaining to the impact of intercollegiate athletics is very mixed, contradicting, debated, and ambiguous. At the NCAA

Division II and Division III levels, those impacts are even more ambiguous because the vast majority of research that exists is focused on Division I.

College and university presidents are the primary leaders and decision-makers at their institutions. They wear many hats and are very busy. At smaller institutions, many of which belong to NCAA Division II and Division III, presidents play a more active role in campus and are more in tune with the individuals on their campuses. Presidents are ultimately in control of intercollegiate athletics, but because of their busy schedules, they often delegate much of their athletic decision-making and responsibilities to others such as athletic directors. Although presidents of NCAA institutions have been studied before, almost no research has specifically investigated what NCAA Division II and Division III presidents think about the impacts of athletics on their campuses.

### **Chapter Three: Method**

The purpose of this research study was to describe and compare how NCAA Division II college presidents and NCAA Division III college presidents perceived the impacts of intercollegiate athletics at their institutions. Descriptive statistics were used to describe the presidents' perceptions. The inferential statistical method for the comparison utilized four independent samples t-tests. The four t-tests analyzed and compared the presidents' perceptions regarding the impacts of athletics on four overall areas of higher education impact gleaned from the literature: (1) financial impact, (2) enrollment impact, (3) marketing impact, (4) student impact. To measure the presidents' perceptions, an anonymous internet survey was created, included 26 randomized Likert-type items gleaned from the literature. Each item used a 6-point Likert-type scale. In order to measure the presidents' perceptions on each of the four overall areas of impact, the survey items were divided into four subscales corresponding to the four overall areas of athletic impact from the literature. The mean scores of the items for each of the four subscales were statistically compared between NCAA Division II presidents and NCAA Division III presidents using independent samples t-tests at an alpha ( $\alpha$ ) level of .05 to determine if any statistically significant differences existed between the perceptions of NCAA Division II presidents and NCAA Division III presidents. Because the population of NCAA Division II and Division III presidents is small (N=760), the survey was sent to the entire population.

#### **Research Questions**

This research study was guided by the following four research questions (RQs):

- RQ1: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the financial impacts of intercollegiate athletics at their institutions?

RQ2: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the enrollment impacts of intercollegiate athletics at their institutions?

RQ3: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the marketing impacts of intercollegiate athletics at their institutions?

RQ4: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the student impacts of intercollegiate athletics at their institutions?

The research questions were addressed using quantitative null hypothesis testing (Agresti & Finlay, 2009; Field, 2009).

### **Independent Variable**

There was one independent variable for this study. The variable was dichotomous and indicated whether the respondent was a president of a NCAA Division II institution or a NCAA Division III institution. This variable was determined from the response to Item #1 on the survey.

Item #1: Please indicate your institution's primary NCAA membership division classification.

The respondents were able to choose between one of two possible responses to this item—either NCAA Division II or NCAA Division III.

### **Dependent Variables**

This study included four dependent variables that were each continuous. Each of the dependent variables measured the presidents' perceptions on one of the four subscales of the

impact of athletics—(1) financial impact, (2) enrollment impact, (3) marketing impact, and (4) student impact. Each of the four dependent variables was calculated from the mean of the recoded survey responses for each of the four subscales. The four dependent variables (DVs) were:

DV<sub>1</sub>: Presidents' perceptions of the financial impacts of intercollegiate athletics at their institutions. DV<sub>1</sub> was calculated from the mean of the recoded survey response scores to Items #8, #9, #10, #11, and #12.

DV<sub>2</sub>: Presidents' perception of the enrollment impacts of intercollegiate athletics at their institutions. DV<sub>2</sub> was calculated from the mean of the recoded survey response scores to Items #13, #14, #15, #16, #17, #18, and #19.

DV<sub>3</sub>: Presidents' perception of the marketing impacts of intercollegiate athletics at their institutions. DV<sub>3</sub> was calculated from the mean of the recoded survey response scores to Items #20, #21, #22, #23, and #24.

DV<sub>4</sub>: Presidents' perception of the student impacts of intercollegiate athletics at their institutions. DV<sub>4</sub> was calculated from the mean of the recoded survey response scores to Items #25, #26, #27, #28, #29, and #30.

It is worth noting that each of these dependent variables were interval in character, but were calculated from ordinal Likert-type responses within each subscale. This method of producing interval data with a collection of ordinal Likert-type items is common and acceptable in social science research (Carifio & Perla, 2008). Also, parametric testing such as t-testing is acceptable when combining ordinal Likert-type items into a total continuous interval-like score (Carifio & Perla, 2008; De Winter & Dodou, 2010) and has very little affect on Type I and Type II errors



(Jaccard & Wan, 1996, p. 4). Furthermore, Garrett (1985) utilized this technique to compare NCAA Division I, II, and III presidents' perceptions regarding intercollegiate athletics.

### **Hypotheses Statements**

Each of the four research questions were addressed with a corresponding null hypothesis and alternative hypothesis. In each case, the null hypothesis stated that, at an alpha ( $\alpha$ ) = .05 level, there was no statistically significant difference between mean of the NCAA Division II presidents' perceptions and NCAA Division III presidents' perceptions. Thus, the null hypothesis ( $H_0$ ) stated that the mean scores were equal. The alternative hypothesis stated that, at an alpha ( $\alpha$ ) = .05 level, there was a statistically significant difference between the mean of the NCAA Division II presidents' perceptions and NCAA Division III presidents' perceptions. Thus, the alternative hypothesis ( $H_a$ ) stated that the mean scores were not equal. Expressed as mathematical formulas:

$$H_0: \mu_{\text{divII}} = \mu_{\text{divIII}}$$

$$H_a: \mu_{\text{divII}} \neq \mu_{\text{divIII}}$$

where

$H_0$  = null hypothesis

$H_a$  = alternative hypothesis

$\mu_{\text{divII}}$  = mean of all NCAA Division II presidents' perceptions within a subscale

$\mu_{\text{divIII}}$  = mean of all NCAA Division III presidents' perceptions within a subscale

For each of the four research questions, an independent samples t-test was conducted to determine if there was strong enough evidence to reject the null hypothesis. To determine this, an alpha ( $\alpha$ ) level of .05 was chosen because in social science research, the .05 cut-off originated by Fisher (1925) is the most commonly accepted cut-off level establish statistical significance

(Agresti & Finlay, 2009; Field, 2009). Thus, if  $p \leq .05$ , then the null hypothesis was rejected.

Conversely, if  $p > .05$ , then the evidence was not strong enough to reject the null hypothesis and thus the null hypothesis failed to be rejected (Agresti & Finlay, 2009; Field, 2009).

The following null and alternative hypotheses were used to address the four research questions:

*Null and Alternative Hypotheses for RQ1:*

H<sub>01</sub>: There is not a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the financial impacts of athletics at their institutions.

H<sub>a1</sub>: There is a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the financial impacts of athletics at their institutions.

*Null and Alternative Hypotheses for RQ2:*

H<sub>02</sub>: There is not a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the enrollment impacts of athletics at their institutions.

H<sub>a2</sub>: There is a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the enrollment impacts of athletics at their institutions.

*Null and Alternative Hypotheses for RQ3:*

H<sub>03</sub>: There is not a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the marketing impacts of athletics at their institutions.

H<sub>a3</sub>: There is a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the marketing impacts of athletics at their institutions.

*Null and Alternative Hypotheses for RQ4:*

H<sub>04</sub>: There is not a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the student impacts of athletics at their institutions.

H<sub>a4</sub>: There is a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the student impacts of athletics at their institutions.

Each of the four research questions and corresponding hypotheses are objectively non-directional, acknowledging the possibility that if an effect were found, it could go in either direction (Agresti & Finlay, 2009). Thus, the four null hypotheses were tested using non-directional two-tailed tests.

### **Research Design**

Four research questions guided this study and each question was examined using quantitative null hypothesis testing. A separate independent samples t-test was used to address each of the four research questions. Thus, a total of four independent samples t-tests were performed for this study. Independent samples t-tests were chosen because they allow inferences to be made about any differences between two independent group means (Agresti & Finlay, 2009; Field, 2009). For each research question, the two groups compared were NCAA Division II college presidents and NCAA Division III college presidents. The means of these two groups were compared statistically for each of the four subscales from the survey instrument.

Table 2

*Matrix of Analyses*

Research Question	Independent Variable	Dependent Variable	Statistical Test
RQ1: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the financial impacts of intercollegiate athletics at their institutions?	NCAA Division II or Division III (survey item #1)	DV <sub>1</sub> : Mean of the Financial Impact recoded subscale items (mean of survey items #8, #9, #10, #11, & #12)	Independent Samples t-test #1
RQ2: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the enrollment impacts of intercollegiate athletics at their institutions?	NCAA Division II or Division III (survey item #1)	DV <sub>2</sub> : Mean of the Enrollment Impact recoded subscale items (mean of survey items #13, #14, #15, #16, #17, #18, & #19)	Independent Samples t-test #2
RQ3: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the marketing impacts of intercollegiate athletics at their institutions?	NCAA Division II or Division III (survey item #1)	DV <sub>3</sub> : Mean of the Marketing Impact recoded subscale items (mean of survey items #20, #21, #22, #23, & #24)	Independent Samples t-test #3
RQ4: Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the student impacts of intercollegiate athletics at their institutions?	NCAA Division II or Division III (survey item #1)	DV <sub>4</sub> : Mean of the Student Impact recoded subscale items (mean of survey items #25, #26, #27, #28, #29, & #30)	Independent Samples t-test #4

**Instrument**

An anonymous internet survey (see Appendix F), utilizing *SurveyMonkey*, was the instrument used to collect the data for this study—including the independent variable as well as the data for all four dependent variables. The 34-item survey was designed to obtain the

perceptions of college and university presidents regarding the impacts of intercollegiate athletics at their institutions. It contained seven demographic items, 26 randomized Likert-type items, and one optional narrative item. The items were gleaned from an extensive review of literature. The seven demographic items (Items #1 to #7) appear first in the survey and were designed to gather background and institutional information about each respondent. Placing these types of basic, easily answered items at the beginning of the survey helps to encourage respondents and put them at ease (Dillman, Smyth, & Christian, 2009; Iarossi, 2006). The response to the first demographic item (Item #1) was the independent variable for the study and determined whether the respondent was a NCAA Division II college president or a NCAA Division III college president.

The 26 randomized Likert-type items (Items #8 to #33) appear next. Of the 26 Likert-type items, 23 were aligned with the a priori research questions and thus were used in the analyses. Three of the Likert-type items were not aligned with the a priori research questions, but will be used to inform the subsequent development of the instrument. The 26 Likert-type items appeared in randomized order through *SurveyMonkey* in order to counteract item order effects (Dillman et al., 2009, pp. 160-161). Finally, Item #33 was an optional open-ended narrative item that was not a part of the a priori research analyses, but will be used to inform the subsequent development of the instrument. It was used simply to offer the respondents an opportunity to add anything else regarding the impacts of intercollegiate athletics at their respective institutions.

**Instrument construction and piloting.** The survey instrument was designed, edited, and revised by the researcher with significant input from two of the dissertation committee members. The items and subscales were gleaned from an extensive review of literature. The

survey was piloted utilizing three of the techniques offered by Sapsford (2007) for piloting a survey instrument—(1) critical review and feedback of the instrument from an individual experienced in survey administration, (2) expert validation through critical review and feedback of the instrument from an expert in the field, and (3) feedback from pilot test participants after they have completed the survey.

First, both of the dissertation committee members that provided significant input toward the design of the survey instrument had extensive experience in survey research design and administration. Also, one of those committee members had previously performed internet survey research on NCAA university presidents' perceptions regarding intercollegiate athletics (Branch, Watson, & Lubker, 2008). This piloting procedure served as a critical review and feedback process that is recommended when designing surveys (Dillman et al., 2009; Iarossi, 2006; Sapsford, 2007).

Second, in addition to the two dissertation committee members who contributed to the survey design, the instrument was also reviewed for quality, adequacy, face validity, and wording concerns by four professionals who are experts in matters of NCAA Division II and Division III intercollegiate athletics. The four individuals utilized for expert validation were a NCAA Division II conference commissioner, a NCAA Division III conference commissioner, and two other individuals with significant leadership experience with the NCAA Division II Conference Commissioners Association (D2CCA) and the NCAA Division III Commissioners Association (DIIIICA). These four individuals had extensive experience working closely with college presidents regarding intercollegiate athletics and higher education. This piloting procedure served as the expert validation of the instrument. Through several phases of feedback, the instrument was edited, revised, and shortened numerous times.

Finally, the instrument was pretested by administering it to six individuals—two retired NCAA Division II presidents, an experienced NCAA Division II athletic director, a NCAA Division II Faculty Athletic Representative (FAR), and two of the researcher's fellow doctoral students in Higher Education Leadership. According to Dillman et al. (2009), this type of expert feedback and pretesting “with a variety of different people whose areas of expertise are likely to be significantly different” (p. 220) is recommended. After pretesting, the researcher received feedback from each of the six individuals who participated in the pilot pretest regarding the clarity, instructions, formatting, wording, ease of use, and completion time. Based on this pretest feedback, a couple of minor revisions were implemented. Also, the average actual completion time during pretesting was 6 minutes, 39 seconds and average perceived completion time was 7 minutes. This piloting procedure was similar to that used by Branch et al. (2008) prior to administering their online survey instrument to NCAA Division I university presidents regarding their opinions of various intercollegiate athletic issues.

Two of the piloting techniques offered by Sapsford (2007, p. 227) were not utilized—(1) collection and analysis of pilot data for reliability, validity, and factor validation and (2) re-administration of the survey to the pilot test participants to determine test-retest reliability. Piloting for the purposes of reliability coefficients, validity coefficients, and factor validation analyses was not performed because it requires about 100 to 300 participants in the pilot sample or about 100 to 200 participants per subscale (Sapsford, 2007, p. 227). This did not seem pragmatic, especially because the survey was to be administered for this study to a unique population of just 760 NCAA Division II and Division III presidents from which a low response rate was anticipated. Moreover, administering a test-retest also seemed impractical given this unique population.

**Six-point Likert-type scale.** Survey Items #8 through #33 were Likert-type items, measured on a 6-point ordinal scale. On the 6-point scale, the neutral midpoint option was not available to the respondents. Thus, the respondents' selection choices for each Likert-type item was: (1) Strongly agree, (2) Agree, (3) Slightly agree, (4) Slightly disagree, (5) Disagree, or (6) Strongly disagree. This scale was thus a slight modification of the typical 5-point Likert scale, but flexibility is acceptable regarding the number of response choices and the inclusion of a neutral mid-point (Sapsford, 2007, p. 223). Specifically, an even number of response choices is used whenever it was desirable to "force respondents to express some kind of preference rather than picking a neutral midpoint" (Sapsford, 2007, p. 227). Branch et al. (2008) used this technique when they utilized a four-point Likert-type scale to survey NCAA Division I-FBS presidents regarding their perceptions regarding athletic reform. Also, by utilizing a 6-point scale rather than a 5-point scale, respondents have the opportunity to convey finer differences in opinion (Sapsford, 2007, pp. 226-227). Moreover, reliability, validity, and discriminating power are at least as high for 6-point scales as 5-point scales (Preston & Coleman, 2000; Chomeya, 2010).

**Scoring and recoding of responses.** Of the 23 Likert-type items that were part of the analyses (Items #8 to #30), 14 were positively phrased and nine were negatively phrased. Utilizing a mixture of positively phrased items and negatively phrased items helps to minimize acquiescence bias, positional bias, and response bias (Field, 2009, p. 675; Sapsford, 2007, p. 226). The direction of each item was considered when scoring each item. Each item response was assigned a score based on the respondent's degree of agreement or disagreement to the statement. Positively phrased items did not require recoding such that "Strongly Agree" was scored with six points, "Agree" was scored with five points, "Slightly Agree" was scored with



four points, "Slightly Disagree" was scored with three points, "Disagree" was scored with two points, and "Strongly Disagree" was scored with one point.

Negatively worded items were recoded by scoring them oppositely such that "Strongly Agree" was scored with one point, "Agree" was scored with two points, "Slightly Agree" was scored with three points, "Slightly Disagree" was scored with four points, "Disagree" was scored with five points, and "Strongly Disagree" was scored with six points. To summarize, Table 3 illustrates how the Likert-type items were scored and recoded for analysis.

Table 3

*Scoring and Recoding of Likert-type Responses for Combining into Continuous Subscale Dependent Variables*

Positively phrased items (+)		Negatively phrased items (-)	
Score	Response	Score	Response
6	Strongly Agree	1	Strongly Agree
5	Agree	2	Agree
4	Slightly Agree	3	Slightly Agree
3	Slightly Disagree	4	Slightly Disagree
2	Disagree	5	Disagree
1	Strongly Disagree	6	Strongly Disagree

The score assigned to each item indicated the degree to which the president perceived athletics as positively contributing to the phenomenon inquired within the item. For example, if a president responded "Strongly Agree" to a positively-phrased item regarding the impact of athletics on marketing, then the item was assigned a score of 6, indicating that the president perceived athletics as positively affecting marketing. If a president responded "Strongly Agree" to a negatively-phrased item regarding the impact of athletics on marketing, then the item was assigned a score of 1, indicating that the president did not perceive athletics as positively affecting marketing. If a president responded "Strongly Disagree" to a positively-phrased item regarding the impact of athletics on marketing, then the item was assigned a score of 1,

indicating that the president did not perceive athletics as positively affecting marketing. If a president responded “Strongly Disagree” to a negatively-phrased item regarding the impact of athletics on marketing, then the item was assigned a score of 6, indicating that the president perceived athletics as positively affecting marketing.

**Demographic items.** The first seven items on the survey (Items #1 to #7) are demographic items that were designed to gather background and institutional information about the respondents and their institutions. The seven demographic items are illustrated in Table 4.

Table 4

*Demographic Items*

Item	Item stem	Response options
#1	Please indicate your institution's primary NCAA membership division classification.	<input type="radio"/> NCAA Division II <input type="radio"/> NCAA Division III
#2	Please indicate the approximate fulltime undergraduate enrollment of your institution (Please do NOT use commas).	_____
#3	Please indicate the control of your institution.	<input type="radio"/> Public <input type="radio"/> Private
#4	Please indicate your gender.	<input type="radio"/> Male <input type="radio"/> Female
#5	Does your institution currently sponsor a varsity football team?	<input type="radio"/> Yes <input type="radio"/> No
#6	Please indicate the total number of years you have served as a president/chancellor of a college or university (all institutions combined).	_____
#7	To whom does your athletic director (AD) directly report? (please select one)	<input type="radio"/> AD reports to you (the President/Chancellor) <input type="radio"/> Student Services VP/Dean <input type="radio"/> Academic VP/Dean or Provost <input type="radio"/> Enrollment VP/Dean <input type="radio"/> Financial VP/CFO <input type="radio"/> Institutional Advancement VP <input type="radio"/> Executive VP <input type="radio"/> Other (please specify)_____

Item #1 is the independent variable for the study and was the only demographic item that was used for the statistical analyses. Item #2 and Item #3 are both common demographics reported by the NCAA as well as the U.S. Department of Education. They also represent two of the primary differences between Division II and Division III institutions. For example, the average Division II enrollment of 4,236 is 1.6 times the average Division III enrollment of 2,625.

Also, the composition of NCAA Division II institutions is 52% public and 48% private while the composition of NCAA Division III institutions is 19% public and 81% private (NCAA, 2011, 2012g). Item #4, inquiring the gender of the respondents, was used only to report the demographics of the presidents who completed the survey. Overall, in the population, 74% of college presidents are male and 26% were females (ACE, 2012).

Item #5, regarding varsity football sponsorship is commonly listed on reports by the NCAA and the U.S. Department of Education. Also, as shown in Chapter Two, there are distinct financial differences between NCAA institutions that sponsor football and those that do not (Fulks, 2012b, 2012c). Item #6 was used only to report the demographics of the presidents who completed the survey. Finally, Item #7 was included because the relationship between an athletic director and a president is critical to controlling intercollegiate athletics (Duderstadt, 2000). Most NCAA Division II athletic directors report directly to their presidents while most NCAA Division III athletic directors report directly to a vice president or dean of student services (Sanders, 2004). The NCAA prefers a reporting structure in which the athletic director reports directly to the president because it maximizes the athletic director's access to the president which purportedly increases institutional control (NCAA, 2008).

**Subscales.** The 23 Likert-type items that were part of the analyses were divided into four subscales. Each subscale was developed from an extensive review of the literature. The comprehensive literature review indicated a clustering of four dominant themes of the impact of athletics in higher education. From these four themes, the four subscales were created: (1) Financial Impact, (2) Enrollment Impact, (3) Marketing Impact, and (4) Student Impact. Each subscale was quantitatively scored by calculating the mean of the recoded corresponding Likert-

type items within each subscale. In this way, individual Likert-type ordinal responses were combined to create the four continuous dependent variables.

***Financial Impact subscale.*** The Financial Impact subscale is comprised of five Likert-type items—two positively phrased and three negatively phrased—and include Items #8, #9, #10, #11, and #12 on the survey. These items investigated the presidents' perceptions of the financial impact of athletics at their institutions. The mean score of these five items constituted DV<sub>1</sub>. The five items within the Financial Impact subscale are illustrated in Table 5.

Table 5

*Financial Impact Subscales*

Item	Statement	Ph	Aspect
#8	Eliminating athletics would benefit our institution financially.	-	Overall finance
#9	Funding our athletic programs diverts valuable financial resources away from other mission-related components of our campus.	-	Overall finance
#10	Although athletics requires considerable expenditures, it brings substantial indirect benefits to our institution in forms that escape financial reports.	+	Indirect financial effects
#11	Our athletic programs generate substantial donations for our institution that we would not receive otherwise.	+	Donations
#12	When our athletic fundraising is successful, it tends to cut into fundraising for our general fund.	-	Donations crowd-out effects

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

Item #8 and Item #9 are both negatively phrased items designed to gauge the presidents' opinions about the overall financial impact of athletics at their institutions. Citing NCAA financial reports (Fulks, 2012a, 2012b, 2012c), many scholars have asserted that athletics is a money-losing endeavor at almost every level (Gerdy, 2000; Grant, Leadley, & Zigmont, 2008; Noll, 1999; Sperber, 1990; Weisbrod, Ballou, & Ashe, 2008; Zimbalist, 1999). However, others

have contended that the reported losses are over-estimated because of the highly aggregated form in which the data are reported (Borland, Goff, & Pulsinelli, 1992; Goff, 2000; Skousen & Condie, 1988). Also, Division II and Division III athletic programs are much less expensive (Fulks, 2012a, 2012b, 2012c) and Noll (1999) has described them as “relatively low-cost activities” (p. 26). Item #10 focuses on the degree to which presidents think that athletics brings indirect benefits that do not appear on financial reports. Some of these indirect financial benefits have been argued to be marketing, advertising, increased enrollments, increased donations, enhanced alumni relations, enhanced public relations, increased concession sales, and increased parking revenues (Frank, 2004; Goff, 2000; Getz & Siegfried, 2012; Kelderman, 2008; Sperber, 1990; Weisbrod, Ballou, & Asche, 2008, pp. 218-250; Zimbalist, 1999).

Items #11 and #12 investigate presidents' opinions about the impact of athletics on donations. Item #11 pertains to whether or not athletics helps to bring additional donations to a school. The empirical literature pertaining to this notion is very debated and contradicting (Baade & Sundberg, 1996; Booker & Klastorin, 1981; Clotfelter, 2003; Coughlin & Erikson, 1984; Daughtrey & Stotlar, 2000; Gaski & Etzel, 1984; Grimes & Chressanthis, 1994; Holmes, Meditz, & Sommers, 2008; Humphreys & Mondello, 2007; Litan, Orzag, & Orzag, 2003; McCormick & Tinsley, 1990; McEvoy, 2005; Meer & Rosen, 2009; Monks, 2003; Orszag & Orszag, 2005a; Rhoads & Gerking, 2000; Sack & Watkins, 1985; Shulman & Bowen, 2001; Sigelman & Bookheimer, 1983; Sigleman & Carter, 1979; Stinson & Howard, 2004, 2007, 2008; Tucker, 2004; Turner, Meserve, & Bowen, 2001; Weisbrod, Ballou, & Asch, 2008; Wunnava & Lauze, 2001). Item #12 examines the concept that athletic fundraising “crowds out” overall institutional fundraising. This has also been debated in the literature (McCormick & Tinsley,

1990; Shulman & Bowen, 2001; Sigelman & Bookheimer, 1983; Stinson & Howard, 2004, 2007, 2008, 2010; Turner et al., 2001; Sperber, 2000; Zimbalist, 1999).

***Enrollment Impact subscale.*** The Enrollment Impact subscale is composed of seven Likert-type items—five positively phrased and two negatively phrased—and includes Items #13, #14, #15, #16, #17, #18, and #19 on the survey. These items investigate the presidents' perceptions regarding how athletics affects various aspects of the enrollments of their institutions—including the quantity, quality, retention, and diversity of the student body (Bean, 1990; Dolence, Miyahara, Grajeda, & Rapp, 1988; Hossler, 1984; Hossler & Bean, 1990; Huddleston, 2000). The mean score of these seven items constituted DV<sub>2</sub>. The seven items within the Financial Impact subscale are illustrated in Table 6.

Table 6

*Enrollment Impact Subscale*

Item	Statement	Ph	Aspect
#13	When prospective students decide whether or not to attend our institution, our athletics is a considerable factor.	+	Quantity
#14	Overall, our athletes enter college less prepared academically than our non-athletes.	-	Quality
#15	Our athletic programs greatly enhance the diversity of our student body.	+	Diversity
#16	Our current students are more likely to persist at our institution due to our intercollegiate athletics.	+	Retention
#17	Intercollegiate athletics helps us when recruiting students who are non-athletes.	+	Non-athletes
#18	Winning and losing in athletics does not affect how many admission applications we receive from prospective students.	-	Success affects on incoming quantity
#19	When our athletic teams are winning, it is easier to recruit students with stronger academic credentials.	+	Success affects on incoming quality

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

Item #13 focuses on the degree to which presidents perceive that athletics is part of the college decision-making process for prospective college students in general. While some research has shown that athletics is not an important college choice factor (Broekemier & Seshadri, 1999; Warwick & Mansfield, 2003), other studies have indicated that for prospective students who desire to participate in athletics, it can be an important college choice factor (Finley & Fountain, 2008; Gabert, Hale, & Montalvo, 1999; Goss, Jubenville, & Orejan, 2006; Johnson, Jubenville, & Goss, 2009; Jordan & Kobritz, 2011; Konnert & Giese, 1987; Letawsky, Schneider, Pedersen, & Palmer, 2003; Mathes & Gurney, 1985; Pauline, Pauline, & Allen, 2008; Slabik, 1995). Item #14 is a negatively phrased item designed to examine the degree to which presidents think that incoming athletes at their institutions enter college with less academic credentials than non-athletes. There are numerous studies that have demonstrated that overall, athletes at all levels and institutional types enter college with lower academic credentials than their non-athlete counterparts—such as lower SAT scores, ACT scores, grade-point averages, and class ranks (Aries, McCarthy, Salovey, & Banaji, 2004; Blaich, 2003; Bowen & Levin, 2003; Espenshade, Chung, & Walling, 2004; Fizel & Smaby, 2004; Holmes, Meditz, & Sommers, 2008; Hood, Craig, & Ferguson, 1992; Maloney & McCormick, 1993; Purdy, Eitzen, & Hufnagel, 1985; Robst & Keil, 2000; Shulman & Bowen, 2001; Sigelman, 1995).

Item #15 addresses presidents' perceptions that athletics enhances diversity at their institutions. Diversity is a desired enrollment aspect that has been theorized and shown to enrich the educational experience for all students (Evans et al., 2010; Gurin, Dey, Hurtado, & Gurin, 2011; Pascarella & Terenzini, 2005; Smith, 2011; Wesibrod et al., pp. 88, 95-96). According to Shulman and Bowen (2001), athletics only contributes very small effects toward the diversity of college and university student bodies (pp. 50-58, 135-140, 261).



Item #16 is designed to record presidents' opinions about the impact that athletics has on institutional retention. This notion has been investigated by several scholars and the results seem to indicate that athletics has some effect of enhancing retention in some contexts (DesJardins, Ahlburg, & McCall, 1994, 1999; Harshaw, 2009; Jones, 2010; Le Crom, Warren, Clark, Marolla, & Gerber, 2009; Leppel, 2006; Mixon & Treviño, 2005). Item #17 focuses on how much athletics plays a part in the college choice process of prospective students who do not intend to participate in athletics. Although athletics has been shown to be a fairly unimportant college choice factor for prospective students in general, prospective students see athletics as a significantly more important selection factor than their parents (Broekemier & Seshadri, 1999; Warwick & Mansfield, 2003).

Item #18 and Item #19 investigate to what degree presidents believe that winning and losing in athletics contributes to the quantity and quality of their institutions' applicant pools. Item #18 specifically focuses on the impact of winning in athletics on the quantity of the applicant pool. The "Flutie Factor" is a hypothesized effect in which athletic winning and institutional exposure from athletics has been anecdotally reported to increase the numbers of applications institutions receive in various instances (Clotfelter, 2011, pp. 144-146; Sperber, 2000, pp. 60-61). Empirically, there have been numerous studies that have investigated the systematic effects of winning on the quantity and the quality of applicant pools. The results are mixed and seem to indicate a marginal positive effect on the quantity of applications (Borland, Goff, & Pulsinelli, 1992; Castle & Kostelnik, 2011; Chressanthi & Grimes, 1993; Jain, 2004; Jones, 2009; McEvoy, 2005, 2006; Mixon & Hsing, 1994; Mixon & Ressler, 1995; Murphy & Trandel, 1994; Perez, 2012; Pope & Pope, 2009, 2012; Sandy & Sloane, 2004; Toma & Cross, 1998; Weisbrod, Ballou, & Asch, 2008; Zimbalist, 1999). Item #19 specifically focuses on the

impact of winning athletics on the quality of the applicant pool. The results of studies on the effects of winning on applicant quality are also very mixed (Bremmer & Kesselring, 1993; Castle & Kostelnik, 2011; Jain, 2004; Litan, Orszag, & Orszag, 2003; McCormick & Tinsley, 1987; Mixon, 1995; Mixon, Treviño, & Minto, 2004; Orszag & Orszag, 2005a; Pope & Pope, 2009; Sandy & Sloane, 2004; Smith, 2008, 2009; Tucker, 2005; Tucker & Amato, 1993, 2006; Zimbalist, 1999).

***Marketing Impact subscale.*** The Marketing Impact subscale is comprised of five Likert-type items—three positively phrased and two negatively phrased—and includes Items #20, #21, #22, #23, and #24 on the survey. These items investigate presidents' perceptions of how athletics affect marketing at their institutions. Aspects of institutional brand, perception, publicity, prestige, and exposure are examined. The mean score of these five items constituted DV<sub>3</sub>. The five items within the Marketing Impact subscale are illustrated in Table 7.

Table 7

*Marketing Impact Subscale*

Item	Statement	Ph	Aspect
#20	Our institutional brand has little to do with our athletic programs.	-	Brand
#21	People draw conclusions about the overall quality of our institution based on their opinion of our athletic programs.	+	Perception
#22	The publicity generated from our athletic programs rarely translates into real, tangible benefits for our institution.	-	Publicity
#23	Ongoing lackluster athletic outcomes are harmful to our institution's prestige.	+	Prestige
#24	Our athletic programs expose our institution to many individuals who otherwise would not be aware of us.	+	Exposure

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

Item #20 is negatively phrased and measures the degree to which presidents perceive that athletics at their institutions impact their institutions' brands. For most colleges and universities, building an institutional brand is very important (Brewer, Gates, & Goldman, 2002; Kretovics, 2011; Weisbrod, Ballou, & Asch, 2008) and some scholars have asserted that athletics is an effective way to build an institutional brand (Brewer et al., 2002; Lee, Miloch, Kraft, & Tatum, 2008). Item #21 investigates how much presidents' feel that athletics contributes to the public's perception of the overall quality of their institutions. It has been noted that athletics can affect the public's perception of overall institutional quality (Boyer, 1987; Toma & Cross, 1998). Item #22 is a negatively phrased item designed to measure the degree to which presidents think that publicity from their athletic programs translates into benefits for their institutions. Ultimately, the increased publicity can lead to enhanced institutional reputation or prestige (Brewer et al., 2002; Clopton & Finch, 2012; Clotfelter, 2011; Goidel & Hamilton, 2006; Lee et al., 2008; Lovaglia & Lucas, 2005; Sperber, 2000; Toma & Cross, 1998) that can lead to indirect financial benefits (Frank, 2004; Goff, 2000; Getz & Siegfried, 2012; Sperber, 1990; Weisbrod et al., 2008, Zimbalist, 1999).

Item #23 focuses on the impact of athletics on the public's perception of institutional prestige—something that has been found to be statistically related (Clopton & Finch, 2012; Goidel & Hamilton, 2006; Lovaglia & Lucas, 2005). Item #24 examines presidents' perceptions regarding the degree of exposure that athletics provides for their institutions. According to Toma and Cross (1998), athletics serves as the “front door” of the university because it is the most visible part of the institution. Also, one of the rationales for the concept of the aforementioned “Flutie Factor” is that athletics effectively increases an institution's exposure (Clotfelter, 2011, pp. 144-146; Sperber, 2000, pp. 60-61).

***Student Impact subscale.*** The Student Impact subscale is comprised of six Likert-type items—four positively phrased and two negatively phrased—and includes Items #25, #26, #27, #28, #29, and #30 on the survey. These items investigate how presidents feel that athletics impacts students at their institutions. Aspects of academic and student development such as cognitive, moral, character, social, leadership, and lifetime skills development are examined as well as the personal development of non-athletes. The mean score of these six items constituted DV<sub>4</sub>. The six items within the Student Impact subscale are illustrated in Table 8.

Table 8

*Student Impact Subscale*

Item	Statement	Ph	Aspect
#25	Athletic participation makes it difficult for our student-athletes to reach their full academic potential.	-	Academic development
#26	Our student-athletes have higher character/moral traits as a result of their participation in our athletic programs.	+	Moral/character development
#27	There is a tendency for our athletes to socially isolate themselves into their own subculture that is separate from the rest of the campus community.	-	Social development
#28	Our student-athletes are better leaders as a result of their participation in athletics.	+	Leadership development
#29	Our graduating athletes take with them enhanced skills and valued experiences that give them an advantage in the job market over our graduating non-athletes.	+	Lifetime/job skills development
#30	For our non-athlete students, being involved with intercollegiate athletics as fans and/or spectators enhances their personal development.	+	Non-athletes' development

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

Item #25 is negatively phrased and focuses on how participation in athletics affects academic development. Although NCAA reports consistently show that graduation rates are

higher for athletes than for non-athletes (Brown, 2011a, 2012b; NCAA Research Staff, 2011; Pickle, 2012), an abundance of researchers have found mixed results when empirically examining the cognitive effects of athletic participation on college students (Amato, Gandar, Tucker, & Zuber, 1996; Amato, Gandar, & Zuber, 2001; Aries, McCarthy, Salovey, & Banaji, 2004; Astin, 1993; Fazel & Smaby, 2004; Heuser & Gray, 2009; Hood, Craig, & Ferguson, 1992; Long & Caudill, 1991; Maloney & McCormick, 1993; Matheson, 2007; McBride & Reed, 1998; Melendez, 2006; Milton, Freeman, & Williamson, 2012; Pascarella, Bohr, Nora, & Terenzini, 1995; Pascarella & Smart, 1991; Pascarella, Truckenmiller, Nora, Terenzini, Edison, & Hagedorn, 1999; Robst & Keil, 2000; Ryan, 1989; Scott, Paskus, Miranda, Petr, & McArdle, 2008; Shulman & Bowen, 2001; Symonds, 2009; Umbach, Palmer, Kuh, & Hannah, 2006; Wolniak, Pierson, & Pascarella, 2001; Yunker, 2009). Item #26 investigates the degree to which presidents feel that athletics contributes to moral and character development. Although the idea that athletic participation builds character has been longstanding, the empirical research does not support this notion (Baldizan & Frey, 1995; Beller, Stoll, Burwell, & Cole, 1996; Bredemeier & Shields, 1986, 2006; French, 2004; Lumpkin, Stoll, & Beller, 1999; Ogilvie & Tutko, 1985; Rudd & Stoll, 2004; Stevenson, 1985; Stoll & Beller, 2000). Several scholars have noted that athletic participation can enhance moral and character development, but only if it is purposefully and deliberately structured and administrated to do so (Bredemeier & Shields, 2006; Doty, 2006; Feezell, 2004; Gaines, 2012; Jones & McNamee, 2003; Stoll & Beller, 2000).

Item #27 focuses on the impact of athletic participation on social development. While some scholars have found that participation in athletics has positive social effects such as community, multiculturalism, and openness to diversity (Hirko, 2007, 2009; Howard-Hamilton & Sina, 2001; Levine & Cureton, 1998; Wolf-Wendel, Toma, & Morphew, 2001), others have

found that athletes tend to isolate themselves into their own subculture (Bowen & Levin, 2003; Shulman & Bowen, 2001) and have less social interaction with the campus community (Diaz, Gonyea, Junck, & Ward, 1998; Warner & Mixon, 2011). Item #28 examines presidents' perceptions of how athletic participation impacts leadership development—a notion that has had mixed results in the literature (Astin, 1993; Extejt & Smith, 2009; Grandzol, Perlis, & Draina, 2010; Pascarella & Smart, 1991; Ryan, 1989; Shulman & Bowen, 2001; Yunker, 2009).

Item #29 is designed to measure the degree to which presidents' believe that athletic participation enhances lifetime and job skills that contribute to occupational status after college. Although Dubois (1985) did not find this effect, other studies have found that athletes tend to earn higher post-college wages several years after graduation (Henderson, Olbrecht, & Polacheck, 2006; Long & Caudill, 1991; Pascarella & Smart, 1991; Shulman & Bowen, 2001). Item #30 examines presidents' perceptions of how involvement with athletics by non-athletes impacts their development. The research seems to suggest some developmental benefits for non-athletes that are involved with athletics as fans or spectators (Clopton, 2009a, 2009b; Schurr, Wittig, Ruble, & Henriksen, 1993; Wann & Robinson, 2002).

*Extra Likert-type items not part of the analyses.* Three of the 26 Likert-type items were not aligned with the a priori research questions and thus were not part of the analyses. Although they were not statistically analyzed, their inquiry is interesting within the context of this study and will be used to inform the subsequent development of the survey instrument. These three extra items are Item #31, #32, and #33. In order to counteract item order effects (Dillman et al., 2009), these three items were also randomly mixed within the other 23 Likert-type items. Item #31 investigates the presidents' opinions for the need for reform at their respective NCAA division. Item #32 inquires the degree to which presidents feel that spending at their particular

NCAA division is escalating too quickly. Finally, Item #33 examines the degree to which presidents' feel that athletics is in line with their institutional missions. The three extra Likert-type items are illustrated in Table 9.

Table 9

*Extra Items Not Part of the Analyses*

Item	Statement	Ph	Aspect
#31	Athletic reform is needed at our NCAA level.	-	Reform
#32	At our institution's NCAA division, athletic spending is getting out of control.	-	Overall spending
#33	Intercollegiate athletics at our institution plays a vital role in contributing to our institutional mission.	+	Mission

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

**Brevity.** Although the survey contains 34 items—10 of which are not part of the statistical analyses, the survey is nonetheless brief. The seven demographic items (Items #1 to #7) are quick and easy for the responding presidents to complete—requiring little thought. As college presidents and the chief executive officers of their institutions, the respondents already know institutional information such as the NCAA division level, approximate undergraduate enrollment, control, football sponsorship, and to whom the athletic director reports.

Short survey items are highly recommended in survey design (Dillman et al., 2009; Sapsford, 2007) and of the 26 randomized Likert-type items on the survey, only two exceed the 20 word limit rule of thumb and none exceed the three comma limit rule of thumb (Iarossi, 2006, p. 31). Furthermore, during pretesting, the average actual completion time was 6 minutes, 39 seconds and average perceived completion time was 7 minutes. Because the college presidents are extremely busy (Eckel & Kezar, 2011), this brevity was very important.

## **Population and Sampling**

**Population of interest.** The population of interest for this study was the college and university presidents of NCAA Division II institutions (N=314) (see Appendix B) and NCAA Division III institutions (N=446) (see Appendix C). Thus, the population included 760 total college presidents at the NCAA Division II and Division III levels. This included newly active and provisional NCAA member institutions, but did not include exploratory members.

**Sampling.** Because the population was small (N=760), it was convenient to invite the entire population to participate in this study. Thus, the researcher attempted to study all 760 presidents of NCAA Division II and Division III colleges and universities. However, because the respondents are a group that tend to have very busy professional careers (Eckel & Kezar, 2011), a low response rate was expected. In a telephone conversation before the study took place, a member of the NCAA Research staff explained to the researcher that even for official NCAA surveys sent directly from the NCAA, it can be difficult to get presidents to respond to email surveys. Also, in a study involving NCAA presidents utilizing an internet survey instrument, Branch, Watson, and Lubker (2008), received responses from 28 of the 117 NCAA Division I-FBS presidents. This represented a response rate of 24% which they described as “appear[ing] consistent with many past Internet based surveys” (p. 141).

## **Survey Administration Procedure and Timeline**

**Presidents' email addresses.** The survey for this study was delivered through an email hotlink to an internet survey instrument using *SurveyMonkey*. In order to electronically send the invitations and reminders, the presidents' email addresses had to be obtained. Of the 760 necessary email addresses, 750 were available and purchased from Higher Education Publications, Inc. (HEP) (<http://www.hepinc.com/>) through a \$350 licensing agreement (see



Appendix D). The remaining 10 email addresses were obtained through an internet search of the institutions' websites. Furthermore, great efforts were taken to "clean up" the 750 email addresses that were purchased from HEP. This was done through a systematic inspection for any email address that appeared vague, inaccurate, or generic. For example, any email address that appeared as "president@univeristy.edu," "presidentsoffice@college.edu," or "pres@university.edu" was rechecked by going to the institution's website and searching for a more accurate, personal email address. In many cases, a more personal email address was found within the institution's online email directory or discovered within the institution's corresponding athletic conference website contact information. Also, any email address that contained a name that did not match the president's name was also rechecked through an internet search. Furthermore, any president listed in the HEP database with an "interim" or "acting" title was rechecked and corrected if necessary. In all, approximately 100 of the purchased email addresses were revised.

**Contacts with presidents.** On February 12, 2013 the research proposal was defended and accepted by the dissertation committee. On February 27, 2013, human subjects protection approval was sought from the West Virginia University (WVU) Institutional Review Board (IRB) via the Kuali Coeus (WVU+kc) system. On March 6, 2013, the research study was acknowledged and approved by the WVU IRB (see Appendix E).

From March 8-11, 2013, the letters of invitation were mailed to the presidents, explaining the study and inviting them to voluntarily participate (see Appendix G). The mailing addresses for the institutions were provided by the NCAA (see Appendix A). In order to increase response rate, the letter was printed in full-color, on bright white paper, and each letter was signed individually in blue ink by the researcher. Dillman, Smyth, and Christian (2009) specifically

recommend all of these strategies in order to personalize the communication which helps to increase response rates (p. 237). Also, as a form of an incentive, the letter indicated that the researcher would offer to share the results with the presidents upon completion of the research project. These strategies were thought to be even more important when sampling college presidents due to their busy schedules. Furthermore, a glossy, full-color, double-sided, 3.5-inch by 4.5-inch survey information card was enclosed along with each letter (see Appendix H). The web address to the online survey was printed clearly on the letter and on the card. The purpose of the card was to offer the presidents something small yet eye-catching that might serve as a convenient reminder for presidents to complete the survey. In this way, it was anticipated that perhaps presidents might discard the letter after reading it, but might be more likely to keep the small card sitting on their desks or near their computers as a reminder to complete the survey. The letters were systematically mailed over several days (March 8-11, 2013), depending on the number of days anticipated for each letter to reach its destination through the United States Postal System (USPS) First Class Mail based on the geographical locations of the institutions. Thus ideally, the attempt was made for all 760 presidents to receive the letters on approximately the same day.

On Thursday, March 14, 2013, the actual survey link was emailed to the presidents through an email invitation (see Appendix I). In order to personalize the emails, the invitations were emailed individually to each of the 760 presidents, with each president's name appearing in the greeting of each specific email. These highly personalized methods of sending email surveys are highly recommended to increase response rates (Dillman et al., 2009, pp. 272-273). Also, the content of the emails contained wording that minimized the possibility of the emails being flagged as "junk mail" or "spam" (Dillman et al., 2009, pp. 284-285). This was thought to be

even more important because it was anticipated that college and university presidents might be likely to have sophisticated spam-filters protecting their email accounts.

From March 16-20, 2013, a postcard reminder was mailed to each president (see Appendix J). The postcards were also printed in full-color with a glossy finish on the back. Using the same geographic mailing strategy employed with the initial letter, the postcard reminders were also mailed systematically over several days based on the number of days anticipated for the postcards to reach their destinations through the USPS First Class Mail.

Finally, on Thursday, March 21, 2013, the last communication with the presidents was sent as an email reminder that also included a direct link to the survey (see Appendix K). Similar to the original email invitations, the email reminders were highly personalized. They were emailed to each president one by one, with the individual names of each president appearing in the greeting. Because the survey was anonymous, it was not possible to determine who had completed the survey and who had not. Thus, the reminders contained generic, uniform messages that expressed thanks to the respondents who may have completed the survey and a re-invitation to those who may have yet to complete the survey (Dillman et al., 2009, pp. 275-276). The survey remained open in *SurveyMonkey* until April 3, 2013 when the survey was closed and the data were loaded into *Statistical Package for the Social Sciences* (SPSS) software for grouping, recoding, and statistical analysis. Table 10 concisely illustrates the timeline that was employed during the research project.

Table 10

*Research Project Timeline*

Date	Action
February 12, 2013	Research proposal approved by committee (prospectus defense meeting)
February 27, 2013	Research protocol submitted to IRB for human subjects approval
March 6, 2013	Research protocol acknowledged and approved by IRB
March 8-11, 2013	Letters of invitation mailed to presidents
March 14, 2013	Email invitations (with link to survey) emailed to presidents
March 16-20, 2013	Postcard reminders mailed to presidents
March 21, 2013	Email reminders (with link to survey) emailed to presidents
April 3, 2013	Survey closed

In summary, the method of communicating with the respondents to administer the survey was fairly rapid—from the initial invitation letter mailing on March 8 to the final email reminder on March 21. According to Dillman et al. (2009), shorter time frames are recommended for electronic surveys because they tend to have quicker tempo than mail surveys (pp. 278-280). Also, the overall administration of survey was delivered through a combination of multiple delivery techniques—a mixture of methods that alternated between postal mail and electronic mail. Dillman et al. (2009) highly recommend this type of combining email and postal contacts because emails may not reach their respondents or may never be opened by the respondents. Also, as mentioned previously, emails run the risk of being flagged as spam or junk mail. Thus, alternating the delivery modes between postal mail and electronic mail increases the likelihood that respondents receive at least some of the correspondence (Dillman et al., 2009, pp. 275-282). Moreover, one of Dillman et al.'s (2009) guidelines is to “use multiple contacts, each with a different look and appeal” (p. 242).

### **A Priori Assumptions of the Independent Samples t-test**

For this research study, four independent samples t-tests were utilized. Because t-tests are parametric, four assumptions had to be considered, a priori, in order to anticipate drawing reasonably accurate conclusions from the results of the t-tests (Field, 2009).

**Assumption of interval data.** First, it was assumed that interval data were used for the analysis (Field, 2009). In this study the raw scores from the survey were Likert-type and thus were ordinal. However, these ordinal responses were combined within each subscale to produce continuous variables ( $DV_1$ ,  $DV_2$ ,  $DV_3$ , and  $DV_4$ ) that were interval in nature. This method of producing interval data with a collection of ordinal Likert-type items is common and acceptable in social science research (Carifio & Perla, 2008). Also, parametric testing such as t-testing is acceptable when combining ordinal Likert-type items into a total continuous interval-like score (Carifio & Perla, 2008; De Winter & Dodou, 2010) and has very little affect on Type I and Type II errors (Jaccard & Wan, 1996, p. 4). Furthermore, Garrett (1985) utilized this technique to compare NCAA Division I, II, and III presidents' perceptions regarding intercollegiate athletics.

**Assumption of normality.** Second, the assumption of normally distributed sampling distributions was to be addressed. This assumption was to be addressed primarily with sample size. Because sampling distributions tend to be normal in samples of at least 30 (Field, 2009), it was necessary to obtain a sample size of at least 30 NCAA Division II presidents and 30 NCAA Division III presidents for the t-tests.

**Assumption of homogeneity of variance.** Third, the assumption of homogeneity of variance—assuming the variance of both populations is approximately equal—was to be addressed by using Levene's test in SPSS. If, from Levene's test, it was determined that the

variances are not equal, then SPSS has the ability to make adjustments in order to validly perform the t-tests (Field, 2009).

**Assumption of independent samples.** Fourth, the assumption of independent samples was addressed (Field, 2009). In this study, the two participating groups from which data were collected were presidents of NCAA Division II institutions and presidents from NCAA Division III institutions. Generally speaking, these two groups were assumed to be independent because how a Division II president responded to the survey items probably would have nothing to do with how a Division III president responds. Presidents of NCAA institutions generally discuss athletic issues with other presidents within their own conferences and NCAA divisions. Also, at the annual NCAA convention, the presidents from the different NCAA divisions usually meet separately. Thus, virtually all interactions that presidents might have with other presidents that could potentially influence how they perceive the impacts of athletics on their campuses are normally not with presidents of differing NCAA divisions.

### **Human Protections**

Every effort was made to protect human subjects in this study. The internet survey that was utilized for this study was anonymous. The information that was requested from the respondents was almost completely unidentifiable. In addition, steps were taken—through the survey settings within *SurveyMonkey*—to make the survey even more anonymous. First, the survey was configured to not collect Internet Protocol (IP) addresses—which could compromise anonymity—when a respondent completed the survey. The survey was also set to allow multiple survey responses from each computer. In this way, any attempt to discover the identity of respondents would be further complicated because allowing multiple responses from each computer creates the possibility that multiple individuals can complete the survey from the same

computer. Finally, upon receiving approval from the dissertation committee at the prospectus defense meeting, the researcher sought written permission to conduct this research study from the West Virginia University Institutional Research Board (IRB) for the Protection of Human Subjects in Morgantown, West Virginia (see Appendix E).

### **Limitations**

The following limitations were considered for this study:

1. Because the survey instrument was created by the researcher for this study, no pre-existing validity and reliability measures were available at the time of administration. In order to attempt to minimize this limitation, a comprehensive procedure of expert validation, pretesting, and feedback from individuals from various backgrounds associated with higher education and intercollegiate athletics was utilized.
2. A low response rate was expected because (1) presidents are very busy, (2) previous research with NCAA presidents had provided low response rates, and (3) email addresses could be ambiguous, never reach certain presidents, or never be opened by certain presidents. Moreover, the population of 760 limited the possibility of increasing the sample. This also could have led to a violation of the assumption of normality. Several strategies were implemented to counteract this. First, the survey was designed to be very brief with an average actual pretest completion time of 6 minutes, 39 seconds. Also, the email invitation and survey introduction was short, inviting, trust-building, and personalized specifically for presidents at the NCAA Division II and Division III levels.

3. Data were only collected from two divisions within a single national athletic association—the NCAA. Thus, the results are probably not generalizable to the NCAA Division I level, to other national athletic associations, or to higher education institutions with other athletic structures.
4. It is possible that in some cases, individuals other than presidents may have completed the survey. In order to minimize this possibility, attempts were made, whenever possible, to obtain the presidents' most personal and active email addresses that go directly to the presidents. This required a thorough "clean up" of the email list that was purchased from Higher Education Publications, Inc.
5. Because substantial institutional funds are allocated to intercollegiate athletics (Fulks, 2012b, 2012c), and because the presidents are ultimately responsible for decisions regarding institutional resource allocation (Eckel & Kezar, 2011), varying levels of cognitive dissonance may exist among the presidents regarding intercollegiate athletics at their institutions. In this way, the presidents' perceptions may be biased, tending to inadvertently justify the institutional investments in intercollegiate athletics at their institutions.



## **Chapter Four: Results and Findings**

The purpose of this study was to describe and compare how NCAA Division II and NCAA Division III college presidents perceive the impacts of intercollegiate athletics at their institutions. The data were collected with an online survey instrument developed by the researcher and sent via email using *SurveyMonkey*. The survey was emailed to the entire population of all NCAA Division II and Division III college and university presidents (N=760). This chapter will present the results and findings of the data collection from the survey—including the demographics of respondents, the descriptive data that describes the perceptions of the presidents, and the inferential analyses from t-test results for the comparisons of the perceptions between the NCAA Division II presidents and the NCAA Division III presidents.

### **Survey Responses**

At the time of closing the survey in *SurveyMonkey* on April 3, 2013, a total of 341 survey responses were collected. One of the survey responses was considered unusable because the president who completed the survey notified the researcher that the president had selected the inappropriate NCAA division in Item #1. Through this president's voluntary disclosure, the survey was able to be identified and eliminated from the final data set. Among the remaining 340 survey responses, 17 more were eliminated from the analysis because they did not include responses to at least nine of the Likert-type items (Item #8 through Item #33). Thus, the final data set included 323 survey responses from the population of 760 total presidents of NCAA Division II and NCAA Division III institutions. This represented a 42.5% response rate.

### Demographics of Respondents

In the following section, the demographics of the presidents in the final data set are presented. These demographics were collected from the responses to Item #1 through Item #7 on the survey.

**NCAA division.** Table 11 illustrates the NCAA divisional membership affiliation of the 323 presidents who participated in the study. The data were drawn from Item #1 on the survey.

Table 11

#### *NCAA Division Levels of Responding Presidents' Institutions*

NCAA level	Number of responding presidents	Percentage of responding presidents	Total number of presidents in the entire population	Survey response rate
Division II	147	45.5%	314	46.8%
Division III	176	54.5%	446	39.5%
Total	323	100.0%	760	42.5%

Of the 323 survey responses contained within the final data set, 147 (45.5%) of the responses are from NCAA Division II presidents and 176 (54.5%) of the responses are from NCAA Division III presidents. Therefore, because there are 314 total NCAA Division II presidents in the population, the survey results represent 46.8% of all NCAA Division II presidents. Also, because there are 446 total NCAA Division III presidents in the population, the survey results represent 39.5% of all NCAA Division III presidents.

**Full-time undergraduate enrollment.** Table 12 illustrates the approximate full-time undergraduate enrollments of the responding presidents' institutions. The mean, standard deviation, median, smallest, and largest enrollments are presented. The data were drawn from Item #2 on the survey.

Table 12

*Full-time Undergraduate Enrollments of Responding Presidents' Institutions*

NCAA level	Approximate full-time undergraduate enrollment				
	Mean	Std. dev.	Median	Smallest	Largest
Division II	4,759	4,371	3,300	500	22,800
Division III	2,805	2,632	1,888	460	17,500
Total	3,688	3,651	2,250	460	22,800

For the responding NCAA Division II presidents, the mean full-time undergraduate enrollment is 4,759 with a median of 3,300. These respondent means are fairly representative of the population means of 4,236 in Division II and 2,625 in Division III (NCAA, 2011, 2012g). The smallest Division II institution among the respondents has an enrollment of 500 and the largest has an enrollment of 22,800. For the responding NCAA Division III presidents, the mean full-time undergraduate enrollment is 2,805 with a median of 1,888. The smallest Division III institution among the survey respondents has an enrollment of 460 and the largest has an enrollment of 17,500. Figure 1 illustrates a grouped frequency distribution of the full-time undergraduate enrollments of the responding presidents' institutions. The data were also drawn from Item #2 on the survey.

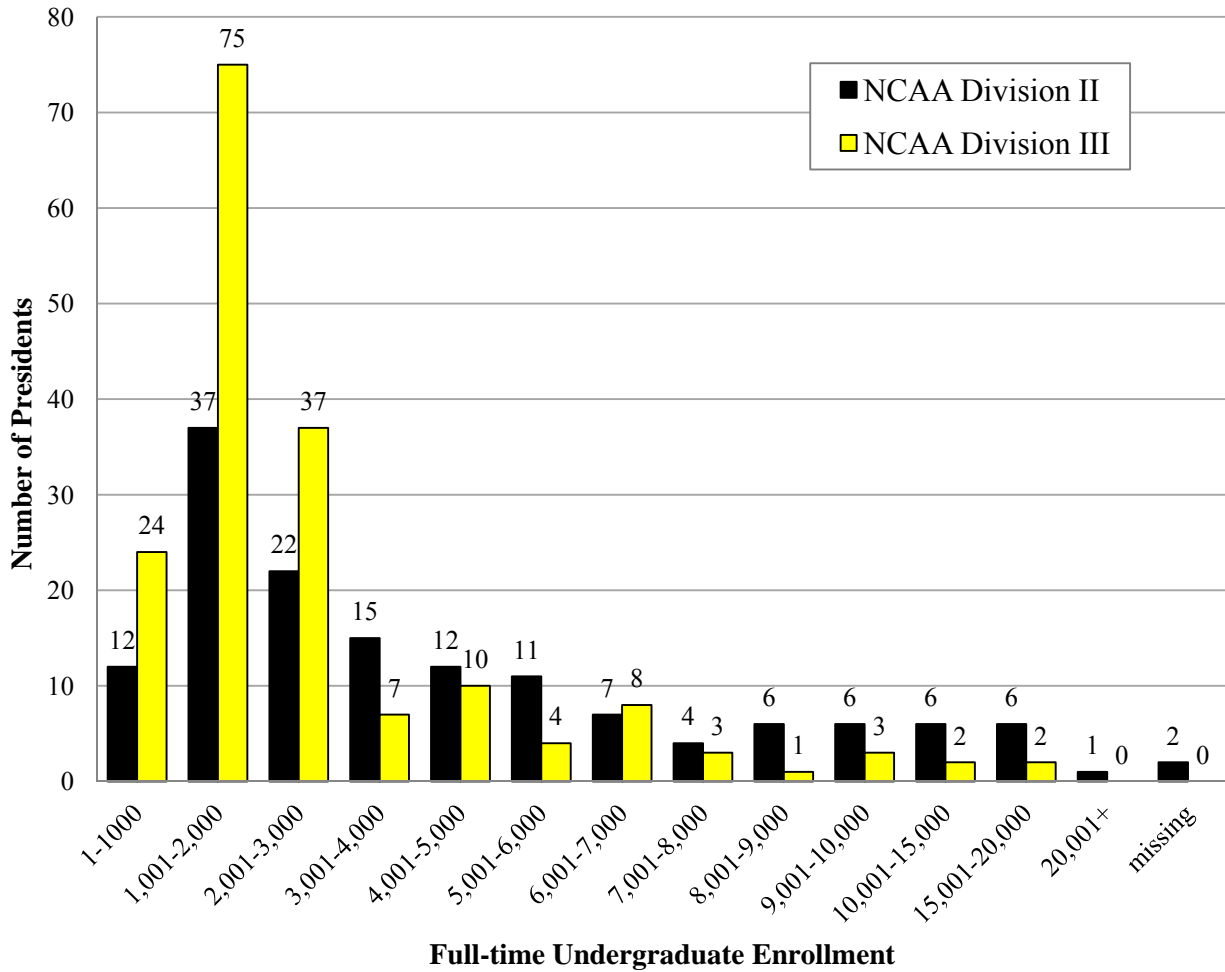


Figure 1. Histogram showing the full-time undergraduate enrollments of the responding presidents' institutions.

Most of the responding NCAA Division II presidents (n=37) are from institutions with undergraduate enrollments of 1,001-2,000, followed by 22 responding presidents with enrollments of 2,001-3,000. At NCAA Division III, by far the most responding presidents (n=75) are from institutions of 1,001-2,000, followed by 37 responding presidents at institutions with enrollments of 2,001-3,000. Schuman (2005) defined a “small college” as a primarily undergraduate four-year institution with an enrollment of about 500 to 3,000 full-time students. Therefore, based on that definition, the data show that almost half of the Division II presidents

and more than 75% of Division III presidents that participated in this study are “small college” presidents.

**Control.** Table 13 illustrates the control of the institutions of the presidents that participated in the study. The data were drawn from Item #3 on the survey.

Table 13

*Control of Responding Presidents' Institutions*

NCAA level	Public	Private	Missing	Total
Division II	81 (55%)	66 (45%)	0 (0%)	147
Division III	40 (23%)	134 (76%)	2 (1%)	176
Total	121 (37%)	200 (62%)	2 (1%)	323

For the responding NCAA Division II presidents, 55% (n=81) are from public schools while 45% (n=66) are from private institutions. For the responding NCAA Division III presidents, 23% (n=40) are from public schools while 76% (n=134) are from private institutions. These private-public ratios among the survey respondents are consistent with the population ratios of 52% public and 48% private in Division II and 19% public and 81% private in Division III (NCAA, 2011, 2012g).

**Gender.** Table 14 illustrates the gender of the presidents that participated in this study. The data were drawn from Item #4 on the survey.

Table 14

*Gender of Responding Presidents*

NCAA level	Male	Female	Missing	Total
Division II	120 (82%)	26 (18%)	1 (0%)	147
Division III	125 (71%)	51 (29%)	0 (0%)	176
Total	245 (76%)	77 (24%)	1 (0%)	323

For the responding NCAA Division II presidents, 82% (n=120) are male while 18% (n=26) are female. For the responding NCAA Division III presidents, 71% (n=125) are male while 29% (n=51) are female. The total gender percentages of responding presidents are 76% male and 24% female. These ratios are very closely aligned with the gender ratios for all college presidents of 74% male and 26% female (ACE, 2012).

**Sponsorship of varsity football.** Table 15 illustrates the responding presidents' institutions that either do or do not sponsor football as a varsity intercollegiate sport. The data were drawn from Item #5 on the survey.

Table 15

*Responding Presidents' Institutions Sponsoring Varsity Football*

NCAA level	Football	No football	Missing	Total
Division II	91 (62%)	56 (38%)	0 (0%)	147
Division III	102 (58%)	73 (41%)	1 (1%)	176
Total	193 (60%)	129 (40%)	1 (0%)	323

For the responding NCAA Division II presidents, 62% (n=91) of their institutions compete in the sport of intercollegiate football while 38% (n=56) do not sponsor a varsity football team. For the responding NCAA Division III presidents, 58% (n=102) of their institutions compete in the sport of intercollegiate football while 41% (n=73) do not sponsor a varsity football team.

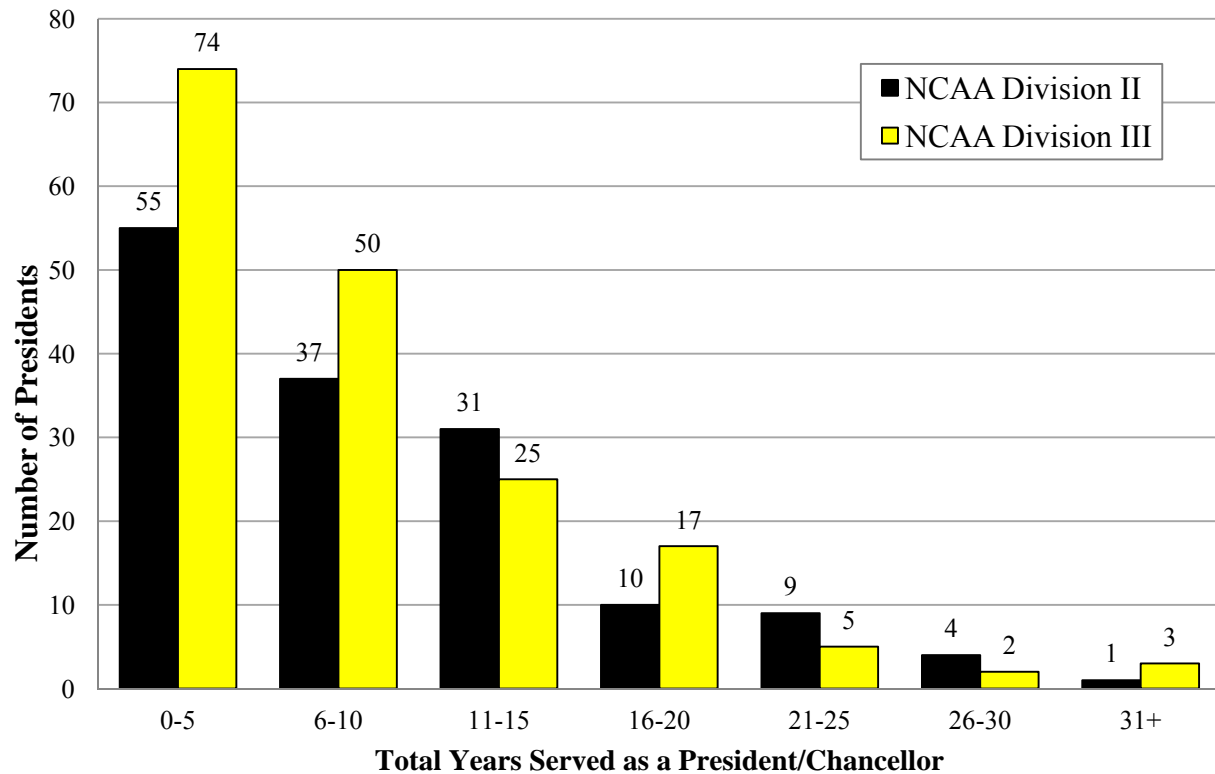
**Years served as president.** Table 16 illustrates the total number of years that the responding presidents have served as presidents or chancellors. This includes the years served at all institutions combined. The mean, standard deviation, median, least, and most number of years are presented. The data were drawn from Item #6 on the survey.

Table 16

*Total Number of Years the Responding Presidents have Served as Presidents*

NCAA level	Number of years served as a president/chancellor				
	Mean	Std. dev.	Median	Least	Most
Division II	9.4	7.0	8	1	31
Division III	8.5	6.9	7	1	33
Total	8.9	6.9	7	1	33

The data indicate that the NCAA Division II presidents in the study have slightly more experience serving in presidential appointments. The responding Division II presidents have a mean of 9.4 years of presidential experience while the mean Division III presidents have a mean of 8.5 years. The results from the medians are similar, with Division II median of eight years and the Division III median of seven. The most years of presidential service is also similar for each division—31 years for Division II and 33 years for Division III. Figure 2 illustrates a grouped frequency distribution of the years of presidential service for the presidents that participated in the study. The data were also drawn from Item #6 on the survey.



*Figure 2.* Histogram showing the total years that the responding presidents have served as presidents or chancellors.

Most of the responding NCAA Division II presidents (n=55) have served 0-5 years as a president, followed by 37 Division II presidents with 6-10 years of service. Four of the responding Division II presidents have served 26-30 years and one has served 31 or more years.

Most of the responding NCAA Division III presidents (n=74) have served 0-5 years as a president, followed by 50 Division III presidents with 6-10 years of service. Two of the responding Division II presidents have served 26-30 years and three have served 31 or more years.

**Reporting structure of athletic directors.** Table 17 illustrates the reporting structures of the athletic directors at the responding presidents' institutions. The data were drawn from Item #7 on the survey.



Table 17

*To Whom Athletic Directors Directly Report at the Responding Presidents' Institutions*

Athletic director reports to the...	Division II	Division III	Total
...President/Chancellor	91 (62%)	48 (27%)	139 (43%)
...Student Services VP/Dean	31 (21%)	72 (41%)	103 (32%)
...Academic VP/Dean or Provost	4 (3%)	30 (17%)	34 (11%)
...Enrollment VP/Dean	4 (3%)	5 (3%)	9 (3%)
...Financial VP/CFO	8 (5%)	5 (3%)	13 (4%)
...Institutional Advancement VP	3 (2%)	3 (2%)	6 (2%)
...Executive VP	4 (3%)	6 (3%)	10 (3%)
...Other	2 (1%)	7 (4%)	9 (3%)
<b>TOTALS</b>	<b>147</b>	<b>176</b>	<b>323</b>

At the NCAA Division II institutions in this study, 62% of the athletic directors (n=91) report directly to their presidents, followed by 21% that report to a student services vice president or dean (n=31). At the NCAA Division III institutions in this study, 41% of the athletic directors (n=72) report directly to a student services vice president or dean, followed by 27% that report to their president (n=48). These demographic results are somewhat consistent with Sanders (2004) who found that most Division II athletic directors report to the president (46%) or to the Student Affairs vice president (38%) while at Division III, athletic directors most commonly report to the Student Affairs vice president (40%) or to the president (17%).

### **Inter-correlations among Likert-type Items**

A correlation matrix was generated showing all possible correlation coefficients among all 26 of the Likert-type survey items (see Appendix L). Among all of the correlations, the highest correlation coefficient between any item and any other item is .525. Also, there are only five total correlation coefficients that exceed .500. Thus, none of the Likert-type survey items

are strongly correlated with any of the other Likert-type items. This suggests that there is not a lot of overlap of phenomena among the Likert-type items on the survey.

### Reliability Results

After all negatively phrased Likert-type items were recoded (Field, 2009, p. 675-676, 681), Cronbach's alpha coefficients were calculated for all of the Likert-type items used for analysis and for each of the four subscales. The Cronbach's alpha coefficients are reported to estimate the internal consistency reliability of each subscale. Appendix M provides the detailed SPSS outputs of the reliability statistics. Table 18 provides a summary of the Cronbach's alpha reliability statistics for all of the items used for analysis as well as for each of the four subscales.

Table 18

#### *Summary of Reliability Statistics – Cronbach's Alpha Coefficients*

	No. of items	Survey items included	Cronbach's alpha coefficient
All Likert-type items for analysis	23	#8 to #30	.850
Financial Impact subscale	5	#8 to # 12	.584
Enrollment Impact subscale	7	#13 to #19	.673
Marketing Impact subscale	5	#20 to #24	.733
Student Impact subscale	6	#25 to #30	.649

Of the four subscales, the highest Cronbach alpha coefficient is found in the Marketing Impact subscale ( $\alpha=.733$ ). The Financial Impact subscale has the weakest Cronbach's alpha coefficient ( $\alpha=.584$ ). There is no agreement or authoritative source regarding the acceptable level of Cronbach's alpha for subscales (Bowling, 2009, p. 164; Pedhazur & Schmelkin, 1991, pp. 109-110). As a general guideline, George and Mallery (2003) provided this rule of thumb: .9 is excellent; .8 is good; .7 is acceptable; .6 is questionable; .5 is poor; and less than .5 is unacceptable (p. 231). Supporting this range, Bowling (2009) pointed out that .7 is acceptable to

some while some others have accepted values as low as .5 (p. 164). Field (2009) prefers “values in the range of .7 to .8 (or thereabouts)” (p. 679). Sapsford (2007) explained that .6 could be acceptable for comparing large groups when measuring attitudes, but .8 is preferable (pp. 237-238). Pedhazur and Schmelkin (1991) summarized that the acceptable level depends on the researcher and context of the study (p. 110).

### **Addressing the Assumptions of the t-test**

Comparisons between the perceptions of the NCAA Division II presidents and the NCAA Division III presidents was carried out with four independent samples t-tests. Because t-tests are parametric, four assumptions had to be addressed in order to assure more accurate conclusions from the t-test results (Field, 2009).

**Assumption of interval data.** Interval data were created for the dependent variables of the t-tests by taking clusters of individual Likert-type responses that were ordinal, and combining them together into continuous data. This was done to create the dependent variables for all four subscales. This practice is commonly accepted in social science research and has a minimal effect on the error rate of parametric testing (Carifio & Perla, 2008; De Winter & Dodou, 2010; Jaccard & Wan, 1996, p.4).

**Assumption of normality.** The assumption of normality means that the sampling distributions of both groups in the t-tests are assumed to be normal. This assumption was addressed by the large sample sizes that were collected for each group of presidents. According to the central limit theorem, regardless of the shape of the data that are collected from a sample, the sampling distribution tends to be normal in sample sizes of at least 30 (Field, 2009, pp. 133-134, 155-156, 344-345). Because t-tests utilize two groups of data, it was necessary to collect a sample size of at least 30 for each group—at least 30 NCAA Division II presidents and at least

30 NCAA Division III presidents. Thus, because the sample collected for this study contained 147 Division II presidents and 176 Division III presidents, the sampling distributions were assumed to be normal.

**Assumption of homogeneity of variance.** The assumption of homogeneity of variance was tested and accounted for during the analysis through Levene's Test in *Statistical Package for the Social Sciences* (SPSS). The SPSS output in Table 20 shows the statistical significance levels from Levene's Test of Equality of Variances for each of the four subscales. The significance levels for three of the four subscales are not statistically significant, indicating that the variances are assumed to be approximately equal. Specifically, for the Financial Impact Subscale ( $p=.143$ ), the Enrollment Impact Subscale ( $p=.339$ ), and the Student Impact Subscale ( $p=.659$ ), the variances of the two groups are assumed to be equal. For the Marketing Impact Subscale, the significance level of Levene's Test is significant ( $p=.014$ ), indicating that the variances for that subscale are not assumed to be equal. Accordingly, SPSS made the necessary adjustments to statistically account for this within the t-tests (Field, 2009, pp. 339-340).

**Assumption of independent samples.** The two groups are assumed to be independent because presumably the way that a president from one group responded to the survey should not have impacted how presidents from the other group responded to the survey.

### **T-test Results**

Four independent samples t-tests were administered using four subscales to compare the perceptions of the NCAA Division II presidents with the perceptions of the NCAA Division III presidents. The two SPSS outputs from the t-tests are illustrated in Table 19 and Table 20. The first output, illustrated in Table 19, shows the overall means, standard deviations, and standard errors of the means for each subscale for both groups.

Table 19

*SPSS t-test Output: Descriptive Group Statistics*

Subscale	NCAA division	n	Mean	Std. deviation	Std. error of mean
Financial Impact	Division II	147	4.4463	.63564	.05243
	Division III	176	4.3352	.68884	.05192
Enrollment Impact	Division II	147	4.1480	.61169	.05045
	Division III	176	3.9714	.66561	.05017
Marketing Impact	Division II	147	4.2446	.70091	.05781
	Division III	176	3.7489	.84008	.06332
Student Impact	Division II	147	4.4697	.60807	.05015
	Division III	176	4.3902	.62933	.04744

**Findings from the subscale means.** A six-point Likert-type scale was used to measure the presidents' perceptions with 1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4=Slightly Agree, 5=Agree, and 6=Strongly Agree. Although no neutral midpoint was available for the presidents when completing the survey, when items are combined, the midpoint separating agreement with disagreement is a hypothetical score of 3.5. Any score greater than 3.5 indicates a degree of agreement. Any score less than 3.5 indicates a degree of disagreement.

On the Financial Impact subscale, the Division II presidents responded with a mean recoded score of 4.4463 while the Division III presidents mean recoded response was 4.3352. Both of these scores fall between "slightly agree" and "agree", indicating that both sets of presidents perceive on average that athletics positively impacts the finances of their institutions. On the Enrollment Impact subscale, the Division II presidents responded with a mean recoded score of 4.1480 while the Division III presidents mean recoded response was 3.9714. This indicates that both groups of presidents approximately "slightly agree" that athletics has a positive impact on the enrollments of their institutions. On the Marketing Impact subscale, the

Division II presidents responded with a mean recoded score of 4.2446 while the Division III presidents mean recoded response was 3.7489. This indicates that Division II presidents more than “slightly agree” that athletics has a positive impact on marketing at their institutions while the Division III presidents feel more neutral. Finally, on the Student Impact subscale, the Division II presidents responded with a mean recoded score of 4.4697 while the Division III presidents mean recoded response was 4.3902. Both of these scores fall between “slightly agree” and “agree”, indicating that both sets of presidents perceive that athletics positively impacts the finances at their institutions. On balance, the overall means of each subscale indicate that, on all four subscales, the presidents from both divisions have an overall perception that intercollegiate athletics has a positive impact on their institutions.

It is also worth noting that for each of the four subscales, the NCAA Division III presidents responded with a higher standard deviation than their NCAA Division II counterparts. This indicates that there is overall less agreement among the Division III presidents regarding the impacts of athletics at their institutions. It indicates that the perceptions of the Division II presidents are more consistent regarding the impacts of athletics at their institutions.

**Levene’s test for equality of variances.** The SPSS t-test output in Table 20 shows the results of Levene’s Test for equality of variances, the t-ratios, the degrees of freedom, and the significance level for each of the four t-tests. The results of Levene’s Test illustrate that the only subscale for which the variances of the two groups are not assumed to be equal is the Marketing Impact subscale ( $p=.014$ ). Thus, for the Marketing Impact subscale, the resulting data used for the t-test correspond with the equal variances “Equal variances not assumed” row in Table 20. For the other three subscales, the resulting data used for the t-tests correspond with the equal variances “Equal variances assumed” rows in Table 20 (Field, 2009, pp. 339-341).

Table 20

*SPSS t-test Output: Inferential Statistical Analyses of Group Comparisons*

Subscale	Equality of variances	Levene's Test for equality of variances		t-test for equality of means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confidence interval of the difference	
									Lower	Upper
Financial Impact	Equal variances assumed	2.15	.143	1.49	321	.136	.111	.074	-.035	.257
	Equal variances not assumed			1.50	318	.133	.111	.074	-.034	.256
Enrollment Impact	Equal variances assumed	0.92	.339	2.46	321	.014	.177	.072	.036	.318
	Equal variances not assumed			2.48	318	.014	.177	.071	.037	.317
Marketing Impact	Equal variances assumed	6.14	.014	5.69	321	.000	.496	.087	.324	.667
	Equal variances not assumed			5.78	321	.000	.496	.086	.327	.664
Student Impact	Equal variances assumed	0.20	.659	1.15	321	.251	.080	.069	-.057	.216
	Equal variances not assumed			1.15	314	.250	.080	.069	-.056	.215

**Findings from the research questions.** The t-ratios, degrees of freedom, and significance levels illustrated in the SPSS t-test output in Table 20 provide the inferential analyses to answer for the four research questions. This section addresses each of the four research questions.

**Research Question #1.** Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the financial impacts of intercollegiate athletics at their institutions?

*Finding.* The first independent samples t-test detected no statistically significant difference when comparing the Financial Impact subscale scores between NCAA Division II presidents and NCAA Division III presidents ( $t=1.49$ ;  $df=321$ ;  $p=.136$ ). Therefore, we fail to reject the null hypothesis, lending support to the notion that the perceptions of NCAA Division II presidents are not different than the perceptions of NCAA Division III presidents regarding the financial impacts of intercollegiate athletics at their institutions.

**Research Question #2.** Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the enrollment impacts of intercollegiate athletics at their institutions?

*Finding.* The second independent samples t-test detected a statistically significant difference when comparing the Enrollment Impact subscale scores between NCAA Division II presidents and NCAA Division III presidents ( $t=2.46$ ;  $df=321$ ;  $p=.014$ ). Therefore, we reject the null hypothesis, lending support to the notion that the perceptions of NCAA Division II presidents are more positive than NCAA Division III presidents regarding the enrollment impacts of intercollegiate athletics at their institutions.

**Research Question #3.** Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the marketing impacts of intercollegiate athletics at their institutions?

*Finding.* The third independent samples t-test detected a statistically significant difference when comparing the Marketing Impact subscale scores between NCAA Division II presidents and NCAA Division III presidents ( $t=5.78$ ;  $df=321$ ;  $p<.001$ ). Therefore, we reject the null hypothesis, lending support to the notion that the perceptions of NCAA Division II



presidents are more positive than NCAA Division III presidents regarding the marketing impacts of intercollegiate athletics at their institutions.

**Research Question #4.** Is there a statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the student impacts of intercollegiate athletics at their institutions?

*Finding.* The fourth independent samples t-test detected no statistically significant difference when comparing the Student Impact subscale scores between NCAA Division II presidents and NCAA Division III presidents ( $t=1.15$ ;  $df=321$ ;  $p=.251$ ). Therefore, we fail to reject the null hypothesis, lending support to the notion that the perceptions of NCAA Division II presidents are not different than the perceptions of NCAA Division III presidents regarding the student impacts of intercollegiate athletics at their institutions.

### **Descriptive Results from Individual Items**

The survey contained 26 individual Likert-type items to which the presidents were asked to indicate their level of agreement with statements regarding the impacts of intercollegiate athletics at their institutions. Appendix N contains individual histograms illustrating the responses for each of the 26 Likert-type items. Of the 26 items, 23 were used in the a priori analyses. The 23 items used for analysis were divided into four subscales based on the literature—financial impact, enrollment impact, marketing impact, and student impact. The following section reports the descriptive results of each individual Likert-type item on the survey.

**Financial Impact subscale item results.** Table 21 reports the means and standard deviations of the individual Likert-type survey responses within the Financial Impact subscale.

Table 21

*Means of Financial Impact Subscale Items*

#	Item	Aspect	Ph	NCAA Division					
				Division II			Division III		
				n	Mean	s.d.	n	Mean	s.d.
8	Eliminating athletics would benefit our institution financially.	Overall finance	-	147	2.122	1.14	176	2.051	1.23
9	Funding our athletic programs diverts valuable financial resources away from other mission-related components of our campus.	Overall finance	-	147	2.667	1.13	176	2.472	1.03
10	Although athletics requires considerable expenditures, it brings substantial indirect benefits to our institution in forms that escape financial reports.	Indirect financial effects	+	145	4.876	0.79	174	4.667	0.85
11	Our athletic programs generate substantial donations for our institution that we would not receive otherwise.	Donations	+	146	3.562	1.32	174	3.000	1.29
12	When our athletic fundraising is successful, it tends to cut into fundraising for our general fund.	Crowd-out effects	-	146	2.411	0.74	174	2.511	1.00

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

**Mean item scores.** The mean scores of the Financial Impact subscale items indicate that the presidents of both divisions perceive that athletics positively impacts the finances at their institutions. With the exception of Item #11, both groups of presidents expressed mean agreement with positively phrased items and expressed mean disagreement with negatively phrased items. On Item #11, the Division II presidents indicated overall neutrality while Division III presidents indicated a level of overall disagreement that their athletic programs generate substantial donations for their institutions that would not be received otherwise.

***Most opinionated mean item scores.*** With 3.5 representing the conceptual neutral point, Item #8 is the most numerically opinionated mean score for both groups of presidents (Division II=2.122; Division III=2.051). As shown in Appendix N, 87% of Division II presidents expressed some level of disagreement on this item, with 73% disagreed or strongly disagreed. Similarly, 86% of Division III presidents expressed some level of disagreement, with 43% strongly disagreed. This indicates that among the perceptions measured with these five items, the presidents of both groups feel most opinionated that eliminating athletics would not benefit their institutions financially and thus athletics has a positive overall impact on their institutions.

***Standard deviations.*** The standard deviations of the responses to these items are fairly balanced with the exception of Item #12. This indicates that regarding “crowd out” effects of athletic fundraising, Division III presidents’ perceptions are more polarized within their own division than the Division II presidents.

**Enrollment Impact subscale item results.** Table 22 reports the means and standard deviations of the individual Likert-type survey responses within the Enrollment Impact subscale.

Table 22

*Means of Enrollment Impact Subscale Items*

#	Item	Aspect	Ph	NCAA Division					
				Division II			Division III		
				n	Mean	s.d.	n	Mean	s.d.
13	When prospective students decide whether or not to attend our institution, our athletics is a considerable factor.	Enrollment quantity	+	147	3.714	1.15	175	3.926	1.19
14	Overall, our athletes enter college less prepared academically than our non-athletes.	Enrollment quality	-	144	2.285	0.90	176	2.256	0.96
15	Our athletic programs greatly enhance the diversity of our student body.	Enrollment diversity	+	146	4.774	0.95	176	4.165	1.22
16	Our current students are more likely to persist at our institution due to our intercollegiate athletics.	Enrollment retention	+	146	4.322	1.17	176	4.335	1.17
17	Intercollegiate athletics helps us when recruiting students who are non-athletes.	Enrolling non-athletes	+	146	4.247	0.92	176	3.773	1.16
18	Winning and losing in athletics does not affect how many admission applications we receive from prospective students.	Success affects on enrollment quantity	-	147	3.680	1.23	174	3.839	1.23
19	When our athletic teams are winning, it is easier to recruit students with stronger academic credentials.	Success affects on enrollment quality	+	145	3.972	0.94	175	3.674	1.08

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

**Mean item scores.** The mean scores of the Enrollment Impact subscale items indicate that the presidents of both divisions perceive that athletics positively impacts the enrollments at their institutions. With the exception of Item #18, both groups of presidents expressed mean agreement with positively phrased items and expressed mean disagreement with negatively

phrased items. On Item #18, both groups of presidents indicated an overall slight agreement that winning and losing in athletics does not affect their numbers of admissions applicants.

***Most opinionated mean item scores.*** With 3.5 representing the conceptual neutral point, the most opinionated mean score for Division III presidents corresponds to Item #14 (2.256). As shown in Appendix N, 88% of Division III presidents expressed some level of disagreement on this item, with 71% disagreed or strongly disagreed. This indicates that among these seven items, Division III presidents feel most opinionated that their athletes enter college just as prepared academically as their non-athletes and consequently athletics does not reduce enrollment quality. The most opinionated mean score for Division II presidents corresponded to Item #15 (4.774), followed closely by Item #14 (2.285). As shown in Appendix N, on Item #15, 92% of Division II presidents expressed some level of agreement, with 63% agreed or strongly agreed. On Item #14, 89% of Division II presidents expressed some level of disagreement, with 67% disagreed or strongly disagreed. This indicates that among the perceptions measured with these seven items, Division II presidents feel most opinionated that athletics positively impacts enrollment diversity and does not reduce enrollment quality.

***Standard deviations.*** The standard deviations are fairly close for these items, with higher standard deviations reported for the Division III group for a few of the items.

**Marketing Impact subscale item results.** Table 23 reports the means and standard deviations of the individual Likert-type survey responses within the Marketing Impact subscale.

Table 23

*Means of Marketing Impact Subscale Items*

#	Item	Aspect	Ph	NCAA Division					
				Division II			Division III		
				n	Mean	s.d.	n	Mean	s.d.
20	Our institutional brand has little to do with our athletic programs.	Brand	-	146	2.767	1.15	176	3.284	1.39
21	People draw conclusions about the overall quality of our institution based on their opinion of our athletic programs.	Perception	+	146	3.932	1.04	173	3.387	1.23
22	The publicity generated from our athletic programs rarely translates into real, tangible benefits for our institution.	Publicity	-	147	2.925	1.27	176	3.273	1.35
23	Ongoing lackluster athletic outcomes are harmful to our institution's prestige.	Prestige	+	147	4.048	1.07	176	3.557	1.15
24	Our athletic programs expose our institution to many individuals who otherwise would not be aware of us.	Exposure	+	145	4.945	0.75	175	4.343	1.06

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

**Mean item scores.** The mean scores of the Marketing Impact subscale items indicate that the presidents of both divisions perceive that athletics positively impacts marketing at their institutions. The NCAA Division II presidents responded agreeably to all three positively phrased items (Items #21, #23, and #24) and responded disagreeably to both negatively phrased items (Items #20 and #22). The NCAA Division III presidents responded similarly with the exception of a negative mean response regarding how athletics affects the perception of the quality of their institutions (Item #21) and a neutral mean response regarding how athletic success affects institutional prestige (Item #23).

***Most opinionated mean item scores.*** With 3.5 representing the conceptual neutral point, Item #24 received the most numerically opinionated mean score for both groups (Division II=4.945; Division III=4.343). As shown in Appendix N, 99% of Division II presidents expressed some level of agreement with this item, with 72% agreed or strongly agreed. Also, 84% of Division III presidents expressed some level of agreement with this item, with 46% agreed or strongly agreed. This indicates that among the perceptions measured with these five items, the presidents of both groups feel most opinionated that their athletic programs expose their institutions to many individuals who otherwise would not be aware of their institutions.

***Standard deviations.*** For all five items, the standard deviations for the Division III presidents are higher than the Division II presidents. This indicates that Division III presidents are more polarized within their own division than the Division II presidents regarding the marketing impacts of athletics at their institutions. Conversely, this indicates that the Division II presidents responded more consistently and thus are in more agreement within their own division regarding these items.

**Student Impact subscale item results.** Table 24 reports the means and standard deviations of the individual Likert-type survey responses within the Student Impact subscale.

Table 24

*Means of Student Impact Subscale Items*

#	Item	Aspect	Ph	NCAA Division					
				Division II			Division III		
				n	Mean	s.d.	n	Mean	s.d.
25	Athletic participation makes it difficult for our student-athletes to reach their full academic potential.	Academic development	-	145	2.145	0.93	176	2.125	1.05
26	Our student-athletes have higher character/moral traits as a result of their participation in our athletic programs.	Moral/ character development	+	144	4.271	1.02	172	4.070	1.15
27	There is a tendency for our athletes to socially isolate themselves into their own subculture that is separate from the rest of the campus community.	Social development	-	146	3.034	1.14	176	2.875	1.21
28	Our student-athletes are better leaders as a result of their participation in athletics.	Leadership development	+	145	4.903	0.83	174	4.799	0.89
29	Our graduating athletes take with them enhanced skills and valued experiences that give them an advantage in the job market over our graduating non-athletes.	Lifetime/ job skills development	+	145	4.579	0.97	172	4.471	1.03
30	For our non-athlete students, being involved with intercollegiate athletics as fans and/or spectators enhances their personal development.	Non-athletes' development	+	145	4.290	0.91	172	4.000	1.08

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

**Mean item scores.** The mean scores of the Student Impact subscale items indicate that the presidents of both divisions perceive that athletics positively impacts the students at their institutions. Both groups of presidents expressed mean agreement with all four positively phrased items (Items #26, #28, #29, and #30) and expressed mean disagreement with both negatively phrased items (Items #25 and #27).



***Most opinionated mean item scores.*** With 3.5 representing the conceptual neutral point, the most opinionated mean score for Division II presidents corresponds to Item #28 (4.903), followed closely by Item #25 (2.145). Similarly, the most opinionated mean score for Division III presidents corresponds to Item #25 (2.125), followed closely by Item #28 (4.799). As shown in Appendix N, on Item #25, 89% of Division II presidents expressed some level of disagreement, with 75% either disagreed or strongly disagreed. Almost identically, 89% of Division III presidents expressed some level of disagreement with the item, including 74% who either disagreed or strongly disagreed. This indicates that among the perceptions measured with these six items, both groups of presidents feel most opinionated that athletics enhances leadership development but does not hinder academic development.

***Standard deviations.*** The standard deviations for all five items are higher for the NCAA Division III presidents, but the gap is narrow for each item.

**Descriptive results from items not included in the analyses.** Table 25 reports the means and standard deviations of the individual Likert-type survey responses of the items not included in the a priori analyses.

Table 25

*Means of Survey Items Not Included in the Analyses*

#	Item	Aspect	Ph	NCAA Division					
				Division II			Division III		
				n	Mean	s.d.	n	Mean	s.d.
31	Athletic reform is needed at our NCAA level.	Reform need	-	144	3.181	1.32	173	3.110	1.26
32	At our institution's NCAA division, athletic spending is getting out of control.	Overall spending	-	145	2.986	1.37	175	2.823	1.18
33	Intercollegiate athletics at our institution plays a vital role in contributing to our institutional mission.	Overall mission	+	147	4.762	0.86	174	4.707	0.99

*Note.* Ph = Phrasing (i.e., item is positively or negatively phrased).

Although these items are not included in the analyses, their results indicate that the presidents in both divisions perceive athletics overall positively. Both groups of presidents expressed mean agreement with Item #33 with low standard deviations, indicating that these presidents perceive that athletics plays a vital role in contributing to their institutional missions. Also, both groups expressed mean slight disagreement with Items #31 and #32—both negatively phrased—indicating a slight disagreement, at their respective NCAA levels, with the notion that athletics needs reformed or with the notion that spending is getting out of control.

**Most opinionated responses within each subscale.** The items with the most opinionated mean response within each subscale are reported in Table 26. Numerically, these items scored the largest difference from the conceptual neutral point of 3.5 within each subscale. They represent the items within each subscale to which the presidents expressed the strongest

opinion. Conceptually, the further away from 3.5 that a score is, the stronger the opinion the presidents voiced on the item. For example, a mean score of 2.000 is 1.500 away from the neutral point of 3.5. There are two items listed for the Enrollment Impact subscale and the Student Impact subscale because the top two item means were close enough to justify including both items on this list.

Table 26

*Most Opinionated Mean Responses Within Each Subscale*

Subscale	#	Item	NCAA Division			
			Division II		Division III	
			Mean	Diff.	Mean	Diff.
Financial Impact	8	Eliminating athletics would benefit our institution financially.	2.122	-1.378	2.051	-1.449
Enrollment Impact	14	Overall, our athletes enter college less prepared academically than our non-athletes.	2.285	-1.215	2.256	-1.244
	15	Our athletic programs greatly enhance the diversity of our student body.	4.774	+1.274	----- <sup>a</sup>	----- <sup>a</sup>
Marketing Impact	24	Our athletic programs expose our institution to many individuals who otherwise would not be aware of us.	4.945	+1.445	4.343	+0.843
Student Impact	25	Athletic participation makes it difficult for our student-athletes to reach their full academic potential.	2.145	-1.355	2.125	-1.375
	28	Our student-athletes are better leaders as a result of their participation in athletics.	4.903	+1.403	4.799	+1.299

<sup>a</sup> Because NCAA Division III presidents are not as opinionated regarding Item #15, values are not reported.

The strongest opinions expressed by the presidents are similar between the divisions. On the Financial Impact subscale, both the Division II and the Division III presidents are most opinionated on Item #8, thereby voicing their collective opinions that eliminating athletics would not benefit their institutions (Division II=-1.378; Division III=-1.449). On the Enrollment Impact subscale, both sets of presidents voiced a strong opinion through Item #14 that their athletes do not enter college less prepared academically than their non-athletes (Division II=-

1.15; Division III=-1.244). Also, with a difference of +1.274, the Division II presidents strongly expressed their perception through Item #15 that their athletic programs greatly enhance the diversity of their student bodies. The Division III presidents are not as strongly opinionated on this item and thus a blank line is listed adjacent to this item in Table 26. On the Marketing Impact subscale, both sets of presidents expressed strong opinions through Item #24 that their athletic programs expose their institutions to many individuals who otherwise would not be aware of them (Division II=+4.945; Division III=+4.343). Finally, on the Student Impact subscale, both sets of presidents were most opinionated regarding Item #25 and #28. With their responses, the presidents voiced that athletic participation does not make it more difficult for their student-athletes to reach their full academic potential (Division II=+2.145; Division III=+2.125). Also, they are opinionated that their student-athletes are better leaders as a result of their participation in athletics (Division II=+4.903; Division III=+1.299).

### **Post-hoc Mann-Whitney U Tests for Individual Item Comparisons**

In order to further explore the data, post hoc Mann-Whitney U tests were conducted on each of the 26 Likert-type items to compare the perceptions of NCAA Division II presidents and NCAA Division III presidents on each item (see Appendix O). Non-parametric Mann-Whitney U tests were chosen for these comparisons because the data are ordinal and because parametric assumptions could not be assumed. Because 26 analyses were administered, there is a greatly inflated risk of experiencing a Type I error and thus these post hoc results should be considered with caution. Therefore, these extra analyses are only provided for deeper exploration into the data—to investigate patterns that may be present that were not specified a priori—and to potentially guide the subsequent development of the survey instrument. It is important to note

that these post hoc analyses are not part of the a priori research hypotheses or the four null hypothesis tests for this study.

Despite the inflated Type I error risk, seven of the items resulted in significance levels of  $p < .001$  (Items #11, #15, #17, #20, #21, #23, and #24) and three other items resulted in significance levels of  $p = .007$  (Item #30),  $p = .016$  (Item #19), and  $p = .017$  (Item #22). The most noteworthy results from these post hoc Mann-Whitney U tests correspond to the five items within the Marketing Impact subscale. Four of the five items within this subscale resulted in significant differences between NCAA Division II and NCAA Division III presidents with alpha levels of  $p < .001$  (Items #20, #21, #23, and #24) while the fifth item within this subscale resulted in a significance level of  $p = .017$  (Item #22). For each of these five items, the NCAA Division II presidents responded more positively than the NCAA Division III presidents regarding the marketing impact of intercollegiate athletics at their institutions. The results of all 26 of the post hoc Mann-Whitney U tests are provided in Appendix O.

## **Chapter Five: Summary, Conclusions, and Implications**

### **Summary of the Study**

There are 760 higher education institutions in the United States that belong to the NCAA Division II and the NCAA Division III as intercollegiate athletic members. The impact that intercollegiate athletics has at those institutions is very complex. Most scholarly investigations of those complexities generally fall into four overall categories—financial impact, enrollment impact, marketing impact, and student impact. The problem is that most of the literature regarding intercollegiate athletics in higher education is either anecdotally debated or empirically contradicting. Not only that, but the vast majority of this research is focused primarily on the NCAA Division I level which is very different than the Division II and Division III levels. Furthermore, even less is known about what the presidents and chancellors of the Division II and Division III schools think about the impacts of intercollegiate athletics at their institutions. Because presidents are the primary leaders and influential decision-makers in higher education, and they ultimately control intercollegiate athletics within the NCAA, it is important to study how they perceive the impacts of intercollegiate athletics at their institutions. Moreover, because NCAA Division II and NCAA Division III have several distinctions, it is valuable to also compare the perceptions of these two groups of presidents.

Thus, this study described and compared the perceptions of NCAA Division II and NCAA Division III college presidents regarding the impacts of intercollegiate athletics at their institutions. The presidents' perceptions were collected with a very brief internet survey, created by the researcher, that was emailed to the entire population of NCAA Division II and Division III presidents (N=760). The description of the presidents' perceptions is reported in Chapter Four and Appendix N through aggregate descriptive data from the survey results. The statistical

comparison of the presidents' perceptions is reported in Chapter Four through four research questions that guided this study. Each of the four research questions sought to determine whether or not a statistically significant difference exists between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding four key areas of higher education gleaned from the literature—finance, enrollment, marketing, and students.

### **Conclusions from the Research Questions**

**Research Question #1 conclusion.** In addressing Research Question #1, the first independent samples t-test detected no statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the financial impact of intercollegiate athletics at their institutions. This finding indicates that overall, the presidents of Division II institutions and Division III institutions perceive that intercollegiate athletics has a similar financial impact on their campuses. As the Chapter Two literature review has illustrated, the degree to which intercollegiate athletics positively or negatively impacts the finances of an institution is quite complex and contains many aspects. The presidents' perceptions regarding some of these complex aspects were measured with items from the Financial Impact subscale—such as overall finance, indirect financial effects, effect on donations, and “crowd-out” effects from athletic fundraising. This finding is consistent with Garrett (1985) who did not find a statistically significant difference between the attitudes of Division II presidents and Division III presidents regarding a “Business of Athletics” subscale which contained items related to finance.

In Chapter Two, several financial differences between NCAA Division II and NCAA Division III were pointed out that might make this finding initially surprising. For example, NCAA Division II institutions offer athletic scholarships—a financial burden of which NCAA

Division III institutions are free (Hardwick-Day, 2008). Also, Division II colleges and universities spend about twice as much on intercollegiate athletics as Division III schools—about \$4 million yearly for Division II institutions compared to about \$2 million yearly for Division III schools (Fulks, 2012b, 2012c; NCAA, 2010). Moreover, Division II institutions devote about 5% to 7% of their total institutional budgets to intercollegiate athletics compared to about 3% to 4% at Division III schools. This translates into a yearly expense of about \$12,400 to \$14,500 per athlete in Division II compared to about \$5,100 to \$5,600 per athlete in Division III (Fulks, 2012b, 2012c). In terms of direct financial impacts, this clearly demonstrates that intercollegiate athletic programs at the NCAA Division II level are generally more expensive to operate than at the NCAA Division III level.

However, as also presented in Chapter Two, it has been argued that various indirect financial benefits of intercollegiate athletics may also exist and these can help mitigate direct costs. The results from two of the individual items within the Financial Impact subscale suggest that it is these indirect financial benefits that the NCAA Division II presidents perceive are at work at their institutions. For example, although the literature has demonstrated that intercollegiate athletics at the NCAA Division II level is more directly expensive than at the Division III level, the Division II presidents perceive the existence of indirect financial benefits (Item #10) and impactful donation generation (Item #11) from their athletic programs more so than the Division III presidents (see Appendix O).

These findings also align with the study of Hardwick-Day (2008), who found that, excluding athletic scholarship costs, Division II athletic programs actually cost less to operate than Division III athletic programs because of the higher revenues generated at the Division II level. These results also coincide with Borland, Goff, and Pulsinelli (1992), Getz and Siegfried



(2012, p. 352), Goff (2000), Noll (1999), Weisbrod, Ballou, and Asch (2008, pp. 248-249), who have pointed out that the actual cost of an athletic scholarship to a college or university is not nearly as much as indicated on financial reports. Moreover, at Division II, most athletes actually receive either no athletic scholarship or a partial athletic scholarship (Hardwick-Day, 2008; NCAA, 2012e).

Thus, when the results of the individual Financial Impact subscale items are combined and compared statistically with the t-test, the overall perceptions of the two groups regarding financial impact do not differ significantly. The conclusion of this finding is that sponsoring Division II intercollegiate athletics is generally more directly expensive than sponsoring Division III intercollegiate athletics, but indirect financial benefits of intercollegiate athletics are perceived to exist more in the Division II environment than in the Division III environment.

**Research Question #2 conclusion.** In addressing Research Question #2, the second independent samples t-test detected a statistically significant difference between the perceptions of NCAA Division II presidents and the perceptions of NCAA Division III presidents regarding the enrollment impact of intercollegiate athletics at their institutions. This finding reveals that overall, NCAA Division II presidents perceive, more so than NCAA Division III presidents, that intercollegiate athletics is positively impactful on their enrollments.

On the surface, this finding could seem initially trivial because it is the NCAA Division III institutions that contain greater quantities of athletes per institution than Division II institutions. Also, the percentage of athletes on a typical Division III campus is much higher than on a typical Division II campus. On average, 24% of students at Division III institutions are athletes compared to just 10% of students at Division II institutions (NCAA, 2011, 2012g). This clearly demonstrates that intercollegiate athletics is more impactful on the quantities of

enrollments at NCAA Division III institutions than at NCAA Division II institutions. However, enrollment quantity is but a single aspect of a larger perspective of overall enrollment that was measured by the Enrollment Impact subscale in this study. Although enrollment quantity receives the most attention from higher education leaders because it translates into vital tuition revenue (Brewer, Gates, & Goldman, 2002, pp. 51-66; Kretovics, 2011, pp. 66-69; Weisbrod et al., 2008, p. 77), quantity is in fact just one of several aspects of enrollment management (Dolence, Miyahara, Grajeda, & Rapp, 1988; Hossler, 1984; Hossler & Bean, 1990; Huddleston, 2000). Thus, the Enrollment Impact subscale includes items that examine additional aspects of enrollment—such as enrollment quality, enrollment diversity, enrollment retention, enrollment of non-athlete students, the effect of winning on enrollment quantity, and the effect of winning on enrollment quality. On three of those items—regarding enrollment diversity (Item #15), enrollment of non-athlete students (Item #17), and the effect of winning on enrollment quality (Item #19)—the NCAA Division II presidents responded more positively than the NCAA Division III presidents (see Appendix O).

This finding aligns with the study by Hardwick-Day (2008) who found that various aspects of enrollment diversity and enrollment quality are generally enhanced through the awarding of Division II athletic scholarships. However, this finding does not align with the findings of Orszag and Orszag (2005b) who found that increased spending in Division II does not affect enrollment quality. Thus, the conclusion of this finding is that although NCAA Division III intercollegiate athletic programs may be more impactful in terms of their ability to enhance enrollment quantity through athletic participation opportunities, when other aspects of enrollment are considered, NCAA Division II presidents perceive, more so than NCAA Division

III presidents, that intercollegiate athletics is positively impactful on the enrollments at their institutions.

**Research Question #3 conclusion.** In addressing Research Question #3, the third independent samples t-test detected a statistically significant difference between the perceptions of NCAA Division II presidents and the perceptions of NCAA Division III presidents regarding the marketing impact of intercollegiate athletics at their institutions. This indicates that NCAA Division II presidents perceive, more so than NCAA Division III presidents, that intercollegiate athletics is positively impactful on the marketing at their institutions. This finding is by far the most statistically significant of the four t-tests ( $p < .001$ ) as the Division II presidents responded more positively than the Division III presidents on all five items within this subscale (see Appendix O). The aspects of marketing that are included within this subscale are institutional brand, perception, publicity, prestige, and exposure. From this finding, it is evident that NCAA Division II presidents, significantly more so than NCAA Division III presidents, perceive Toma and Cross' (1998) metaphor at their institutions—that their intercollegiate athletic programs serve as the “front porch” of their institutions.

This result is consistent with the findings of Ward and Hux (2011) who found that athletic department mission statements of NCAA Division II institutions place significantly more emphasis on public relations and exposure than athletic department mission statements of NCAA Division III institutions. The finding also generally aligns with the work of Garrett (1985) who found a statistically significant difference between the attitudes of Division II presidents and Division III presidents regarding a “Tradition, School Spirit, and College Life” subscale that included primarily items relating to perception, publicity, and prestige. The conclusion of this

finding is that NCAA Division II athletic programs have more of a marketing impact for their institutions than NCAA Division III athletic programs.

**Research Question #4 conclusion.** In addressing Research Question #4, the fourth independent samples t-test detected no statistically significant difference between the perceptions of NCAA Division II presidents and NCAA Division III presidents regarding the student impact of intercollegiate athletics at their institutions. This indicates that NCAA Division II presidents and NCAA Division III presidents overall perceive that intercollegiate athletics has a similar level of impact on their students. As the Chapter Two literature review has demonstrated, the degree to which intercollegiate athletics positively or negatively impacts students is very complicated and involves many intricate aspects. The evidence regarding how intercollegiate athletics impacts students is very contradicting. In this study, presidents' perceptions regarding some of these controversial aspects—such as academic development, moral/character development, social development, leadership development, lifetime/job skills development, and the personal development of students who are not athletes—were measured with items from the Student Impact subscale. This finding is consistent with Garrett (1985) who did not find a statistically significant difference between the attitudes of Division II presidents and Division III presidents regarding an “Intellect” subscale, an “Athletes’ Traits” subscale, or a “Morality” subscale—each of which contained items fairly related to the items in Student Impact subscale in this study.

Some might be surprised by this finding because NCAA Division II institutions offer athletic scholarships which are based on athletics ability—not academic ability. However, Milton, Freeman, and Williamson (2012) actually found—using one institution from which to draw a sample—that student-athletes receiving athletic scholarships performed significantly

better academically than student-athletes not receiving any athletic scholarship. Also, Hardwick-Day (2008) found that athletic scholarships awarded at the Division II level tend to augment the recruitment of students that are near the middle or just above the middle in academic performance. Moreover, most Division II athletes actually receive either no athletic scholarship or only a partial athletic scholarship (Hardwick-Day, 2008; NCAA, 2012e). Thus some of the presumed academic differences between NCAA Division II and NCAA Division III may be inconsequential.

Furthermore, this result seems logical considering the strategic positioning statements of NCAA Division II and NCAA Division III are very similar and the positioning platforms of both divisions are almost identical. The Division II platform, titled “Life in the Balance,” contains six key attributes—learning, service, passion, sportsmanship, resourcefulness, and balance (NCAA, 2012f, 2012q) while the Division III platform utilizes six brand attributes—balance, learning, spirit, character, fair-play, and community (NCAA, 2012n). Although Division II rules permit slightly longer athletic playing seasons than Division III, and place more off-season athletic demands on student-athletes (Covell, 2010, pp.35-36; NCAA, 2012l, 2012m), both divisions appear to stress academic and personal development. Both divisions strive to make intercollegiate athletics a contributory piece of the whole, well-rounded educational experience for student-athletes and spectators. This is also consistent with the work of Ward and Hux (2011) who found no statistically significant difference between athletic department mission statements of NCAA Division II institutions and NCAA Division III institutions regarding the emphasis placed on students’ personal development—such as social, academic, emotional, and ethical development. Thus, the conclusion of this finding is that overall, the impact of

intercollegiate athletics on students is similar at both NCAA Division II institutions and NCAA Division III institutions.

### **Other Conclusions**

There are some other findings from this study that are worth mentioning that albeit related, are not direct responses to the study's four research questions.

**Presidents' overall perceptions of athletics.** Based on the results of this study, it is concluded that the presidents of both NCAA divisions perceive that intercollegiate athletics has an overall positive impact on their institutions. This is primarily evidenced by the overall mean recorded scores for each subscale on Table 19 which are all above 3.5. This is further evidenced by the means of the individual Likert-type items. Among all the items on the entire survey, there are only two Division II mean responses and four Division III mean responses that do not indicate that athletics has a positive impact. These means are reported in Chapter Four within Tables 21, 22, 23, and 24. Although not part of the analyses, the mean response to Item #33 succinctly summarizes the perceptions of NCAA Division II and Division III presidents—that is, they feel that overall, intercollegiate athletics plays a vital role in contributing to their institutions' missions.

Despite one of the limitations of this study being the potential bias that may exist among the presidents' perceptions regarding intercollegiate athletics, this is nonetheless an important finding because the presidents are the key leaders and most influential decision-makers within higher education. The finding empirically quantifies the perceptions of the presidents regarding many ambiguous, debated, contradicting, and sometimes contentious areas of intercollegiate athletics in higher education. This finding also indirectly contradicts the findings of Shulman and Bowen (2001) and Bowen and Levin (2003) who found that intercollegiate athletics—even

at non-scholarship institutions, highly-selective schools, and Division III colleges—threatens to undermine the educational mission of higher education.

**Presidents' most opinionated perceptions.** Another noteworthy set of findings from this study pertains to the survey items to which the presidents responded strongest. Within each of the four subscales, the items with the strongest level of agreement or disagreement provide another mode of describing the presidents' perceptions. Based on the mean results from the individual Likert-type item responses, the presidents expressed the following as the strongest perception within each subscale. On these items, the presidents are most opinionated:

1. The presidents perceive that eliminating athletics would not benefit their institutions financially.
2. The presidents perceive that overall, their athletes enter college just as prepared academically as their non-athletes.
3. The presidents perceive that their athletic programs greatly enhance the diversity of their student bodies.
4. The presidents perceive that their athletic programs expose their institutions to many individuals who otherwise would not be aware of them.
5. The presidents perceive that athletic participation does not make it difficult for their student-athletes to reach their full academic potential.
6. The presidents perceive that their student-athletes are better leaders as a result of their participation in athletics.

**Presidents' perceptions relative to existing literature.** As Chapter Two and Chapter Three have shown, each Likert-type item on the survey embodies a debated phenomenon of intercollegiate athletics in higher education. Because multiple studies and scholars have yielded

contradictory findings, presidents were surveyed in this study in order to learn about their perceptions regarding these debates. Based on the findings from this study, it is concluded that the presidents' perceptions do not always align with the literature.

For example, one of the conclusions reached in this study is that presidents from both Division II and Division III perceive that overall, their athletes enter college just as prepared academically as their non-athletes. This is an interesting finding because it directly contradicts previous research. The literature consistently demonstrates that overall, intercollegiate athletes enter college academically less prepared than non-athletes—including lower SAT scores, ACT scores, grade-point averages, and class ranks than their non-athlete counterparts. This even occurs at NCAA Division III institutions (Aries, McCarthy, Salovey, & Banaji, 2004; Blaich, 2003; Bowen & Levin, 2003, pp. 57-94; Holmes, Meditz, & Sommers, 2008; Robst & Keil, 2000; Shulman & Bowen, 2001, pp. 40-50) as well as academically selective institutions (Aries et al., 2004; Bowen & Levin, 2003, pp. 57-94; Espenshade, Chung, & Walling, 2004; Holmes et al., 2008; Shulman & Bowen, 2001, pp. 40-50).

Similarly, another conclusion reached in this study is that presidents from both Division II and Division III perceive that their student-athletes are better leaders as a result of their participation in athletics. However, this notion has also found mixed empirical results. Some studies have shown that athletics enhances leadership (Astin, 1993; Pascarella & Smart, 1991; Ryan, 1989) while others have not (Extejt & Smith, 2009; Shulman & Bowen, 2001; Yunker, 2009). Also, while Grandzol, Perlis, and Draina (2010) found that athletic participation does not enhance leadership, they found that serving as a team captain does enhance leadership skills. Also, athletes themselves perceive that they possess enhanced leadership abilities (Aries, McCarthy, Salovey, and Banaji, 2004; Astin, 1993, pp. 233, 387; Shulman & Bowen, 2001, pp.



183-186) and also believe that their participation in athletics has enhanced their leadership skills (Potuto & O'Hanlon, 2007). Thus, based on the literature, the extent to which athletic participation actually enhances leadership is ambiguous at best. However, presidents from both divisions perceive that their student-athletes are better leaders as a result of the participation in athletics. Therefore, one of the conclusions from this study is that presidents' perceptions do not always align with the literature.

**Less agreement among NCAA Division III presidents.** Finally, a more subtle finding of this study is that the perceptions of the NCAA Division III presidents are more divided among themselves than the perceptions of the NCAA Division II presidents regarding these issues. The Division III presidents responded with higher standard deviations than their Division II counterparts on all four subscale means. This indicates less agreement among the Division III presidents and indicates that the perceptions of Division II presidents are more consistent regarding the impacts of athletics at their institutions. This finding aligns with Bowen and Levin's (2003, pp. 304-306) and Staurowsky and Abney's (2010, p. 145) observation that a great deal of diversity exists within Division III including differences in missions, circumstances, enrollments, academic profiles, admission criteria, curricula, and priorities. Because of this, both Bowen and Levin (2003) and Staurowsky and Abney (2010) proposed the idea of splitting NCAA Division III and establishing a Division IV.

### **Implications for Practice**

There are several implications for practice based on this study. The first implication is for institutions that already hold membership in the NCAA Division II or the NCAA Division III. The implication is simply that intercollegiate athletics at the NCAA Division II and NCAA Division III levels are useful and valuable to their institutions. According to the 323 presidents

who participated in this study, athletics augments multiple important aspects of higher education. Notwithstanding the possibility that the presidents' perceptions may be biased, the presidents of both divisions perceive that athletics has a positive impact on the finances, enrollments, marketing, and students at their institutions. Thus, institutions that are already members of NCAA Division II or Division III should consider retaining their membership or even consider the possibility of adding more sports. Also, based on the significant differences between the two groups of presidents, Division III members that are looking for increased publicity and exposure could consider a move to Division II.

The second implication for practice is for NCAA Division III institutions. Based on the results of this study, Division III schools should consider enhancing the way that their athletic programs are used to market their institutions. This is especially directed at institutions that are enrollment-driven or institutions that are not academically selective. Division II presidents perceive significantly more than Division III presidents that their athletic programs help to market their institutions. Thus, the implication is for Division III leaders to investigate strategies to use athletics to enhance the perception, publicity, exposure, brand, and prestige of their institutions. Perhaps these institutions could utilize marketing techniques involving athletics that are not being currently implemented. Perhaps some of these institutions already have potential marketing resources on their campuses within athletics that are untapped. At the very least, Division III schools should take a strategic approach to the use of social networking through athletics to promote their institutions (Clavio, 2011; Cooper & Pierce, 2011; Robinson, 2010; Weaver, 2011). Also, because of their size, Division III schools should reach out and be visible in the community as much as possible. In this way, another implication for practice is for Division III leaders to consider hiring and retaining coaches that involve their athletic teams with

the community. This exposes the institution, through athletics, to a wider audience and elevates the image, publicity, exposure, and brand of the institution.

The third implication of this study is for institutions that do not hold NCAA Division II or NCAA Division III membership. This study has presented evidence that perhaps NCAA Division II membership could be an option to consider for some NCAA Division I institutions that are struggling to compete in the ever-growing “arms race” (Clotfelter, 2011; Tsitsos & Nixon, 2012; Zimbalist, 1999; Weisbrod, Ballou, & Asch, 2008). As state funding for public higher education continues to be slashed (Kelderman, 2012; Vedder, 2012) and as numerous private colleges continue to struggle with financial resources, many colleges and universities will be forced to implement changes in order to stay fiscally solvent and fulfill their missions. As this happens, many smaller Division I schools may be looking for ways to adapt their intercollegiate athletic programs and might need to investigate other options. Based on the results of this study, NCAA Division II might make a very good fit for these smaller Division I schools. NCAA Division II might provide the proper niche because according to the results of this study, Division II presidents perceive the marketing and enrollment impacts of Division II athletics to be very positive and significantly greater than the Division III presidents. In this way, the results from this study indicate that NCAA Division II membership could provide impactful marketing at a reduced cost.

Likewise, over the years, many institutions belonging to the National Association of Intercollegiate Athletics (NAIA) have withdrawn from the NAIA and others continue to do so. Leaders at many of those institutions wrestle with what NCAA division to join. The results of this study provide additional guidance for such decisions. If minimizing costs or enrollment quantity is the immediate priority, then NCAA Division III may be the better fit. But, if the

institution can benefit from increased publicity and exposure, or if it is determined that athletic scholarships could augment other aspects of enrollment such as enrollment quality and diversity, then NCAA Division II may be the better fit.

The fourth implication of this study is for leaders at all small and mid-sized institutions that sponsor intercollegiate athletics—regardless of conference affiliation or division. Based on the results of this study, presidents and other higher education leaders should seek ways to learn more about the true impacts of intercollegiate athletics at their institutions. As noted, one of the conclusions of this study is that presidents' perceptions regarding athletics do not always align with the research. Furthermore, there are many ambiguities regarding the real impacts of athletics in higher education. Therefore, leaders will be well-served to invest in information-gathering initiatives or data-collection regarding the real impacts of their athletic programs. A portion of this responsibility would, of course, rest with the athletic director. Thus, another implication for practice from this study is that presidents should consider hiring and retaining athletic directors who demonstrate some level of data-driven strategic leadership. In this way, the idea of a model small-college athletic director could be partially reinvented such that part of the job description includes data collection, analysis, and utilization. This model would incorporate data into institutional and leadership decisions. This model would also help to inform administrators at all levels—including presidents—about the empirical impacts that intercollegiate athletics is having on their institutions. In some ways, this process might resemble assessment for the intercollegiate athletics department.

Moreover, institutions should adopt general practices that utilize data to make athletic decisions as much as possible. Because NCAA Division II and NCAA Division III institutions are designating about 3% to 7% of their institutional budgets to intercollegiate athletics, data

should be used to inform decisions regarding how those funds are spent. As this study has demonstrated, there are complexities, ambiguities, and misunderstandings regarding the impacts of intercollegiate athletics in higher education. For example, this study showed that NCAA Division II and Division III presidents both perceive that their athletes come to college just as prepared academically as their non-athletes. However, this is in direct contradiction to the research in higher education. This contradiction serves as a microcosm of the misunderstandings and contradictions that permeate higher education regarding intercollegiate athletics. The best way to address this problem is for each institution to incorporate strategies that use data to inform their thinking.

Also, institutions should consider the administration of an annual “impacts” study of their athletic departments in which phenomena from the survey in this study would be quantified. This would provide a way of regularly measuring and documenting the impacts of intercollegiate athletics. Thus, such a report would investigate various aspects of higher education that are impacted by intercollegiate athletics such as finances, enrollment, marketing, and student development. The report would help provide institutions with valuable information for improvement and accountability. This would also educate all athletic stakeholders, including presidents, about the impacts of athletics at their institutions. Also, such a report would provide a necessary response to the increasing call for accountability in higher education (Field, 2013). Perhaps over time, a standardized impact of athletics report could be created. Or, perhaps the NCAA could require this as part of the Institutional Self-Study Guide (ISSG) process that is required by all NCAA Division II and NCAA Division III institutions.

Furthermore, another implication for practice is the establishment of a national research organization that focuses on intercollegiate athletics at the small and mid-sized college level. In

2007, the College Sport Research Institute (CSRI) was founded and has now held six national conferences and participation has grown each year (CSRI, 2013). With more smaller and mid-sized colleges adding graduate and doctoral programs and with interest growing in studying college sport, it seems that the time has come to create a small-college version of the CSRI. This could serve as a national “think tank” for small college sport research—an opportunity for scholars, administrators, and leaders to put their minds together to discuss and learn about the impacts of small and mid-sized college athletics. Or, at the very least, perhaps a subdivision of the CSRI could be established that has its focus on smaller college athletic research.

### **Implications for Future Research**

As noted earlier, the vast majority of research that exists pertaining to intercollegiate athletics within higher education is contradicting and debated. Also, most of the existing literature is focused on NCAA Division I institutions—leaving Division II and Division III much less researched. The survey utilized in this study was created by extracting various debated topics from the literature and then constructing survey items from the debates. Thus, future research should study any of the phenomena from the survey instrument at the NCAA Division II and NCAA Division III levels. Also, because NCAA Division I presidents were not included in this research, future research could investigate the perceptions of NCAA Division I presidents regarding the impacts of intercollegiate athletics at their institutions.

Future research should attempt to further examine, validate, and refine the survey instrument and the subscales used in this study. For example, factor analysis should be performed on all of the survey items to determine what factors empirically exist among the items and how they coincide with the four subscales utilized in this study. Also, qualitative research could be used to further investigate the themes that constituted the four subscales in this study.

The reporting structure of athletic departments can vary from institution to institution. For example, in this study, 38% of NCAA Division II presidents and 73% of NCAA Division III presidents reported that their athletic directors report directly to someone other than the president. At those institutions, the athletic director usually reports directly a vice president or dean of student services or some other administrator. Thus, future research should replicate this study using other institutional administrators. Particularly, future studies should replicate this study with other administrators that have direct reporting lines associated with athletics. Thus, the perceptions of any administrator—from the athletic director to the president—should be investigated regarding the impacts of intercollegiate athletics. Furthermore, it would be valuable to replicate this study with other stakeholder groups such as faculty, scholars, alumni, non-athlete students, and even student-athletes themselves. In this way, the instrument utilized for this study could be useful to compare perceptions among various stakeholder groups that are considered either “inside” or “outside” of intercollegiate athletics.

Also, because college presidents report directly to a board that is often not aware of the operations and intricacies of higher education (Eckel & Kezar, 2011; Kretovics, 2011; Pierce, 2012), future research should replicate this study with board members. Moreover, because college coaches are the front line employees that work closest with the student-athletes, future studies should replicate this study with college coaches. Comparisons could be made between the perceptions of presidents, board members, vice presidents, and coaches as well as among the NCAA divisions. Also, this study could be repeated longitudinally with any of the aforementioned stakeholder groups. This might be particularly useful during periods of institutional transformation or change. Measuring stakeholder perceptions regarding the impacts of intercollegiate athletics before and after an institutional change could provide valuable results.

The results from this study indicate that the perceptions of NCAA Division III presidents are not as unified as the perceptions of NCAA Division II presidents regarding the impacts of intercollegiate athletics in higher education. Thus, more research is needed, particularly at Division III to see where the differences lie within the division. Perhaps more research can inform future adjustments to NCAA Division III, especially as it continues to grow.

This study has demonstrated that presidents of NCAA Division II institutions perceive significantly more than Division III presidents that their athletics programs help to market their institutions. Future research should investigate how these institutions use athletics for marketing in order to determine where the significant differences might exist. Also, future research could investigate the degree to which institutional rankings affect the perceptions of the impacts of intercollegiate athletics.

### **Conclusion**

This dissertation study has demonstrated that there are both similarities and differences in the ways that NCAA Division II presidents and NCAA Division III presidents perceive the impacts of intercollegiate athletics at their institutions. Overall, the presidents in both groups perceive that intercollegiate athletics has a positive impact on their campuses. Both groups perceive that the finances, enrollments, marketing, and students at their institutions are positively impacted by intercollegiate athletics. Also, there is not a significant difference between the perceptions of the two groups regarding the impacts of athletics on their students or finances. However, Division II presidents perceive the overall enrollment impacts and marketing impacts of athletics significantly more positive than do Division III presidents. Thus, this study has described and compared the perceptions of NCAA Division II and NCAA Division III college and university presidents regarding the impacts of intercollegiate athletics at their institutions.



However, there is much more to learn about how intercollegiate athletics impacts higher education, especially at these small and mid-sized institutions.

The totality of this dissertation study—from the introduction in Chapter One to the conclusions in Chapter Five—has demonstrated that the impacts of intercollegiate athletics, even at the NCAA Division II and NCAA Division III levels, are tremendously complex. As the landscape of higher education continues to evolve, these impacts will become even more complex. Thus, it is increasingly important to study intercollegiate athletics at these smaller and mid-sized schools, not just at the NCAA Division I level. Technology is threatening to change the very nature of higher education. Institutions of all types are incorporating more and more online learning as a more cost-effective method of course delivery. Where will small-college athletics fit into all of this? At what point will “brick and mortar” institutions start to look like online schools? As we move into an era of even more rapid changes in technology, higher education will also continue changing at a more rapid rate. In the midst of all of this, at small colleges in the future, it is conceivably possible that intercollegiate athletics could become one of the last bastions of the traditional college experience. But, how will small college athletics survive and what functions will they serve? These questions will need answers in the near future. Thus, in conclusion, it will be increasingly important to make use of research and data to inform decisions regarding intercollegiate athletics in higher education.

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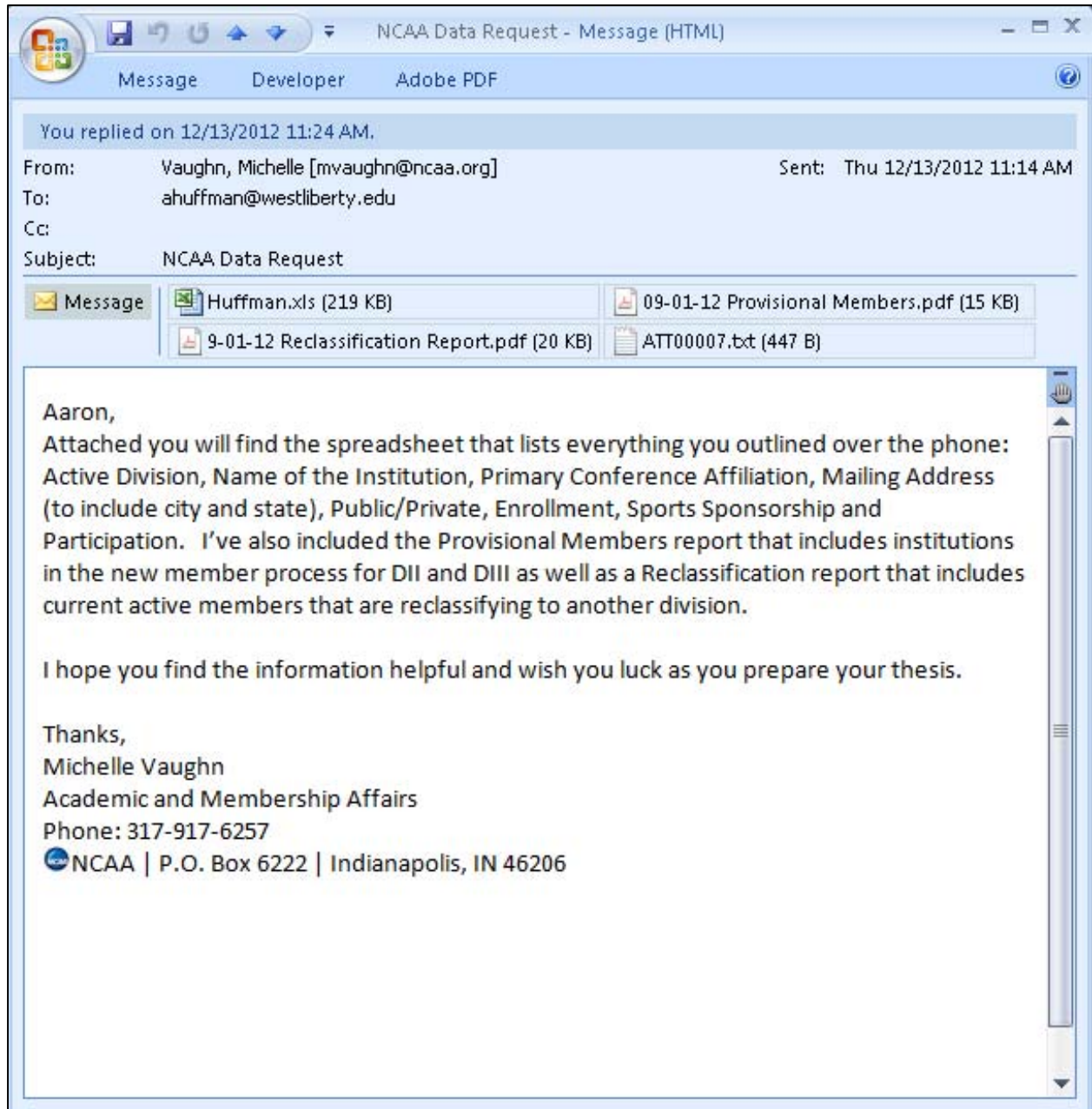
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**APPENDIX A: Email from NCAA with Attached Data Files**

## APPENDIX B: List of NCAA Division II Institutions

This institutional data was provided by the NCAA Academic and Membership Affairs Staff on December 13, 2012 (see Appendix A). The alphabetized list includes all active and provisional NCAA Division II members, but not exploratory members, as of the 2012-2013 academic year.

	NCAA Division II Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
1	Abilene Christian University	Abilene	TX	Private	3,844	16	405	11%
2	Academy of Art University*	San Francisco	CA	Private	*	*	*	*
3	Adams State University	Alamosa	CO	Public	2,000	20	787	39%
4	Adelphi University	Garden City	NY	Private	5,021	22	430	9%
5	Albany State University (Georgia)	Albany	GA	Public	4,663	11	250	5%
6	Alderson-Broaddus College	Philippi	WV	Private	624	13	227	36%
7	American International College	Springfield	MA	Private	1,396	22	505	36%
8	Anderson University (South Carolina)	Anderson	SC	Private	1,957	18	317	16%
9	Angelo State University	San Angelo	TX	Public	6,267	13	438	7%
10	Arkansas Tech University	Russellville	AR	Public	7,012	10	344	5%
11	Armstrong Atlantic State University	Savannah	GA	Public	4,834	11	169	3%
12	Ashland University	Ashland	OH	Private	2,474	20	663	27%
13	Assumption College	Worcester	MA	Private	2,084	23	493	24%
14	Augusta State University	Augusta	GA	Public	6,741	11	160	2%
15	Augustana College (South Dakota)	Sioux Falls	SD	Private	1,745	18	504	29%
16	Azusa Pacific University**	Azusa	CA	Private	**	**	**	**
17	Barry University	Miami Shores	FL	Private	2,898	12	218	8%
18	Barton College	Wilson	NC	Private	902	16	270	30%
19	Bellarmino University	Louisville	KY	Private	2,251	19	539	24%
20	Belmont Abbey College	Belmont	NC	Private	1,711	18	368	22%
21	Bemidji State University	Bemidji	MN	Public	3,715	15	383	10%
22	Benedict College	Columbia	SC	Private	3,149	16	280	9%
23	Bentley University	Waltham	MA	Private	4,094	23	632	15%
24	Black Hills State University**	Spearfish	SD	Public	**	**	**	**
25	Bloomfield College	Bloomfield	NJ	Private	2,366	10	172	7%
26	Bloomsburg University of Pennsylvania	Bloomsburg	PA	Public	8,651	20	543	6%
27	Bluefield State College	Bluefield	WV	Public	1,929	10	108	6%
28	Bowie State University	Bowie	MD	Public	3,552	13	325	9%
29	Brevard College	Brevard	NC	Private	613	17	373	61%
30	Brigham Young University, Hawaii	Laie	HI	Private	2,585	11	195	8%
31	Caldwell College	Caldwell	NJ	Private	1,093	11	190	17%
32	California Baptist University**	Riverside	CA	Private	**	**	**	**
33	California State Polytechnic Univ., Pomona	Pomona	CA	Public	15,906	10	241	2%
34	California State University, Monterey Bay	Seaside	CA	Public	5,164	12	249	5%
35	California State University, Chico	Chico	CA	Public	13,634	13	378	3%
36	California State University, Dominguez Hills	Carson	CA	Public	7,798	11	247	3%
37	California State University, East Bay	Hayward	CA	Public	9,238	15	261	3%

\* newly active NCAA member in 2012-2013 and thus the NCAA does not yet have data.

\*\* provisional NCAA member in 2012-2013 and thus the NCAA does not yet have data.

	NCAA Division II Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
38	California State University, Los Angeles	Los Angeles	CA	Public	14,404	11	277	2%
39	California State University, San Bernardino	San Bernardino	CA	Public	14,732	10	225	2%
40	California State University, Stanislaus	Turlock	CA	Public	6,406	14	338	5%
41	California University of Pennsylvania	California	PA	Public	6,564	18	583	9%
42	Cameron University	Lawton	OK	Public	3,936	10	153	4%
43	Carson-Newman College	Jefferson City	TN	Private	1,736	18	488	28%
44	Catawba College	Salisbury	NC	Private	978	18	349	36%
45	Cedarville University*	Cedarville	OH	Private	*	*	*	*
46	Central State University	Wilberforce	OH	Public	2,430	12	253	10%
47	Central Washington University	Ellensburg	WA	Public	9,387	13	422	4%
48	Chadron State College	Chadron	NE	Public	1,717	11	426	25%
49	Chaminade University	Honolulu	HI	Private	1,293	10	150	12%
50	Chestnut Hill College	Philadelphia	PA	Private	873	14	247	28%
51	Cheyney University of Pennsylvania	Cheyney	PA	Public	1,250	12	182	15%
52	Chowan University	Murfreesboro	NC	Private	1,282	13	286	22%
53	Christian Brothers University	Memphis	TN	Private	1,200	13	201	17%
54	Clafflin University	Orangeburg	SC	Private	1,794	11	195	11%
55	Clarion University of Pennsylvania	Clarion	PA	Public	5,876	16	376	6%
56	Clark Atlanta University	Atlanta	GA	Private	2,955	11	205	7%
57	Clayton State University	Morrow	GA	Public	6,860	12	170	2%
58	Coker College	Hartsville	SC	Private	964	14	248	26%
59	Colorado Christian University	Lakewood	CO	Private	1,013	13	174	17%
60	Colorado Mesa University	Grand Junction	CO	Public	8,930	23	650	7%
61	Colorado School of Mines	Golden	CO	Public	3,730	18	588	16%
62	Colorado State University-Pueblo	Pueblo	CO	Public	5,230	16	435	8%
63	Columbus State University	Columbus	GA	Public	8,307	14	183	2%
64	Concord University	Athens	WV	Public	2,372	18	368	16%
65	Concordia College (New York)	Bronxville	NY	Private	723	12	151	21%
66	Concordia University, St. Paul	St. Paul	MN	Private	1,333	15	325	24%
67	Converse College	Spartanburg	SC	Private	601	7	91	15%
68	Daemen College**	Amherst	NY	Private	**	**	**	**
69	Dallas Baptist University	Dallas	TX	Private	2,347	14	222	9%
70	Davis and Elkins College	Elkins	WV	Private	743	14	188	25%
71	Delta State University	Cleveland	MS	Public	2,333	13	345	15%
72	Dixie State College of Utah	St. George	UT	Public	5,370	12	292	5%
73	Dominican College (New York)	Orangeburg	NY	Private	2,058	12	189	9%
74	Dominican University of California	San Rafael	CA	Private	1,321	12	203	15%
75	Dowling College	Oakdale	NY	Private	1,910	15	267	14%
76	Drury University	Springfield	MO	Private	1,580	19	373	24%
77	East Central University	Ada	OK	Public	3,146	13	300	10%
78	East Stroudsburg University of Pennsylvania	East Stroudsburg	PA	Public	6,047	20	552	9%
79	Eastern New Mexico University	Portales	NM	Public	5,574	12	377	7%
80	Eckerd College	St. Petersburg	FL	Private	1,821	11	183	10%

\* newly active NCAA member in 2012-2013 and thus the NCAA does not yet have data.

\*\* provisional NCAA member in 2012-2013 and thus the NCAA does not yet have data.

	NCAA Division II Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
81	Edinboro University of Pennsylvania	Edinboro	PA	Public	6,024	17	437	7%
82	Elizabeth City State University	Elizabeth City	NC	Public	2,836	11	211	7%
83	Emporia State University	Emporia	KS	Public	3,350	15	445	13%
84	Erskine College	Due West	SC	Private	560	14	249	44%
85	Fairmont State University	Fairmont	WV	Public	4,268	15	301	7%
86	Fayetteville State University	Fayetteville	NC	Public	5,930	10	195	3%
87	Felician College	Lodi	NJ	Private	1,555	10	160	10%
88	Ferris State University	Big Rapids	MI	Public	10,010	17	385	4%
89	Flagler College	St. Augustine	FL	Private	2,785	13	229	8%
90	Florida Institute of Technology	Melbourne	FL	Private	2,635	20	379	14%
91	Florida Southern College	Lakeland	FL	Private	2,001	19	364	18%
92	Fort Hays State University	Hays	KS	Public	5,153	20	538	10%
93	Fort Lewis College	Durango	CO	Public	3,748	11	290	8%
94	Fort Valley State University	Fort Valley	GA	Public	2,770	11	222	8%
95	Francis Marion University	Florence	SC	Public	4,187	14	213	5%
96	Franklin Pierce University	Rindge	NH	Private	1,286	16	361	28%
97	Fresno Pacific University**	Fresno	CA	Private	**	**	**	**
98	Gannon University	Erie	PA	Private	2,536	18	414	16%
99	Georgia College & State University	Milledgeville	GA	Public	5,109	10	173	3%
100	Georgia Southwestern State University	Americus	GA	Public	3,046	10	157	5%
101	Georgian Court University	Lakewood	NJ	Private	1,772	9	193	11%
102	Glenville State College	Glenville	WV	Public	1,857	12	286	15%
103	Goldey-Beacom College	Wilmington	DE	Private	515	10	138	27%
104	Grand Canyon University	Phoenix	AZ	Private	3,760	21	495	13%
105	Grand Valley State University	Allendale	MI	Public	18,431	20	835	5%
106	Harding University	Searcy	AR	Private	4,041	17	490	12%
107	Hawaii Pacific University	Honolulu	HI	Private	3,666	12	216	6%
108	Henderson State University	Arkadelphia	AR	Public	3,023	12	319	11%
109	Hillsdale College	Hillsdale	MI	Private	1,406	14	410	29%
110	Holy Family University	Philadelphia	PA	Private	1,609	13	183	11%
111	Holy Names University**	Oakland	CA	Private	**	**	**	**
112	Humboldt State University	Arcata	CA	Public	6,818	12	456	7%
113	Indiana University of Pennsylvania	Indiana	PA	Public	12,943	19	488	4%
114	Johnson C. Smith University	Charlotte	NC	Private	1,631	15	235	14%
115	Kentucky State University	Frankfort	KY	Public	2,732	13	291	11%
116	Kentucky Wesleyan College	Owensboro	KY	Private	741	13	297	40%
117	King College	Bristol	TN	Private	969	22	469	48%
118	Kutztown University of Pennsylvania	Kutztown	PA	Public	8,629	21	578	7%
119	Lake Erie College	Painesville	OH	Private	871	23	540	62%
120	Lake Superior State University	Sault Ste. Marie	MI	Public	2,244	15	242	11%
121	Lander University	Greenwood	SC	Public	2,849	11	184	6%
122	Lane College	Jackson	TN	Private	2,002	12	264	13%
123	Le Moyne College	Syracuse	NY	Private	2,414	17	310	13%

\* newly active NCAA member in 2012-2013 and thus the NCAA does not yet have data.

\*\* provisional NCAA member in 2012-2013 and thus the NCAA does not yet have data.

	NCAA Division II Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
124	Lee University**	Cleveland	TN	Private	**	**	**	**
125	Lees-McRae College	Banner Elk	NC	Private	890	17	295	33%
126	LeMoyne-Owen College	Memphis	TN	Private	1,090	10	100	9%
127	Lenoir-Rhyne University	Hickory	NC	Private	1,463	22	578	40%
128	Lewis University	Romeoville	IL	Private	3,557	20	456	13%
129	Limestone College	Gaffney	SC	Private	3,411	24	728	21%
130	Lincoln Memorial University	Harrogate	TN	Private	1,857	13	216	12%
131	Lincoln University (Missouri)	Jefferson City	MO	Public	2,175	13	297	14%
132	Lincoln University (Pennsylvania)	Lincoln University	PA	Public	1,682	17	277	16%
133	Lindenwood University**	Saint Charles	MO	Private	**	**	**	**
134	Livingstone College	Salisbury	NC	Private	1,140	14	217	19%
135	Lock Haven University of Pennsylvania	Lock Haven	PA	Public	4,693	18	542	12%
136	Long Island University/LIU Post	Brookville	NY	Private	4,314	15	353	8%
137	Lubbock Christian University**	Lubbock	TX	Private	**	**	**	**
138	Lynn University	Boca Raton	FL	Private	1,452	11	177	12%
139	Malone University**	Canton	OH	Private	**	**	**	**
140	Mansfield University of Pennsylvania	Mansfield	PA	Public	2,548	13	253	10%
141	Mars Hill College	Mars Hill	NC	Private	949	21	583	61%
142	Maryville University of Saint Louis	St. Louis	MO	Private	1,742	18	306	18%
143	McKendree University**	Lebanon	IL	Private	**	**	**	**
144	Mercy College	Dobbs Ferry	NY	Private	5,451	10	226	4%
145	Mercyhurst University	Erie	PA	Private	2,425	23	563	23%
146	Merrimack College	North Andover	MA	Private	2,136	22	531	25%
147	Metropolitan State University of Denver	Denver	CO	Public	14,105	15	261	2%
148	Michigan Technological University	Houghton	MI	Public	5,314	14	446	8%
149	Midwestern State University	Wichita Falls	TX	Public	4,053	13	310	8%
150	Miles College	Fairfield	AL	Private	1,634	10	207	13%
151	Millersville University of Pennsylvania	Millersville	PA	Public	6,833	22	516	8%
152	Minnesota State University Moorhead	Moorhead	MN	Public	5,569	16	377	7%
153	Minnesota State University, Mankato	Mankato	MN	Public	15,640	20	594	4%
154	Minot State University*	Minot	ND	Public	*	*	*	*
155	Missouri Southern State University	Joplin	MO	Public	3,998	14	421	11%
156	Missouri University of Science & Technology	Rolla	MO	Public	5,672	15	491	9%
157	Missouri Western State University	St. Joseph	MO	Public	4,320	10	289	7%
158	Molloy College	Rockville Centre	NY	Private	2,632	16	304	12%
159	Montana State University Billings	Billings	MT	Public	3,328	17	324	10%
160	Morehouse College	Atlanta	GA	Private	2,436	7	207	8%
161	Mount Olive College	Mount Olive	NC	Private	1,676	18	426	25%
162	New Mexico Highlands University	Las Vegas	NM	Public	2,338	12	358	15%
163	New York Institute of Technology	Old Westbury	NY	Private	4,018	12	211	5%
164	Newberry College	Newberry	SC	Private	1,075	17	557	52%
165	Newman University	Wichita	KS	Private	1,299	14	208	16%
166	North Georgia College & State University	Dahlonega	GA	Public	4,605	11	176	4%

\* newly active NCAA member in 2012-2013 and thus the NCAA does not yet have data.

\*\* provisional NCAA member in 2012-2013 and thus the NCAA does not yet have data.



	NCAA Division II Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
167	North Greenville University	Tigerville	SC	Private	1,935	16	439	23%
168	Northeastern State University	Tahlequah	OK	Public	5,657	10	281	5%
169	Northern Kentucky University	Highland Heights	KY	Public	9,944	17	300	3%
170	Northern Michigan University	Marquette	MI	Public	7,792	13	368	5%
171	Northern State University	Aberdeen	SD	Public	1,772	17	389	22%
172	Northwest Missouri State University	Maryville	MO	Public	5,542	16	473	9%
173	Northwest Nazarene University	Nampa	ID	Private	1,154	14	327	28%
174	Northwestern Oklahoma State University**	Alva	OK	Public	**	**	**	**
175	Northwood University (Michigan)	Midland	MI	Private	1,630	18	503	31%
176	Notre Dame College*	South Euclid	OH	Private	*	*	*	*
177	Notre Dame de Namur University	Belmont	CA	Private	1,147	11	172	15%
178	Nova Southeastern University	Fort Lauderdale	FL	Private	4,165	17	380	9%
179	Nyack College	Nyack	NY	Private	1,016	10	153	15%
180	Oakland City University	Oakland City	IN	Private	633	13	162	26%
181	Ohio Dominican University	Columbus	OH	Private	2,249	18	342	15%
182	Ohio Valley University	Vienna	WV	Private	438	13	213	49%
183	Oklahoma Christian University**	Oklahoma City	OK	Private	**	**	**	**
184	Oklahoma Panhandle State University	Goodwell	OK	Public	1,463	10	222	15%
185	Ouachita Baptist University	Arkadelphia	AR	Private	1,556	16	381	24%
186	Pace University	Pleasantville	NY	Private	6,852	18	318	5%
187	Paine College	Augusta	GA	Private	815	10	150	18%
188	Palm Beach Atlantic University	West Palm Beach	FL	Private	2,385	10	166	7%
189	Pfeiffer University	Misenheimer	NC	Private	765	18	362	47%
190	Philadelphia University	Philadelphia	PA	Private	2,756	16	234	8%
191	Pittsburg State University	Pittsburg	KS	Public	5,877	13	487	8%
192	Point Loma Nazarene University**	San Diego	CA	Private	**	**	**	**
193	Post University	Waterbury	CT	Private	2,421	15	218	9%
194	Queens College (New York)	Flushing	NY	Public	11,265	19	296	3%
195	Queens University of Charlotte	Charlotte	NC	Private	1,245	20	314	25%
196	Quincy University	Quincy	IL	Private	1,149	15	380	33%
197	Regis University (Colorado)	Denver	CO	Private	2,537	12	232	9%
198	Roberts Wesleyan University**	Rochester	NY	Private	**	**	**	**
199	Rockhurst University	Kansas City	MO	Private	2,130	11	256	12%
200	Rogers State University**	Claremore	OK	Public	**	**	**	**
201	Rollins College	Winter Park	FL	Private	1,818	21	381	21%
202	Saginaw Valley State University	University Center	MI	Public	10,790	17	582	5%
203	Saint Anselm College	Manchester	NH	Private	1,856	20	443	24%
204	Saint Augustine's University	Raleigh	NC	Private	1,466	16	411	28%
205	Saint Joseph's College (Indiana)	Rensselaer	IN	Private	1,105	18	502	45%
206	Saint Leo University	Saint Leo	FL	Private	1,861	17	325	17%
207	Saint Michael's College	Colchester	VT	Private	1,944	21	421	22%
208	Salem International University	Salem	WV	Private	568	11	246	43%
209	San Francisco State University	San Francisco	CA	Public	21,053	12	296	1%

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\*\* provisional NCAA member in 2012-2013 and thus the NCAA does not yet have data.

	NCAA Division II Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
210	Seattle Pacific University	Seattle	WA	Private	3,176	14	292	9%
211	Seton Hill University	Greensburg	PA	Private	1,668	21	474	28%
212	Shaw University	Raleigh	NC	Private	2,046	13	286	14%
213	Shepherd University	Shepherdstown	WV	Public	4,393	12	317	7%
214	Shippensburg University of Pennsylvania	Shippensburg	PA	Public	6,788	20	645	10%
215	Shorter University**	Rome	GA	Private	**	**	**	**
216	Slippery Rock University of Pennsylvania	Slippery Rock	PA	Public	7,961	17	699	9%
217	Sonoma State University	Rohnert Park	CA	Public	7,025	13	257	4%
218	South Dakota School of Mines**	Rapid City	SD	Public	**	**	**	**
219	Southeastern Oklahoma State University	Durant	OK	Public	2,887	10	260	9%
220	Southern Arkansas University	Magnolia	AR	Public	2,531	11	293	12%
221	Southern Connecticut State University	New Haven	CT	Public	7,524	19	496	7%
222	Southern Nazarene University**	Bethany	OK	Private	**	**	**	**
223	Southern New Hampshire University	Manchester	NH	Private	1,960	15	322	16%
224	Southwest Baptist University	Bolivar	MO	Private	1,960	16	443	23%
225	Southwest Minnesota State University	Marshall	MN	Public	2,078	10	298	14%
226	Southwestern Oklahoma State University	Weatherford	OK	Public	4,252	11	306	7%
227	St. Cloud State University	St. Cloud	MN	Public	11,203	23	599	5%
228	St. Edward's University	Austin	TX	Private	3,438	11	196	6%
229	St. Martin's University	Lacey	WA	Private	1,124	15	290	26%
230	St. Mary's University (Texas)	San Antonio	TX	Private	2,331	12	218	9%
231	St. Thomas Aquinas College	Sparkill	NY	Private	1,277	16	285	22%
232	Stillman College	Tuscaloosa	AL	Private	1,072	12	209	19%
233	Stonehill College	Easton	MA	Private	2,449	20	553	23%
234	Tarleton State University	Stephenville	TX	Public	11,199	12	350	3%
235	Texas A&M International University	Laredo	TX	Public	3,809	11	213	6%
236	Texas A&M University-Commerce	Commerce	TX	Public	6,601	12	299	5%
237	Texas A&M University-Kingsville	Kingsville	TX	Public	5,559	14	436	8%
238	Texas Woman's University	Denton	TX	Public	6,269	5	87	1%
239	The College of Saint Rose	Albany	NY	Private	2,764	18	382	14%
240	The University of Virginia'a College at Wise**	Wise	VA	Public	**	**	**	**
241	Tiffin University	Tiffin	OH	Private	1,397	20	956	68%
242	Trevecca Nazarene University**	Nashville	TN	Private	**	**	**	**
243	Truman State University	Kirksville	MO	Public	5,481	20	460	8%
244	Tusculum College	Greeneville	TN	Private	916	14	367	40%
245	Tuskegee University	Tuskegee	AL	Private	3,114	12	277	9%
246	Union University**	Jackson	TN	Private	**	**	**	**
247	University of Alabama in Huntsville	Huntsville	AL	Public	4,410	16	323	7%
248	University of Alaska Anchorage	Anchorage	AK	Public	5,586	11	194	3%
249	University of Alaska Fairbanks	Fairbanks	AK	Public	3,825	10	143	4%
250	University of Arkansas, Fort Smith	Fort Smith	AR	Public	5,008	10	137	3%
251	University of Arkansas, Monticello	Monticello	AR	Public	3,920	10	225	6%
252	University of Bridgeport	Bridgeport	CT	Private	1,684	13	258	15%

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\*\* provisional NCAA member in 2012-2013 and thus the NCAA does not yet have data.

	NCAA Division II Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
253	University of California, San Diego	La Jolla	CA	Public	23,046	23	613	3%
254	University of Central Missouri	Warrensburg	MO	Public	9,466	16	604	6%
255	University of Central Oklahoma	Edmond	OK	Public	10,613	15	448	4%
256	University of Charleston (West Virginia)	Charleston	WV	Private	1,102	15	321	29%
257	University of Colorado, Colorado Springs	Colorado Springs	CO	Public	10,183	13	296	3%
258	University of Findlay	Findlay	OH	Private	2,574	21	589	23%
259	University of Hawaii at Hilo	Hilo	HI	Public	4,115	12	244	6%
260	University of Illinois at Springfield	Springfield	IL	Public	2,021	11	183	9%
261	University of Indianapolis	Indianapolis	IN	Private	2,771	21	758	27%
262	University of Mary	Bismarck	ND	Private	1,673	16	489	29%
263	University of Massachusetts Lowell	Lowell	MA	Public	9,026	17	507	6%
264	University of Minnesota Duluth	Duluth	MN	Public	9,746	16	587	6%
265	University of Minnesota, Crookston	Crookston	MN	Public	1,550	11	233	15%
266	University of Missouri, St. Louis	St. Louis	MO	Public	6,962	11	165	2%
267	University of Montevallo	Montevallo	AL	Public	2,493	11	183	7%
268	University of Nebraska at Kearney	Kearney	NE	Public	5,003	19	710	14%
269	University of New Haven	West Haven	CT	Private	4,101	16	395	10%
270	University of North Alabama	Florence	AL	Public	8,632	12	239	3%
271	University of North Carolina at Pembroke	Pembroke	NC	Public	5,494	16	415	8%
272	University of Pittsburgh, Johnstown	Johnstown	PA	Public	2,849	12	219	8%
273	University of Puerto Rico, Bayamon	Bayamon	PR	Public	4,948	10	125	3%
274	University of Puerto Rico, Mayaguez	Mayaguez	PR	Public	11,534	16	230	2%
275	University of Puerto Rico, Rio Piedras	San Juan	PR	Public	14,053	12	202	1%
276	University of Sioux Falls*	Sioux Falls	SD	Private	*	*	*	*
277	University of South Carolina Aiken	Aiken	SC	Public	2,375	11	201	8%
278	University of Southern Indiana	Evansville	IN	Public	9,871	17	381	4%
279	University of Tampa	Tampa	FL	Private	6,051	19	469	8%
280	University of Texas of the Permian Basin	Odessa	TX	Public	2,027	13	217	11%
281	University of the District of Columbia	Washington	DC	Public	1,363	10	118	9%
282	University of the Incarnate Word	San Antonio	TX	Private	4,096	20	561	14%
283	University of the Sciences in Philadelphia	Philadelphia	PA	Private	2,487	12	158	6%
284	University of West Alabama	Livingston	AL	Public	1,838	11	318	17%
285	University of West Florida	Pensacola	FL	Public	6,979	13	270	4%
286	University of West Georgia	Carrollton	GA	Public	10,029	12	307	3%
287	University of Wisconsin, Parkside	Kenosha	WI	Public	3,375	15	321	10%
288	Upper Iowa University	Fayette	IA	Private	999	12	352	35%
289	Urbana University	Urbana	OH	Private	1,108	15	370	33%
290	Ursuline College**	Pepper Pike	OH	Private	**	**	**	**
291	Valdosta State University	Valdosta	GA	Public	9,273	12	356	4%
292	Virginia State University	Petersburg	VA	Public	4,971	16	350	7%
293	Virginia Union University	Richmond	VA	Private	1,333	16	321	24%
294	Walsh University**	North Canton	OH	Private	**	**	**	**
295	Washburn University of Topeka	Topeka	KS	Public	4,104	10	294	7%

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	NCAA Division II Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
296	Washington Adventist University	Takoma Park	MD	Private	1,448	11	150	10%
297	Wayne State College (Nebraska)	Wayne	NE	Public	2,717	15	332	12%
298	Wayne State University (Michigan)	Detroit	MI	Public	19,539	15	343	2%
299	West Chester University of Pennsylvania	West Chester	PA	Public	12,834	24	648	5%
300	West Liberty University	West Liberty	WV	Public	2,349	15	383	16%
301	West Texas A&M University	Canyon	TX	Public	5,181	17	605	12%
302	West Virginia State University	Institute	WV	Public	2,827	10	228	8%
303	West Virginia Wesleyan College	Buckhannon	WV	Private	1,335	19	591	44%
304	Western New Mexico University	Silver City	NM	Public	1,064	11	198	19%
305	Western Oregon University	Monmouth	OR	Public	4,688	13	553	12%
306	Western State Colorado University	Gunnison	CO	Public	1,860	11	430	23%
307	Western Washington University	Bellingham	WA	Public	12,803	15	511	4%
308	Wheeling Jesuit University	Wheeling	WV	Private	844	19	426	50%
309	William Jewell College*	Liberty	MO	Private	*	*	*	*
310	Wilmington University (Delaware)	New Castle	DE	Private	7,212	11	223	3%
311	Wingate University	Wingate	NC	Private	1,642	19	569	35%
312	Winona State University	Winona	MN	Public	8,391	15	433	5%
313	Winston-Salem State University	Winston-Salem	NC	Public	5,692	16	312	5%
314	Young Harris College**	Young Harris	GA	Private	**	**	**	**

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## APPENDIX C: List of NCAA Division III Institutions

This institutional data was provided by the NCAA Academic and Membership Affairs Staff on December 13, 2012 (see Appendix A). The alphabetized list includes all active and provisional NCAA Division III members, but not exploratory members, as of the 2012-2013 academic year.

	NCAA Division III Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
1	Adrian College	Adrian	MI	Private	1,676	24	771	46%
2	Agnes Scott College	Decatur	GA	Private	823	6	84	10%
3	Albertus Magnus College	New Haven	CT	Private	516	12	179	35%
4	Albion College	Albion	MI	Private	1,514	22	526	35%
5	Albright College	Reading	PA	Private	1,668	23	510	31%
6	Alfred University	Alfred	NY	Private	1,895	20	596	31%
7	Allegheny College	Meadville	PA	Private	2,084	21	486	23%
8	Alma College	Alma	MI	Private	1,390	24	570	41%
9	Alvernia University	Reading	PA	Private	1,690	20	306	18%
10	Alverno College	Milwaukee	WI	Private	1,560	6	74	5%
11	Amherst College	Amherst	MA	Private	1,791	27	677	38%
12	Anderson University (Indiana)	Anderson	IN	Private	1,901	18	402	21%
13	Anna Maria College	Paxton	MA	Private	803	15	276	34%
14	Arcadia University	Glenside	PA	Private	2,151	14	260	12%
15	Augsburg College	Minneapolis	MN	Private	2,491	20	437	18%
16	Augustana College (Illinois)	Rock Island	IL	Private	2,504	23	941	38%
17	Aurora University	Aurora	IL	Private	2,431	19	658	27%
18	Austin College	Sherman	TX	Private	1,317	12	300	23%
19	Averett University	Danville	VA	Private	810	13	303	37%
20	Babson College	Babson Park	MA	Private	2,007	22	409	20%
21	Baldwin Wallace University	Berea	OH	Private	3,018	21	632	21%
22	Baptist Bible College	Clarks Summit	PA	Private	489	12	151	31%
23	Bard College	Annandale-On-Hudson	NY	Private	1,891	16	176	9%
24	Baruch College	New York	NY	Public	14,266	13	192	1%
25	Bates College	Lewiston	ME	Private	1,769	29	785	44%
26	Bay Path College	Longmeadow	MA	Private	1,255	7	97	8%
27	Becker College	Leicester	MA	Private	1,399	16	362	26%
28	Beloit College	Beloit	WI	Private	1,285	20	380	30%
29	Benedictine University (Illinois)	Lisle	IL	Private	2,875	17	487	17%
30	Berry College**	Mount Berry	GA	Private	**	**	**	**
31	Bethany College (West Virginia)	Bethany	WV	Private	770	20	416	54%
32	Bethany Lutheran College	Mankato	MN	Private	612	13	197	32%
33	Bethel University (Minnesota)	St. Paul	MN	Private	2,682	20	589	22%
34	Birmingham-Southern College	Birmingham	AL	Private	1,305	20	494	38%
35	Blackburn College	Carlinville	IL	Private	526	11	151	29%
36	Bluffton University	Bluffton	OH	Private	895	16	380	42%
37	Bowdoin College	Brunswick	ME	Private	1,773	32	841	47%

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	NCAA Division III Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
38	Brandeis University	Waltham	MA	Private	3,490	17	301	9%
39	Bridgewater College (Virginia)	Bridgewater	VA	Private	1,629	21	614	38%
40	Bridgewater State University	Bridgewater	MA	Public	9,552	21	507	5%
41	Brooklyn College	Brooklyn	NY	Public	9,237	12	177	2%
42	Bryn Mawr College	Bryn Mawr	PA	Private	1,313	11	225	17%
43	Buena Vista University	Storm Lake	IA	Private	924	19	455	49%
44	Buffalo State, State University of New York	Buffalo	NY	Public	8,811	19	506	6%
45	Cabrini College	Radnor	PA	Private	1,266	16	263	21%
46	Cairn University	Langhorne	PA	Private	960	12	150	16%
47	California Institute of Technology	Pasadena	CA	Private	978	17	345	35%
48	California Lutheran University	Thousand Oaks	CA	Private	2,477	20	554	22%
49	Calvin College	Grand Rapids	MI	Private	3,967	19	527	13%
50	Capital University	Columbus	OH	Private	2,397	18	391	16%
51	Carleton College	Northfield	MN	Private	2,018	20	498	25%
52	Carnegie Mellon University	Pittsburgh	PA	Private	6,072	17	480	8%
53	Carroll University (Wisconsin)	Waukesha	WI	Private	2,823	20	575	20%
54	Carthage College	Kenosha	WI	Private	2,537	24	765	30%
55	Case Western Reserve University	Cleveland	OH	Private	4,026	19	553	14%
56	Castleton State College	Castleton	VT	Public	1,843	20	434	24%
57	Catholic University	Washington	DC	Private	3,397	21	538	16%
58	Cazenovia College	Cazenovia	NY	Private	899	14	208	23%
59	Cedar Crest College	Allentown	PA	Private	621	8	88	14%
60	Centenary College (New Jersey)	Hackettstown	NJ	Private	1,378	13	230	17%
61	Central College (Iowa)	Pella	IA	Private	1,604	19	712	44%
62	Centre College	Danville	KY	Private	1,292	23	543	42%
63	Chapman University	Orange	CA	Private	5,077	18	421	8%
64	Chatham University	Pittsburgh	PA	Private	621	9	102	16%
65	Christopher Newport University	Newport News	VA	Public	4,691	20	613	13%
66	Claremont McKenna-Harvey Mudd-Scripps Colleges	Claremont	CA	Private	3,025	21	528	17%
67	Clark University (Massachusetts)	Worcester	MA	Private	2,208	17	319	14%
68	Clarkson University	Potsdam	NY	Private	3,018	17	341	11%
69	Coe College	Cedar Rapids	IA	Private	1,312	21	511	39%
70	Colby College	Waterville	ME	Private	1,815	30	797	44%
71	Colby-Sawyer College	New London	NH	Private	1,239	19	354	29%
72	College at Brockport, State University of NY	Brockport	NY	Public	6,451	23	659	10%
73	College of Mount St. Joseph	Cincinnati	OH	Private	1,277	22	442	35%
74	College of Mount St. Vincent	Bronx	NY	Private	1,394	14	220	16%
75	College of New Rochelle	New Rochelle	NY	Private	500	6	88	18%
76	College of Saint Elizabeth	Morristown	NJ	Private	547	8	92	17%
77	College of St. Benedict	St. Joseph	MN	Private	2,086	11	317	15%
78	College of Staten Island	Staten Island	NY	Public	9,613	13	208	2%
79	College of Wooster	Wooster	OH	Private	1,977	23	642	32%
80	Colorado College	Colorado Springs	CO	Private	2,008	17	333	17%

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	NCAA Division III Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
81	Concordia College, Moorhead	Moorhead	MN	Private	2,746	22	748	27%
82	Concordia University (Wisconsin)	Mequon	WI	Private	2,221	23	638	29%
83	Concordia University Chicago	River Forest	IL	Private	1,411	16	350	25%
84	Concordia University Texas	Austin	TX	Private	1,190	13	332	28%
85	Connecticut College	New London	CT	Private	1,855	28	604	33%
86	Cornell College	Mt. Vernon	IA	Private	1,190	19	446	37%
87	Covenant College**	Lookout Mountain	GA	Private	**	**	**	**
88	Crown College (MN)	St. Bonifacius	MN	Private	609	11	170	28%
89	Curry College	Milton	MA	Private	1,976	14	358	18%
90	Daniel Webster College	Nashua	NH	Private	573	14	200	35%
91	Defiance College	Defiance	OH	Private	805	20	486	60%
92	Delaware Valley College	Doylestown	PA	Private	1,712	18	412	24%
93	Denison University	Granville	OH	Private	2,288	23	552	24%
94	DePauw University	Greencastle	IN	Private	2,352	21	604	26%
95	DeSales University	Center Valley	PA	Private	1,570	16	411	26%
96	Dickinson College	Carlisle	PA	Private	2,397	23	646	27%
97	Dominican University (Illinois)	River Forest	IL	Private	1,697	12	199	12%
98	Drew University	Madison	NJ	Private	1,676	18	306	18%
99	D'Youville College	Buffalo	NY	Private	1,649	15	181	11%
100	Earlham College	Richmond	IN	Private	1,034	16	289	28%
101	East Texas Baptist University	Marshall	TX	Private	1,079	12	353	33%
102	Eastern Connecticut State University	Willimantic	CT	Public	4,446	17	391	9%
103	Eastern Mennonite University	Harrisonburg	VA	Private	1,002	15	226	23%
104	Eastern Nazarene College	Quincy	MA	Private	850	11	170	20%
105	Eastern University	St. Davids	PA	Private	1,541	16	271	18%
106	Edgewood College	Madison	WI	Private	1,591	17	264	17%
107	Elizabethtown College	Elizabethtown	PA	Private	1,847	22	483	26%
108	Elmhurst College	Elmhurst	IL	Private	3,145	20	499	16%
109	Elmira College	Elmira	NY	Private	1,086	16	509	47%
110	Elms College	Chicopee	MA	Private	888	15	236	27%
111	Emerson College	Boston	MA	Private	3,571	14	222	6%
112	Emmanuel College (Massachusetts)	Boston	MA	Private	1,782	17	334	19%
113	Emory and Henry College	Emory	VA	Private	807	13	346	43%
114	Emory University	Atlanta	GA	Private	5,506	18	533	10%
115	Endicott College	Beverly	MA	Private	2,279	18	472	21%
116	Eureka College	Eureka	IL	Private	755	17	275	36%
117	Fairleigh Dickinson University, Florham	Madison	NJ	Private	2,220	19	390	18%
118	Ferrum College	Ferrum	VA	Private	1,512	17	461	30%
119	Finlandia University	Hancock	MI	Private	569	13	194	34%
120	Fitchburg State University	Fitchburg	MA	Public	3,393	16	395	12%
121	Fontbonne University	Saint Louis	MO	Private	1,116	20	251	22%
122	Framingham State University	Framingham	MA	Public	3,497	13	297	8%
123	Franciscan University of Steubenville	Steubenville	OH	Private	2,548	13	238	9%

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124	Franklin & Marshall College	Lancaster	PA	Private	2,320	27	679	29%
125	Franklin College	Franklin	IN	Private	996	20	494	50%
126	Frostburg State University	Frostburg	MD	Public	4,328	21	501	12%
127	Gallaudet University	Washington	DC	Private	1,078	14	283	26%
128	Geneva College	Beaver Falls	PA	Private	1,339	15	374	28%
129	George Fox University	Newberg	OR	Private	1,871	16	285	15%
130	Gettysburg College	Gettysburg	PA	Private	2,714	24	638	24%
131	Gordon College	Wenham	MA	Private	1,657	20	336	20%
132	Goucher College	Baltimore	MD	Private	1,446	19	299	21%
133	Green Mountain College	Poultney	VT	Private	685	12	140	20%
134	Greensboro College	Greensboro	NC	Private	902	18	352	39%
135	Greenville College	Greenville	IL	Private	1,038	16	479	46%
136	Grinnell College	Grinnell	IA	Private	1,646	20	605	37%
137	Grove City College	Grove City	PA	Private	2,461	19	426	17%
138	Guilford College	Greensboro	NC	Private	2,739	20	438	16%
139	Gustavus Adolphus College	Saint Peter	MN	Private	2,431	25	804	33%
140	Gwynedd-Mercy College	Gwynedd Valley	PA	Private	1,586	18	341	22%
141	Hamilton College	Clinton	NY	Private	1,844	28	663	36%
142	Hamline University	St. Paul	MN	Private	1,900	21	565	30%
143	Hampden-Sydney College	Hampden-Sydney	VA	Private	1,057	9	282	27%
144	Hanover College	Hanover	IN	Private	1,068	19	466	44%
145	Hardin-Simmons University	Abilene	TX	Private	1,627	18	418	26%
146	Hartwick College	Oneonta	NY	Private	1,520	17	439	29%
147	Haverford College	Haverford	PA	Private	1,198	23	638	53%
148	Heidelberg University	Tiffin	OH	Private	1,033	19	606	59%
149	Hendrix College	Conway	AR	Private	1,426	21	293	21%
150	Hilbert College	Hamburg	NY	Private	914	12	176	19%
151	Hiram College	Hiram	OH	Private	1,142	14	303	27%
152	Hobart College	Geneva	NY	Private	978	11	356	36%
153	Hollins University	Roanoke	VA	Private	716	7	99	14%
154	Hood College	Frederick	MD	Private	1,331	20	323	24%
155	Hope College	Holland	MI	Private	3,127	18	493	16%
156	Houghton College**	Houghton	NY	Private	**	**	**	**
157	Howard Payne University	Brownwood	TX	Private	973	12	302	31%
158	Hunter College	New York	NY	Public	11,407	18	308	3%
159	Huntingdon College	Montgomery	AL	Private	836	17	417	50%
160	Husson University	Bangor	ME	Private	2,396	15	368	15%
161	Illinois College	Jacksonville	IL	Private	913	19	481	53%
162	Illinois Wesleyan University	Bloomington	IL	Private	2,082	20	684	33%
163	Immaculata University	Immaculata	PA	Private	1,043	19	305	29%
164	Ithaca College	Ithaca	NY	Private	6,760	26	920	14%
165	John Carroll University	University Heights	OH	Private	3,001	21	669	22%
166	John Jay College of Criminal Justice	New York	NY	Public	12,887	14	184	1%

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167	Johns Hopkins University	Baltimore	MD	Private	5,066	24	877	17%
168	Johnson and Wales University	Providence	RI	Private	8,983	16	310	3%
169	Johnson State College	Johnson	VT	Public	1,081	12	151	14%
170	Juniata College	Huntingdon	PA	Private	1,394	19	398	29%
171	Kalamazoo College	Kalamazoo	MI	Private	1,374	16	339	25%
172	Kean University	Union	NJ	Public	10,492	13	368	4%
173	Keene State College	Keene	NH	Public	4,820	18	447	9%
174	Kenyon College	Gambier	OH	Private	1,647	22	543	33%
175	Keuka College	Keuka Park	NY	Private	1,455	14	226	16%
176	Keystone College	La Plume	PA	Private	1,379	17	314	23%
177	King's College (Pennsylvania)	Wilkes-Barre	PA	Private	2,020	19	472	23%
178	Knox College	Galesburg	IL	Private	1,400	21	415	30%
179	La Grange College	La Grange	GA	Private	752	16	335	45%
180	La Roche College	Pittsburgh	PA	Private	1,091	12	207	19%
181	Lake Forest College	Lake Forest	IL	Private	1,481	15	319	22%
182	Lakeland College	Sheboygan	WI	Private	1,034	19	309	30%
183	Lancaster Bible College	Lancaster	PA	Private	665	12	154	23%
184	Lasell College	Newton	MA	Private	1,507	15	267	18%
185	Lawrence University	Appleton	WI	Private	1,496	22	409	27%
186	Lebanon Valley College	Anville	PA	Private	1,630	22	580	36%
187	Lehman College, City University of New York	Bronx	NY	Public	5,784	17	284	5%
188	Lesley University	Cambridge	MA	Private	1,480	16	188	13%
189	LeTourneau University	Longview	TX	Private	1,329	13	216	16%
190	Lewis & Clark College	Portland	OR	Private	2,141	21	424	20%
191	Linfield College	Mc Minnville	OR	Private	1,638	21	632	39%
192	Loras College	Dubuque	IA	Private	1,514	21	614	41%
193	Louisiana College	Pineville	LA	Private	1,068	12	302	28%
194	Luther College	Decorah	IA	Private	2,405	21	750	31%
195	Lycoming College	Williamsport	PA	Private	1,342	17	424	32%
196	Lynchburg College	Lynchburg	VA	Private	2,119	21	498	24%
197	Lyndon State College	Lyndonville	VT	Public	1,278	12	197	15%
198	Macalester College	St. Paul	MN	Private	1,978	21	540	27%
199	MacMurray College	Jacksonville	IL	Private	460	10	232	50%
200	Maine Maritime Academy	Castine	ME	Public	927	11	236	25%
201	Manchester University	North Manchester	IN	Private	1,284	19	520	40%
202	Manhattanville College	Purchase	NY	Private	1,644	21	329	20%
203	Maranatha Baptist Bible College	Watertown	WI	Private	759	11	237	31%
204	Marian University (Wisconsin)	Fond Du Lac	WI	Private	1,497	15	224	15%
205	Marietta College	Marietta	OH	Private	1,477	18	501	34%
206	Martin Luther College	New Ulm	MN	Private	711	15	238	33%
207	Mary Baldwin College	Staunton	VA	Private	1,062	6	75	7%
208	Marymount University (Virginia)	Arlington	VA	Private	2,088	12	196	9%
209	Maryville College (Tennessee)	Maryville	TN	Private	1,032	14	330	32%

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210	Marywood University	Scranton	PA	Private	2,110	17	292	14%
211	Massachusetts College of Liberal Arts	North Adams	MA	Public	1,452	12	170	12%
212	Massachusetts Institute of Technology	Cambridge	MA	Private	4,384	31	892	20%
213	Massachusetts Maritime Academy	Buzzards Bay	MA	Public	1,278	15	377	29%
214	McDaniel College	Westminster	MD	Private	1,582	24	581	37%
215	McMurry University	Abilene	TX	Private	1,190	19	489	41%
216	Medaille College	Buffalo	NY	Private	1,344	15	259	19%
217	Medgar Evers College	Brooklyn	NY	Public	4,594	14	203	4%
218	Meredith College	Raleigh	NC	Private	1,986	6	90	5%
219	Messiah College	Mechanicsburg	PA	Private	2,805	22	535	19%
220	Methodist University	Fayetteville	NC	Private	2,003	21	620	31%
221	Middlebury College	Middlebury	VT	Private	2,507	29	885	35%
222	Millikin University	Decatur	IL	Private	2,107	19	398	19%
223	Mills College	Oakland	CA	Private	941	7	125	13%
224	Millsaps College	Jackson	MS	Private	883	18	319	36%
225	Milwaukee School of Engineering	Milwaukee	WI	Private	2,122	21	420	20%
226	Misericordia University	Dallas	PA	Private	1,679	22	434	26%
227	Mississippi College	Clinton	MS	Private	2,791	17	489	18%
228	Mitchell College	New London	CT	Private	808	13	199	25%
229	Monmouth College (Illinois)	Monmouth	IL	Private	1,297	20	529	41%
230	Montclair State University	Montclair	NJ	Public	12,301	17	474	4%
231	Moravian College	Bethlehem	PA	Private	1,490	18	442	30%
232	Morrisville State College	Morrisville	NY	Public	3,448	14	350	10%
233	Mount Aloysius College	Cresson	PA	Private	1,254	13	178	14%
234	Mount Holyoke College	South Hadley	MA	Private	2,200	14	365	17%
235	Mount Ida College	Newton	MA	Private	1,316	13	272	21%
236	Mount Mary College	Milwaukee	WI	Private	1,209	6	72	6%
237	Mount Saint Mary College (New York)	Newburgh	NY	Private	1,925	17	287	15%
238	Muhlenberg College	Allentown	PA	Private	2,327	22	544	23%
239	Muskingum University	New Concord	OH	Private	1,565	19	671	43%
240	Nazareth College	Rochester	NY	Private	2,017	23	418	21%
241	Nebraska Wesleyan University	Lincoln	NE	Private	1,547	18	568	37%
242	Neumann University	Aston	PA	Private	2,617	21	383	15%
243	New England College	Henniker	NH	Private	905	17	299	33%
244	New Jersey City University	Jersey City	NJ	Public	6,639	12	175	3%
245	New York University	New York	NY	Private	18,517	21	498	3%
246	Newbury College	Brookline	MA	Private	880	13	157	18%
247	Nichols College	Dudley	MA	Private	1,069	15	479	45%
248	North Carolina Wesleyan College	Rocky Mount	NC	Private	569	12	283	50%
249	North Central College	Naperville	IL	Private	2,403	22	764	32%
250	North Central University	Minneapolis	MN	Private	1,101	17	174	16%
251	North Park University	Chicago	IL	Private	1,857	17	459	25%
252	Northland College	Ashland	WI	Private	506	10	143	28%

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253	Northwestern College	St. Paul	MN	Private	1,700	18	324	19%
254	Norwich University	Northfield	VT	Private	2,172	20	592	27%
255	Notre Dame of Maryland University	Baltimore	MD	Private	510	8	111	22%
256	Oberlin College	Oberlin	OH	Private	2,959	22	510	17%
257	Occidental College	Los Angeles	CA	Private	2,111	21	452	21%
258	Oglethorpe University	Atlanta	GA	Private	1,144	15	191	17%
259	Ohio Northern University	Ada	OH	Private	3,597	21	734	20%
260	Ohio Wesleyan University	Delaware	OH	Private	1,819	23	548	30%
261	Olivet College	Olivet	MI	Private	1,128	21	411	36%
262	Otterbein University	Westerville	OH	Private	2,255	20	597	26%
263	Pacific Lutheran University	Tacoma	WA	Private	3,195	20	456	14%
264	Pacific University (Oregon)	Forest Grove	OR	Private	1,562	21	498	32%
265	Penn State Abington*	Abington	PA	Public	*	*	*	*
266	Penn State Berks College	Reading	PA	Public	2,334	12	214	9%
267	Penn State Harrisburg	Middletown	PA	Public	3,167	12	169	5%
268	Penn State University, Altoona	Altoona	PA	Public	3,573	15	216	6%
269	Pennsylvania State Univ. Erie, Behrend	Erie	PA	Public	3,815	22	367	10%
270	Piedmont College	Demorest	GA	Private	891	14	231	26%
271	Pine Manor College	Chestnut Hill	MA	Private	309	5	55	18%
272	Plattsburgh State University of New York	Plattsburgh	NY	Public	5,462	17	374	7%
273	Plymouth State University	Plymouth	NH	Public	4,148	19	434	10%
274	Polytechnic Institute of New York University	Brooklyn	NY	Private	1,902	14	178	9%
275	Pomona-Pitzer Colleges	Claremont	CA	Private	2,621	21	453	17%
276	Presentation College	Aberdeen	SD	Private	444	9	145	33%
277	Principia College	Elsah	IL	Private	500	17	234	47%
278	Purchase College, State University of NY	Purchase	NY	Public	3,654	15	198	5%
279	Ramapo College	Mahwah	NJ	Public	5,472	20	412	8%
280	Randolph College	Lynchburg	VA	Private	544	12	180	33%
281	Randolph-Macon College	Ashland	VA	Private	1,257	16	383	30%
282	Regis College (Massachusetts)	Weston	MA	Private	898	18	240	27%
283	Rensselaer Polytechnic Institute	Troy	NY	Private	5,238	23	667	13%
284	Rhode Island College	Providence	RI	Public	5,123	21	368	7%
285	Rhodes College	Memphis	TN	Private	1,819	22	479	26%
286	Richard Stockton College of New Jersey	Galloway	NJ	Public	6,579	17	393	6%
287	Ripon College	Ripon	WI	Private	966	20	392	41%
288	Rivier University	Nashua	NH	Private	874	13	205	23%
289	Roanoke College	Salem	VA	Private	1,972	19	391	20%
290	Rochester Institute of Technology	Rochester	NY	Private	17,652	25	779	4%
291	Rockford College	Rockford	IL	Private	796	17	290	36%
292	Roger Williams University	Bristol	RI	Private	3,834	20	457	12%
293	Rose-Hulman Institute of Technology	Terre Haute	IN	Private	1,888	21	515	27%
294	Rosemont College	Rosemont	PA	Private	424	13	186	44%
295	Rowan University	Glassboro	NJ	Public	8,909	18	567	6%

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296	Rust College	Holly Springs	MS	Private	810	12	147	18%
297	Rutgers, The State Univ. of NJ, Camden	Camden	NJ	Public	3,800	18	306	8%
298	Rutgers, The State Univ. of NJ, Newark	Newark	NJ	Public	6,021	16	244	4%
299	Saint Joseph's College (Maine)	Standish	ME	Private	984	17	283	29%
300	Saint Mary's College (Indiana)	Notre Dame	IN	Private	1,510	8	109	7%
301	Saint Mary's University of Minnesota	Winona	MN	Private	1,419	21	367	26%
302	Saint Vincent College	Latrobe	PA	Private	1,625	20	462	28%
303	Salem College	Winston-Salem	NC	Private	805	7	97	12%
304	Salem State University	Salem	MA	Public	6,241	16	272	4%
305	Salisbury University	Salisbury	MD	Public	7,304	21	666	9%
306	Salve Regina University	Newport	RI	Private	1,940	18	427	22%
307	Sarah Lawrence College**	Bronxville	NY	Private	**	**	**	**
308	Schreiner University	Kerrville	TX	Private	1,038	13	243	23%
309	Shenandoah University	Winchester	VA	Private	1,755	20	450	26%
310	Simmons College	Boston	MA	Private	1,829	10	211	12%
311	Simpson College	Indianola	IA	Private	1,395	21	539	39%
312	Skidmore College	Saratoga Springs	NY	Private	2,635	19	390	15%
313	Smith College	Northampton	MA	Private	2,627	14	346	13%
314	Southern Vermont College	Bennington	VT	Private	445	10	166	37%
315	Southern Virginia University**	Buena Vista	VA	Private	**	**	**	**
316	Southwestern University (Texas)	Georgetown	TX	Private	1,316	18	323	25%
317	Spalding University*	Louisville	KY	Private	*	*	*	*
318	Spelman College	Atlanta	GA	Private	2,170	6	81	4%
319	Springfield College	Springfield	MA	Private	2,354	26	877	37%
320	St. Catherine University	St. Paul	MN	Private	1,903	11	214	11%
321	St. John Fisher College	Rochester	NY	Private	2,670	21	719	27%
322	St. John's University (Minnesota)	Collegeville	MN	Private	1,856	12	630	34%
323	St. Joseph's College (Brooklyn)	Brooklyn	NY	Private	789	12	165	21%
324	St. Joseph's College (Long Island)	Patchogue	NY	Private	2,879	19	285	10%
325	St. Lawrence University	Canton	NY	Private	2,361	30	735	31%
326	St. Mary's College of Maryland	St. Mary's City	MD	Public	1,901	15	314	17%
327	St. Norbert College	De Pere	WI	Private	2,112	20	542	26%
328	St. Olaf College	Northfield	MN	Private	3,179	25	893	28%
329	State University College at Fredonia	Fredonia	NY	Public	5,235	19	469	9%
330	State University College at New Paltz	New Paltz	NY	Public	6,582	15	292	4%
331	State University College at Old Westbury	Old Westbury	NY	Public	4,112	12	180	4%
332	State University College at Oneonta	Oneonta	NY	Public	6,000	21	512	9%
333	State University of NY at Cobleskill*	Cobleskill	NY	Public	*	*	*	*
334	State University of NY at Cortland	Cortland	NY	Public	6,241	25	782	13%
335	State University of NY at Farmingdale	Farmingdale	NY	Public	5,377	18	388	7%
336	State University of NY at Geneseo	Geneseo	NY	Public	5,371	20	590	11%
337	State University of NY at Oswego	Oswego	NY	Public	6,990	24	556	8%
338	State University of NY at Potsdam	Potsdam	NY	Public	3,825	16	290	8%

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339	State University of NY Institute of Technology	Utica	NY	Public	1,331	12	181	14%
340	State University of NY Maritime College	Throggs Neck	NY	Public	1,565	17	444	28%
341	Stevens Institute of Technology	Hoboken	NJ	Private	2,420	26	543	22%
342	Stevenson University	Stevenson	MD	Private	3,201	23	673	21%
343	Suffolk University	Boston	MA	Private	5,337	13	209	4%
344	Sul Ross State University	Alpine	TX	Public	1,371	12	325	24%
345	SUNY at Canton**	Canton	NY	Public	**	**	**	**
346	Susquehanna University	Selinsgrove	PA	Private	2,236	23	748	33%
347	Swarthmore College	Swarthmore	PA	Private	1,430	21	448	31%
348	Sweet Briar College	Sweet Briar	VA	Private	605	6	98	16%
349	Texas Lutheran University	Seguin	TX	Private	1,415	15	465	33%
350	The City College of New York	New York	NY	Public	12,938	16	308	2%
351	The College of New Jersey	Ewing	NJ	Public	6,274	20	638	10%
352	The College of St. Scholastica	Duluth	MN	Private	2,506	20	617	25%
353	The Sage Colleges	Troy	NY	Private	1,408	12	160	11%
354	Thiel College	Greenville	PA	Private	1,065	23	586	55%
355	Thomas College	Waterville	ME	Private	691	13	204	30%
356	Thomas More College	Crestview Hills	KY	Private	1,296	16	338	26%
357	Transylvania University	Lexington	KY	Private	1,029	20	293	28%
358	Trine University	Angola	IN	Private	1,455	22	623	43%
359	Trinity College (Connecticut)	Hartford	CT	Private	2,178	29	704	32%
360	Trinity University (Texas)	San Antonio	TX	Private	2,431	20	562	23%
361	Trinity Washington University	Washington	DC	Private	1,003	5	76	8%
362	Tufts University	Medford	MA	Private	5,083	30	1,109	22%
363	U.S. Coast Guard Academy	New London	CT	Public	1,015	23	669	66%
364	U.S. Merchant Marine Academy	Kings Point	NY	Public	971	22	513	53%
365	Union College (New York)	Schenectady	NY	Private	2,170	25	583	27%
366	University of California, Santa Cruz	Santa Cruz	CA	Public	15,945	13	242	2%
367	University of Chicago	Chicago	IL	Private	5,369	19	535	10%
368	University of Dallas	Irving	TX	Private	1,356	14	219	16%
369	University of Dubuque	Dubuque	IA	Private	1,587	19	509	32%
370	University of La Verne	La Verne	CA	Private	2,098	20	455	22%
371	University of Maine at Presque Isle	Presque Isle	ME	Public	851	12	143	17%
372	University of Maine, Farmington	Farmington	ME	Public	2,000	13	238	12%
373	University of Mary Hardin-Baylor	Belton	TX	Private	2,544	12	393	15%
374	University of Mary Washington	Fredericksburg	VA	Public	3,846	23	516	13%
375	University of Massachusetts, Boston	Boston	MA	Public	15,600	17	303	2%
376	University of Massachusetts, Dartmouth	North Dartmouth	MA	Public	6,491	26	571	9%
377	University of Minnesota, Morris	Morris	MN	Public	1,930	19	417	22%
378	University of Mount Union	Alliance	OH	Private	2,131	21	1,036	49%
379	University of New England	Biddeford	ME	Private	2,153	14	285	13%
380	University of Pittsburgh, Bradford	Bradford	PA	Public	1,435	14	195	14%
381	University of Pittsburgh, Greensburg	Greensburg	PA	Public	1,673	12	167	10%

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382	University of Puget Sound	Tacoma	WA	Private	2,620	23	484	18%
383	University of Redlands	Redlands	CA	Private	3,032	21	525	17%
384	University of Rochester	Rochester	NY	Private	4,695	23	644	14%
385	University of Scranton	Scranton	PA	Private	3,875	18	395	10%
386	University of Southern Maine	Gorham	ME	Public	4,424	22	487	11%
387	University of St. Joseph (Connecticut)	West Hartford	CT	Private	806	8	113	14%
388	University of St. Thomas (Minnesota)	St. Paul	MN	Private	5,898	22	802	14%
389	University of Texas at Dallas	Richardson	TX	Public	9,760	13	228	2%
390	University of Texas at Tyler	Tyler	TX	Public	3,900	15	277	7%
391	University of the Ozarks (Arkansas)	Clarksville	AR	Private	593	10	194	33%
392	University of the South	Sewanee	TN	Private	1,441	24	503	35%
393	University of Wisconsin Oshkosh	Oshkosh	WI	Public	9,334	21	600	6%
394	University of Wisconsin, Eau Claire	Eau Claire	WI	Public	9,702	22	696	7%
395	University of Wisconsin, La Crosse	La Crosse	WI	Public	8,446	19	661	8%
396	University of Wisconsin, Platteville	Platteville	WI	Public	6,673	16	534	8%
397	University of Wisconsin, River Falls	River Falls	WI	Public	5,766	18	525	9%
398	University of Wisconsin, Stevens Point	Stevens Point	WI	Public	8,236	20	634	8%
399	University of Wisconsin, Stout	Menomonie	WI	Public	8,353	18	499	6%
400	University of Wisconsin, Superior	Superior	WI	Public	2,107	15	313	15%
401	University of Wisconsin, Whitewater	Whitewater	WI	Public	9,535	22	646	7%
402	Ursinus College	Collegeville	PA	Private	1,743	25	713	41%
403	Utica College	Utica	NY	Private	2,132	25	671	31%
404	Valley Forge Christian College**	Phoenixville	PA	Private	**	**	**	**
405	Vassar College	Poughkeepsie	NY	Private	2,345	23	435	19%
406	Virginia Wesleyan College	Norfolk	VA	Private	1,253	19	398	32%
407	Wabash College	Crawfordsville	IN	Private	910	11	450	49%
408	Wartburg College	Waverly	IA	Private	1,735	19	738	43%
409	Washington and Jefferson College	Washington	PA	Private	1,418	26	594	42%
410	Washington and Lee University	Lexington	VA	Private	1,789	23	576	32%
411	Washington College (Maryland)	Chestertown	MD	Private	1,453	18	349	24%
412	Washington University (Missouri)	St. Louis	MO	Private	6,322	19	695	11%
413	Waynesburg University	Waynesburg	PA	Private	1,430	20	504	35%
414	Webster University	St. Louis	MO	Private	2,367	14	211	9%
415	Wellesley College	Wellesley	MA	Private	2,300	15	285	12%
416	Wells College	Aurora	NY	Private	487	15	185	38%
417	Wentworth Institute of Technology	Boston	MA	Private	3,538	15	268	8%
418	Wesley College	Dover	DE	Private	1,570	20	472	30%
419	Wesleyan College (Georgia)	Macon	GA	Private	622	6	70	11%
420	Wesleyan University (Connecticut)	Middletown	CT	Private	2,870	29	790	28%
421	Western Connecticut State University	Danbury	CT	Public	4,763	14	323	7%
422	Western New England University	Springfield	MA	Private	2,673	19	482	18%
423	Westfield State University	Westfield	MA	Public	4,601	21	598	13%
424	Westminster College (Missouri)	Fulton	MO	Private	1,076	16	326	30%

\* newly active NCAA member in 2012-2013 and thus the NCAA does not yet have data.

\*\* provisional NCAA member in 2012-2013 and thus the NCAA does not yet have data.

	NCAA Division III Institution Name	City	State	Control	Undergraduate Enrollment	No. of Sports	No. of Student- Athletes (SAs)	SAs as a % of Student Body
425	Westminster College (Pennsylvania)	New Wilmington	PA	Private	1,537	20	556	36%
426	Wheaton College (Illinois)	Wheaton	IL	Private	2,433	22	630	26%
427	Wheaton College (Massachusetts)	Norton	MA	Private	1,556	20	393	25%
428	Wheelock College	Boston	MA	Private	804	11	158	20%
429	Whitman College	Walla Walla	WA	Private	1,676	14	258	15%
430	Whittier College	Whittier	CA	Private	1,546	21	549	36%
431	Whitworth University	Spokane	WA	Private	2,212	20	516	23%
432	Widener University	Chester	PA	Private	2,790	20	626	22%
433	Wilkes University	Wilkes-Barre	PA	Private	2,020	16	353	17%
434	Willamette University	Salem	OR	Private	1,946	22	548	28%
435	William Paterson University of New Jersey	Wayne	NJ	Public	8,358	13	317	4%
436	William Peace University	Raleigh	NC	Private	578	6	65	11%
437	William Smith College	Geneva	NY	Private	1,238	11	251	20%
438	Williams College	Williamstown	MA	Private	2,168	32	907	42%
439	Wilmington College (Ohio)	Wilmington	OH	Private	1,041	17	446	43%
440	Wilson College	Chambersburg	PA	Private	309	6	86	28%
441	Wisconsin Lutheran College	Milwaukee	WI	Private	874	18	378	43%
442	Wittenberg University	Springfield	OH	Private	1,723	23	637	37%
443	Worcester Polytechnic Institute	Worcester	MA	Private	3,627	20	672	19%
444	Worcester State University	Worcester	MA	Public	4,067	20	547	13%
445	Yeshiva University	New York	NY	Private	2,703	14	208	8%
446	York College (New York)	Jamaica	NY	Public	5,115	17	233	5%
447	York College (Pennsylvania)	York	PA	Private	4,669	22	525	11%

\* newly active NCAA member in 2012-2013 and thus the NCAA does not yet have data.

\*\* provisional NCAA member in 2012-2013 and thus the NCAA does not yet have data.

Division III Page 11 of 11





## Licensing Agreement

**2013 HED**

between

Aaron Huffman  
445 Van Meter Way  
West Liberty, WV 26074-1073  
(304) 830-1060

and

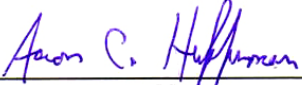
Higher Education Publications, Inc.  
1801 Robert Fulton Drive, Suite 555  
Reston, VA 20191  
(571) 313-0478

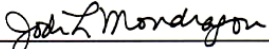
governing the usage of the **Higher Education Publications' (HEP) 2013 Higher Education Directory (HED)** data as follows:

750 records/e-mails. Codes 01 & 02 (Presidents); Version 5 plus no additional fields;  
Pull from the 760 schools marked in Selector file.

We understand the information contained in the 2013 HED is the property of HEP and is subject to all intellectual property rights including copyright. We also agree to the following:

1. The information will be used for the sole purpose of the named person, corporation, organization, association or other legal entity who shall hold HEP harmless from any liability arising from use of this information.
2. The information will not be reproduced or made available in any form to be leased, rented, or distributed for re-use by anyone except the named user. Unless otherwise stipulated in this agreement, this is a **Single Site/Single-User License**. If a distribution vendor is used for mailing or marketing purposes, the 2013 HED may be used for the licensee only.
3. The information from the 2013 HED will not be used to produce a directory in any form as an alternative to the Higher Education Directory, nor will the information be used to collect data to build a database for the purpose of producing a printed directory or electronic database as an alternative to the HED.
4. Use of E-mail addresses shall comply with the "CAN SPAM" Act.
5. The agreement period is for one year from January 2013 to January 2014.
6. Use of the data shall cease at the end of this agreement with the exception of data used in the creation of derivative works. Future updates will be provided upon renewal of this agreement.

By:   
Aaron C. Huffman  
Doctoral Student Candidate,  
Title: West Virginia University

By:   
Jodi L. Mondragon  
Higher Education Publications, Inc.

Date: 1/21/2013

Date: January 21, 2013

**APPENDIX E: IRB Research Protocol Approval**

West Virginia University Mail - 1302015426 IRB protocol

Page 1 of 1



Aaron Huffman &lt;ahuffma3@mix.wvu.edu&gt;

**1302015426 IRB protocol**

3 messages

**Barb White** <Barb.White@mail.wvu.edu>

Wed, Mar 6, 2013 at 9:40 AM

To: Paul Chapman &lt;Paul.Chapman@mail.wvu.edu&gt;, ahuffma3@mix.wvu.edu

I am not able to send you a approval letter for the above study through the WVU+kc system. However, it is approved and I am attaching your approval letter for your records.

Aaron, good luck with your research.  
Barbara

*Barbara A. White*

Senior Administrative Assistant

West Virginia University

Office of Research Integrity and Compliance (IRB)

886 Chestnut Ridge Road, Room 211D

PO Box 6845

Morgantown, WV 26506-6845

Ph. (304) 293-5971

**Exempt letter for KC Chapman 1302015426.pdf**

169K

**Aaron Huffman** <ahuffma3@mix.wvu.edu>

Wed, Mar 6, 2013 at 10:05 AM

To: Barb White &lt;Barb.White@mail.wvu.edu&gt;

Thank you, Barb.

-Aaron

[Quoted text hidden]

**Barb White** <Barb.White@mail.wvu.edu>

Wed, Mar 6, 2013 at 10:13 AM

To: Aaron Huffman &lt;ahuffma3@mix.wvu.edu&gt;

You're welcome!

&gt;&gt;&gt; Aaron Huffman &lt;ahuffma3@mix.wvu.edu&gt; 3/6/2013 10:05 AM &gt;&gt;&gt;

[Quoted text hidden]



### IRB Protocol-Exemption

To: Paul Chapman  
From: WVU Office of Research Compliance  
Date: March 6, 2013  
Subject: Exemption Acknowledgement  
Protocol #: 1302015426  
Title: A Description and Comparison of the Perceptions of NCAA Division II and Division III College Presidents regarding the Impacts of Intercollegiate Athletics at their Institutions

---

The above-referenced study was reviewed by the West Virginia University Institutional Review Board (IRB) and was granted exemption in accordance with 45 CFR 46.101(2).

This protocol was reviewed using the following:

This research study was granted an exemption because the Research involves educational tests, survey procedures, interview procedures or observation of public behavior and (i) information obtained is recorded in such a manner that human subjects cannot be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation [45 CFR 46.101(2)].

The following documents have been acknowledged for use in this study and are available in the WVU + kc system:

01 - Postal Letter of Invitation.pdf;

Introduction Page Narrative (2013-02-19) Prospectus Revised.pdf;

01 - Card of Invitation.jpg

03 - Email - 1st Reminder - Recruitment Script.pdf;

02 - Email - Survey Invitation - Recruitment Script.pdf ;

04 - Email - 2<sup>nd</sup> Reminder - Recruitment Script.pdf

Phone: 304-293-7073  
Fax: 304-293-3098  
<http://oric.research.wvu.edu>

Chestnut Ridge Research Building  
886 Chestnut Ridge Road  
PO Box 6845  
Morgantown, WV 26506-6845

Equal Opportunity/Affirmative Action Employer



05 - Postcard Reminder.jpg

Huffman Survey Instrument (2013-02-19) Prospectus Revised.pdf;

Thank you.

Board Designee: Barbara White

Letter Sent By: Barbara White,

Once you begin your human subject research, the following regulations apply:

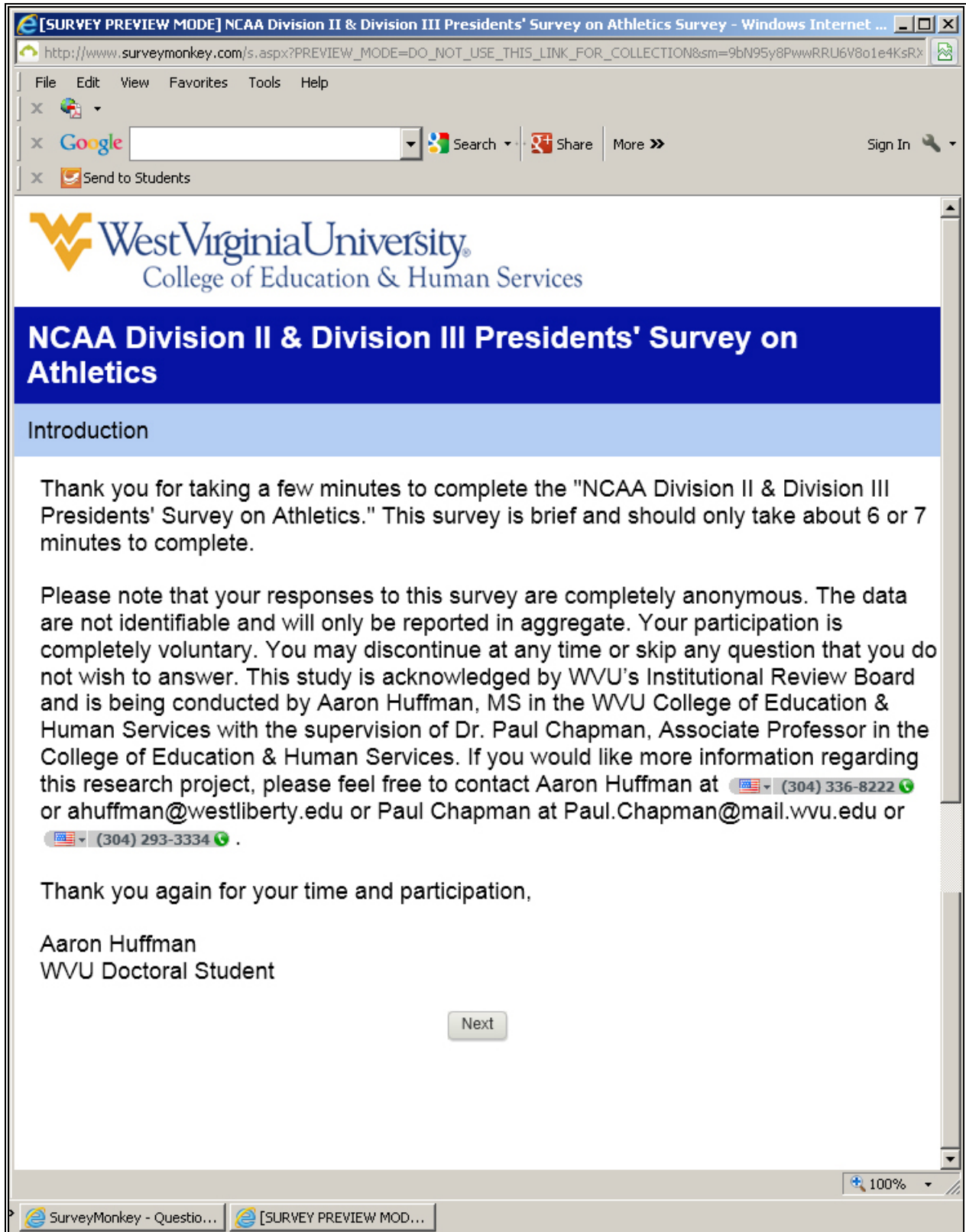
1. Any modifications to the study protocol must be reviewed and acknowledged by the IRB prior to implementation.
2. You may not use a modified form until it has been acknowledged by the IRB.

Phone: 304-293-7073  
Fax: 304-293-3098  
<http://oric.research.wvu.edu>

Chestnut Ridge Research Building  
886 Chestnut Ridge Road  
PO Box 6845  
Morgantown, WV 26506-6845

Equal Opportunity/Affirmative Action Employer

## APPENDIX F: Survey Instrument



The screenshot shows a web browser window with the following content:

**[SURVEY PREVIEW MODE] NCAA Division II & Division III Presidents' Survey on Athletics Survey - Windows Internet ...**

http://www.surveymonkey.com/s.aspx?PREVIEW\_MODE=DO\_NOT\_USE\_THIS\_LINK\_FOR\_COLLECTION&sm=9bN95y8PwwRRU6V8o1e4KsR...

File Edit View Favorites Tools Help

Google Search Share More >> Sign In

Send to Students

**West Virginia University**  
College of Education & Human Services

### NCAA Division II & Division III Presidents' Survey on Athletics

#### Introduction

Thank you for taking a few minutes to complete the "NCAA Division II & Division III Presidents' Survey on Athletics." This survey is brief and should only take about 6 or 7 minutes to complete.

Please note that your responses to this survey are completely anonymous. The data are not identifiable and will only be reported in aggregate. Your participation is completely voluntary. You may discontinue at any time or skip any question that you do not wish to answer. This study is acknowledged by WVU's Institutional Review Board and is being conducted by Aaron Huffman, MS in the WVU College of Education & Human Services with the supervision of Dr. Paul Chapman, Associate Professor in the College of Education & Human Services. If you would like more information regarding this research project, please feel free to contact Aaron Huffman at [\(304\) 336-8222](tel:(304)336-8222) or [ahuffman@westliberty.edu](mailto:ahuffman@westliberty.edu) or Paul Chapman at [Paul.Chapman@mail.wvu.edu](mailto:Paul.Chapman@mail.wvu.edu) or [\(304\) 293-3334](tel:(304)293-3334).

Thank you again for your time and participation,

Aaron Huffman  
WVU Doctoral Student

Next

100%

SurveyMonkey - Questio... [SURVEY PREVIEW MOD...

**NCAA Division II & Division III Presidents' Survey on Athletics**

This survey contains 34 items.

**1. Please indicate your institution's primary NCAA membership division classification.**

- NCAA Division II  
 NCAA Division III

**2. Please indicate the approximate full-time undergraduate enrollment of your institution (Please do NOT use commas).****3. Please indicate the control of your institution.**

- Private  
 Public

**4. Please indicate your gender.**

- Male  
 Female

**5. Does your institution currently sponsor a varsity football team?**

- Yes  
 No

**6. Please indicate the total number of years you have served as a president/chancellor of a college or university (all institutions combined).****7. To whom does your athletic director (AD) directly report? (please select one)**

- AD reports to you (the President/Chancellor)  
 Student Services Vice President/Dean  
 Academic Vice President/Dean or Provost  
 Enrollment Vice President/Dean  
 Financial Vice President / Chief Financial Officer  
 Institutional Advancement Vice President  
 Executive Vice President  
 Other (please specify)

**NCAA Division II & Division III Presidents' Survey on Athletics**

For the remainder of this survey, please indicate your level of agreement with the following statements about intercollegiate athletics at your institution.

This survey contains 34 items.

**8. Eliminating athletics would benefit our institution financially.**

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This survey contains 34 items.

**9. Funding our athletic programs diverts valuable financial resources away from other mission-related components of our campus.**

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This survey contains 34 items.

**10. Although athletics requires considerable expenditures, it brings substantial indirect benefits to our institution in forms that escape financial reports.**

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This survey contains 34 items.

**11. Our athletic programs generate substantial donations for our institution that we would not receive otherwise.**

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This survey contains 34 items.

**NCAA Division II & Division III Presidents' Survey on Athletics**

**12. When our athletic fundraising is successful, it tends to cut into fundraising for our general fund.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.

**13. When prospective students decide whether or not to attend our institution, our athletics is a considerable factor.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.

**14. Overall, our athletes enter college less prepared academically than our non-athletes.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.

**15. Our athletic programs greatly enhance the diversity of our student body.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.

**16. Our current students are more likely to persist at our institution due to our intercollegiate athletics.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.



**NCAA Division II & Division III Presidents' Survey on Athletics**

**17. Intercollegiate athletics helps us when recruiting students who are non-athletes.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.

**18. Winning and losing in athletics does not affect how many admission applications we receive from prospective students.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.

**19. When our athletic teams are winning, it is easier to recruit students with stronger academic credentials.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.

**20. Our institutional brand has little to do with our athletic programs.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.

**21. People draw conclusions about the overall quality of our institution based on their opinion of our athletic programs.**

Strongly Disagree  Disagree  Slightly Disagree  Slightly Agree  Agree  Strongly Agree

This survey contains 34 items.

**NCAA Division II & Division III Presidents' Survey on Athletics**

**22. The publicity generated from our athletic programs rarely translates into real, tangible benefits for our institution.**

Strongly Disagree    Disagree    Slightly Disagree    Slightly Agree    Agree    Strongly Agree

This survey contains 34 items.

**23. Ongoing lackluster athletic outcomes are harmful to our institution's prestige.**

Strongly Disagree    Disagree    Slightly Disagree    Slightly Agree    Agree    Strongly Agree

This survey contains 34 items.

**24. Our athletic programs expose our institution to many individuals who otherwise would not be aware of us.**

Strongly Disagree    Disagree    Slightly Disagree    Slightly Agree    Agree    Strongly Agree

This survey contains 34 items.

**25. Athletic participation makes it difficult for our student-athletes to reach their full academic potential.**

Strongly Disagree    Disagree    Slightly Disagree    Slightly Agree    Agree    Strongly Agree

This survey contains 34 items.

**26. Our student-athletes have higher character/moral traits as a result of their participation in our athletic programs.**

Strongly Disagree    Disagree    Slightly Disagree    Slightly Agree    Agree    Strongly Agree

This survey contains 34 items.

**NCAA Division II & Division III Presidents' Survey on Athletics**

**27. There is a tendency for our athletes to socially isolate themselves into their own subculture that is separate from the rest of the campus community.**

Strongly Disagree   Disagree   Slightly Disagree   Slightly Agree   Agree   Strongly Agree

This survey contains 34 items.

**28. Our student-athletes are better leaders as a result of their participation in athletics.**

Strongly Disagree   Disagree   Slightly Disagree   Slightly Agree   Agree   Strongly Agree

This survey contains 34 items.

**29. Our graduating athletes take with them enhanced skills and valued experiences that give them an advantage in the job market over our graduating non-athletes.**

Strongly Disagree   Disagree   Slightly Disagree   Slightly Agree   Agree   Strongly Agree

This survey contains 34 items.

**30. For our non-athlete students, being involved with intercollegiate athletics as fans and/or spectators enhances their personal development.**

Strongly Disagree   Disagree   Slightly Disagree   Slightly Agree   Agree   Strongly Agree

This survey contains 34 items.

**31. Athletic reform is needed at the [Q1] level.**

Strongly Disagree   Disagree   Slightly Disagree   Slightly Agree   Agree   Strongly Agree

This survey contains 34 items.

**NCAA Division II & Division III Presidents' Survey on Athletics**

**32. At the [Q1] level, athletic spending is getting out of control.**

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This survey contains 34 items.

**33. Intercollegiate athletics at our institution plays a vital role in contributing to our institutional mission.**

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This survey contains 34 items.

**34. Is there anything else you would like to add regarding the impacts of intercollegiate athletics at your institution?**

**APPENDIX G: Survey Notification/Invitation Letter**

March 12, 2013

Dear [president's name],

My name is Aaron Huffman, a doctoral student at West Virginia University in the Higher Education Leadership program. I am writing to you to ask for your help with a unique research study. Because I know your time is very valuable, the time I am asking for your assistance is minimal.

Would you please consider completing a **6 to 7 minute** anonymous online survey regarding your opinions of intercollegiate athletics?

The purpose of the survey is **to specifically focus on NCAA DIVISION II and NCAA DIVISION III presidents/chancellors and what you think about the impacts of intercollegiate athletics at your institutions**. This study is uniquely valuable because the vast majority of research on athletics in higher education is focused on high-profile Division I institutions and very little is known about what Division II and Division III presidents/chancellors think. Thus, your participation in this survey is critical to filling that void.

In a few days, I will email the survey link to you. However, if you would like to take the survey now, you are welcome to do so at the following web address:

<https://www.surveymonkey.com/s/D2-D3>

Also, upon completion of this dissertation study, **you will have the opportunity to request a free copy of the results so that you may also benefit from the findings**. This might be valuable for you because the study will cover critical areas of higher education including FINANCES, ENROLLMENTS, MARKETING, and STUDENTS. In this way, the more presidents and chancellors that participate in the study, the more useful the results will be.

The survey is completely anonymous and voluntary. The data are not identifiable and will only be reported in aggregate. The study has been acknowledged by the WVU Institutional Review Board and is under the supervision of principal investigator, Dr. Paul Chapman, Associate Professor in the WVU College of Education and Human Services. If you have any questions about this research project, please feel free to contact me at [ahuffman@westliberty.edu](mailto:ahuffman@westliberty.edu) or (304) 336-8222 or Dr. Chapman at (304) 293-3334 or [Paul.Chapman@mail.wvu.edu](mailto:Paul.Chapman@mail.wvu.edu).

Thank you in advance for your time,

A handwritten signature in blue ink that reads 'Aaron Huffman'.

Aaron Huffman  
WVU Doctoral Student

**Educational Leadership Studies**

608 Allen Hall  
PO Box 6122  
Morgantown, WV 26506-6122

Phone: 304-293-5928  
Fax: 304-293-2279

Equal Opportunity/Affirmative Action Institution

**APPENDIX H: Survey Information Card (3.5" x 4.5" Glossy Finish)****FRONT**


**NCAA Division II & Division III  
Presidents' Survey on Athletics** 

**Survey Features:**

...Quick (only 6-7 minutes)	...Anonymous
...Easy (point & click)	...Not identifiable
...Division II & Division III only	...IRB approved
...Presidents' & chancellors' perceptions	...Results will be shared

A link to the survey will be emailed shortly. But, if you would like to take the survey now, please go to:

<https://www.surveymonkey.com/s/D2-D3>




**West Virginia University**  
College of Education & Human Services

See back  
for details.

**BACK**

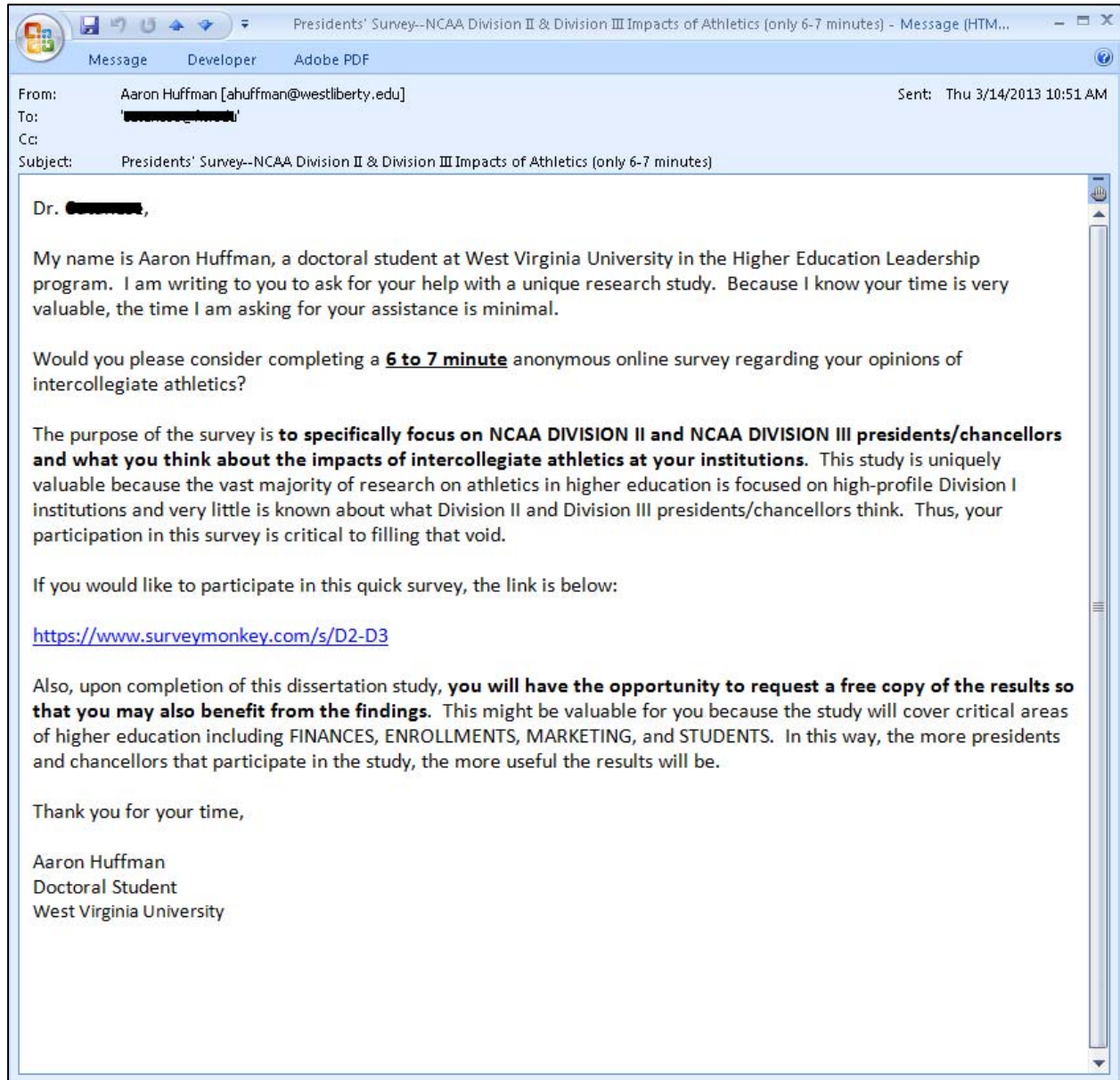
<https://www.surveymonkey.com/s/D2-D3>

The purpose of the survey is to specifically focus on NCAA DIVISION II and NCAA DIVISION III presidents/chancellors and what you think about the impacts of intercollegiate athletics at your institutions. This study is uniquely valuable because the vast majority of research on athletics in higher education is focused on high-profile Division I institutions and very little is known about what Division II and Division III presidents and chancellors think. Thus, your participation in this survey is critical to filling that void. 

Upon completion of this dissertation study, you will have the opportunity to request a free copy of the results so that you may also benefit from the findings. This might be valuable for you because the study will cover critical areas of higher education including FINANCES, ENROLLMENTS, MARKETING, and STUDENTS. In this way, the more presidents and chancellors that participate in the study, the more useful the results will be.

The survey is completely anonymous and no identifiable information will be collected. Your participation is completely voluntary. This research project has been acknowledged by the WVU Institutional Review Board. For questions, please contact Aaron Huffman at (304) 336-8222 or [ahuffman@westliberty.edu](mailto:ahuffman@westliberty.edu). THANK YOU for your time!

## APPENDIX I: Initial Email Invitation (Including Link to Survey)



**APPENDIX J: Postcard Reminder (4" x 6" Glossy Finish)**


**FRONT**

 **West Virginia University**  
 College of Education & Human Services  
 EDUCATIONAL LEADERSHIP STUDIES  
 c/o Aaron Huffman, EDLS Doctoral Candidate  
 608 Allen Hall  
 P.O. Box 6122  
 Morgantown, WV 26506-6122


ADDRESS LABEL

**BACK**

TO: NCAA Division II & Division III Presidents/Chancellors  
 FROM: Aaron Huffman, WVU Doctoral Student  
 DATE: March 22, 2013  
 RE: Reminder--NCAA Division II & Division III Presidents' Survey on Athletics



It's not too late to complete the *NCAA Division II & Division III Presidents' Survey on Athletics*. It is very short and **should only take about 6 to 7 minutes to complete**. The purpose of the survey is to specifically

<b>Survey Features</b>	 focus on NCAA Division II and NCAA Division III presidents/chancellors and what you think about the impacts of intercollegiate athletics at your institutions.
<ul style="list-style-type: none"> <li>...Quick (only 6-7 minutes)</li> <li>...Easy (point &amp; click)</li> <li>...Division II &amp; Division III only</li> <li>...Presidents' &amp; chancellors' perceptions</li> </ul>	<ul style="list-style-type: none"> <li>...Anonymous</li> <li>...Not identifiable</li> <li>...Voluntary</li> <li>...IRB approved</li> <li>...Results will be shared</li> </ul>

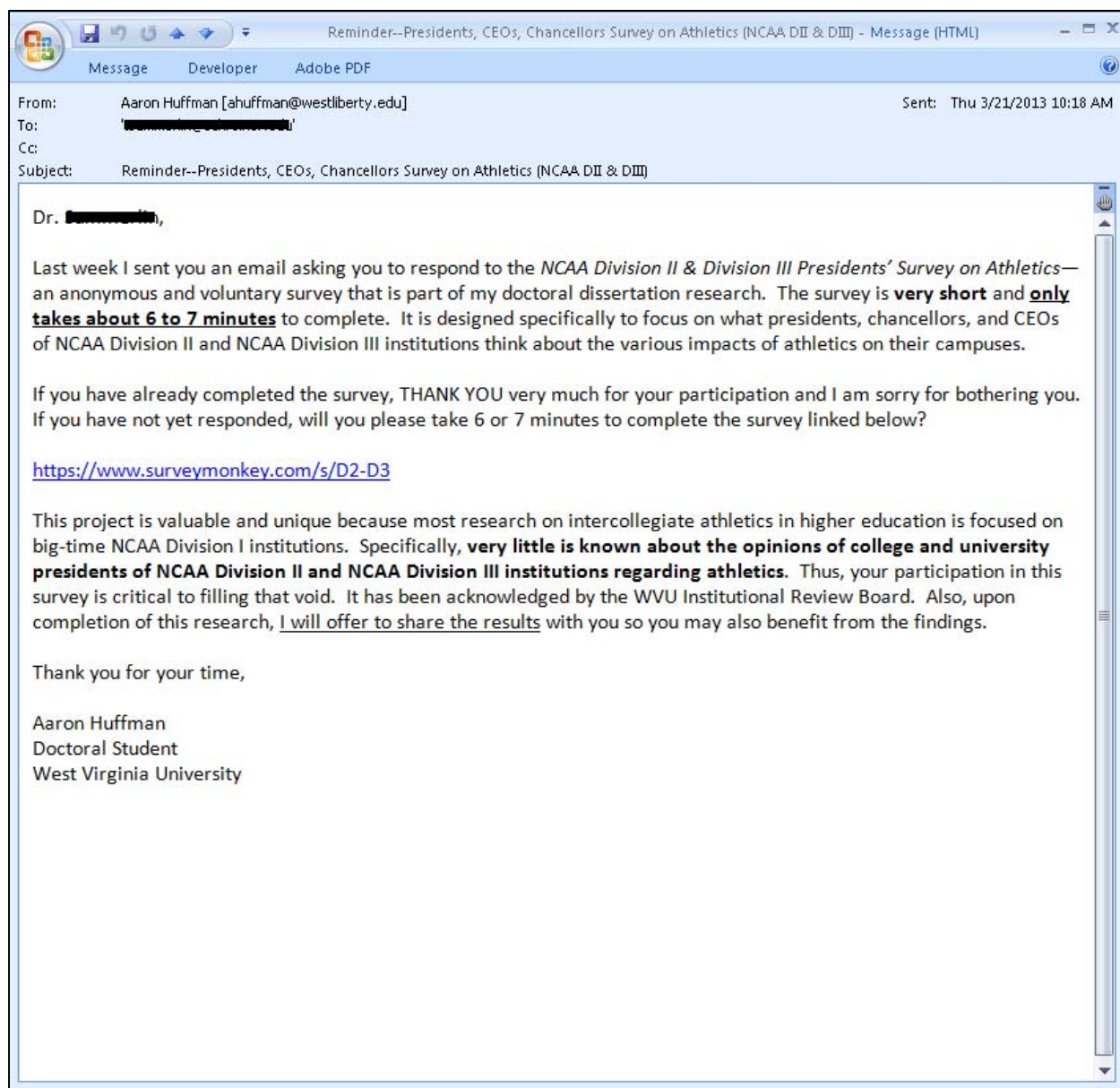
Upon completion of this dissertation study, you will have the opportunity to request a free copy of the results so that you may also benefit from the findings. This might be valuable for you because the study will cover critical areas of higher education including FINANCES, ENROLLMENTS, MARKETING, and STUDENTS. In this way, the more presidents and chancellors that participate in the study, the more useful the results will be. THANK YOU!

**To take the survey, please go to the following web address:**

**<https://www.surveymonkey.com/s/D2-D3>**



## APPENDIX K: Email Reminder (Including Link to Survey)



# APPENDIX L: Correlation Matrix of All Likert-type Items

Correlations

Item #	Item #8	Item #9	Item #10	Item #11	Item #12	Item #13	Item #14	Item #15	Item #16	Item #17	Item #18	Item #19	Item #20	Item #21	Item #22	Item #23	Item #24	Item #25	Item #26	Item #27	Item #28	Item #29	Item #30	Item #31	Item #32	Item #33
Item #8	1	.420**	-.262**	-.177**	.253*	-.253*	.214*	-.191**	-.146*	-.215**	.176*	-.201**	.284*	-.139*	.198*	-.117*	-.237**	.273**	-.065	.117*	-.131**	-.186**	-.159**	.222*	.284*	-.331**
Item #9	.420**	1	-.144*	-.099	.398**	-.042	.225*	-.106*	-.198**	-.101	-.061	-.032	.123*	-.021	.136*	.093	-.064	.312**	-.168**	.232*	-.161**	-.206**	-.214*	.249*	.387**	-.259**
Item #10	-.262**	-.144*	1	.369**	-.128*	.257**	-.160**	.258**	.329**	.338**	-.225**	.248**	-.367**	.268**	-.211**	.249**	.436**	-.215**	.216**	-.116*	.324**	.269**	.258**	-.134*	-.140**	.382**
Item #11	-.177**	-.099	.369**	1	-.068	.282**	.029	.286**	.160**	.393**	-.439**	.359**	-.362**	.492**	-.322**	.378**	.480**	-.036	.275**	-.022	.159**	.268**	.274**	-.120**	-.116*	.224**
Item #12	.253*	.398**	-.128*	-.068	1	.029	.359**	.071	-.001	-.066	-.121*	.036	.094	.045	.051	.052	.037	.335**	-.034	.213*	-.102	-.081	-.036	.170**	.290**	-.159**
Item #13	-.253*	-.042	.257**	.282**	.029	1	.037	.245**	.233**	.317**	-.410**	.314**	-.312**	.370**	-.143**	.279**	.307**	.006	.079	.106	.154**	.181**	.127*	-.131**	-.033	.253**
Item #14	.214*	.225**	-.160**	.029	.359**	.037	1	.030	-.170**	-.057	-.121*	.012	.062	.074	.083	.060	-.013	.435**	-.205**	.314**	-.330**	-.259**	-.170**	.272**	.277**	-.155**
Item #15	-.191**	-.106	.258**	.286**	.071	.245**	.030	1	.340**	.341**	-.249**	.263**	-.339**	.331**	-.238**	.236**	.516**	-.051	.266**	-.013	.228**	.230**	.345**	-.115*	-.120**	.317**
Item #16	-.146*	-.215**	.176*	-.201**	.284*	-.139*	.198*	-.117*	-.237**	.273**	-.065	.117*	-.131**	-.186**	-.159**	.222*	.284*	-.331**	.117*	-.131**	.323**	.275**	-.120**	-.116*	.224**	-.331**
Item #17	-.101	-.061	-.032	.123*	-.021	.136*	.093	-.064	.312**	-.168**	.232*	-.161**	-.206**	-.214*	.249*	.387**	-.259**	-.034	.213*	-.102	-.081	-.036	.170**	.290**	-.159**	-.331**
Item #18	-.070	.276	.570	.027	.706	.015	.095	.254	.000	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Item #19	-.26*	-.144*	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319	.319
Item #20	.253*	.398**	-.128*	-.068	1	.029	.359**	.071	-.001	-.066	-.121*	.036	.094	.045	.051	.052	.037	.335**	-.034	.213*	-.102	-.081	-.036	.170**	.290**	-.159**
Item #21	-.042	.257**	.282**	.029	1	.037	.245**	.233**	.317**	-.410**	.314**	-.312**	.370**	-.143**	.279**	.307**	.006	.079	.106	.154**	.181**	.127*	-.131**	-.033	.253**	-.331**
Item #22	.214*	.225**	-.160**	.029	.359**	.037	1	.030	-.170**	-.057	-.121*	.012	.062	.074	.083	.060	-.013	.435**	-.205**	.314**	-.330**	-.259**	-.170**	.272**	.277**	-.155**
Item #23	-.191**	-.106	.258**	.286**	.071	.245**	.030	1	.340**	.341**	-.249**	.263**	-.339**	.331**	-.238**	.236**	.516**	-.051	.266**	-.013	.228**	.230**	.345**	-.115*	-.120**	.317**
Item #24	-.15*	-.21*	.329**	.160**	-.001	.233**	-.170**	.340**	1	.195**	-.157**	.181**	-.206**	.168**	-.189**	.044	.249**	-.185**	.282**	-.142	.274**	.323**	.275**	-.100**	-.164**	.397**
Item #25	-.22*	-.101	.338**	.393**	-.066	.317**	-.057	.341**	.195**	1	-.398**	.385**	-.426**	.371**	-.307**	.251**	.464**	-.126*	.218**	-.081	.198**	.223**	.359**	-.189**	-.204**	.219**
Item #26	.176*	-.061	-.225**	-.439**	-.121*	.410**	-.121*	.249**	-.157**	-.398**	1	-.516**	.350**	-.412**	.309**	-.321**	-.382**	-.033	.199**	-.087	-.056	-.175**	-.204**	.038	.079	-.169**
Item #27	-.20*	-.032	.248**	.359**	.036	.314**	.012	.263**	.181**	.385**	-.516**	1	-.272**	.413**	-.251**	.333**	.422**	.024	.265**	.117	.191**	.241**	.271**	-.085	-.173**	.127**
Item #28	.284*	.123**	-.367**	-.362**	.094	-.312**	.060	-.339**	-.206**	-.426**	.350**	-.272**	1	-.417**	.286**	-.272**	-.473**	.193**	-.178**	.046	-.227**	-.255**	-.176**	.115*	.146**	-.294**
Item #29	-.139	.070	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Item #30	-.139	.070	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Item #31	-.139	.070	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Item #32	-.139	.070	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Item #33	-.139	.070	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

\*\* Correlation is significant at the 0.01 level (2-tailed).  
\* Correlation is significant at the 0.05 level (2-tailed).

## APPENDIX M: Reliability Statistics (Cronbach's Alpha Coefficients)

**Items From All Four Subscales:  
Reliability Statistics**

Cronbach's Alpha	N of Items
.850	23

**CRONBACH'S ALPHAS:  
ITEMS FROM ALL FOUR SUBSCALES**

**Items From All Four Subscales: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Eliminating athletics would benefit our institution financially.	91.784	136.674	.382	.846
Funding our athletic programs diverts valuable financial resources away from other mission-related components of our campus.	92.278	140.746	.270	.849
Although athletics requires considerable expenditures, it brings substantial indirect benefits to our institution in forms that escape financial reports.	91.924	138.001	.515	.842
Our athletic programs generate substantial donations for our institution that we would not receive otherwise.	93.430	131.708	.514	.840
When our athletic fundraising is successful, it tends to cut into fundraising for our general fund.	92.151	145.018	.140	.853
When prospective students decide whether or not to attend our institution, our athletics is a considerable factor.	92.863	137.057	.372	.846
Overall, our athletes enter college less prepared academically than our non-athletes.	91.931	143.347	.214	.850
Our athletic programs greatly enhance the diversity of our student body.	92.230	134.667	.480	.842
Our current students are more likely to persist at our institution due to our intercollegiate athletics.	92.371	135.496	.421	.844
Intercollegiate athletics helps us when recruiting students who are non-athletes.	92.701	133.734	.559	.839
Winning and losing in athletics does not affect how many admission applications we receive from prospective students.	93.481	134.526	.455	.843
When our athletic teams are winning, it is easier to recruit students with stronger academic credentials.	92.8940	136.164	.471	.842
Our institutional brand has little to do with our athletic programs.	92.735	131.188	.536	.839
People draw conclusions about the overall quality of our institution based on their opinion of our athletic programs.	93.065	134.537	.479	.842
The publicity generated from our athletic programs rarely translates into real, tangible benefits for our institution.	92.790	133.359	.462	.842
Ongoing lackluster athletic outcomes are harmful to our institution's prestige.	92.897	138.134	.360	.846
Our athletic programs expose our institution to many individuals who otherwise would not be aware of us.	92.089	133.489	.630	.837
Athletic participation makes it difficult for our student-athletes to reach their full academic potential.	91.828	140.881	.289	.848
Our student-athletes have higher character/moral traits as a result of their participation in our athletic programs.	92.522	136.699	.432	.844
There is a tendency for our athletes to socially isolate themselves into their own subculture that is separate from the rest of the campus community.	92.591	144.367	.111	.856
Our student-athletes are better leaders as a result of their participation in athletics.	91.835	139.021	.444	.844
Our graduating athletes take with them enhanced skills and valued experiences that give them an advantage in the job market over our graduating non-athletes.	92.165	136.862	.466	.843
For our non-athlete students, being involved with intercollegiate athletics as fans and/or spectators enhances their personal development.	92.564	137.254	.446	.843

**CRONBACH'S ALPHAS: FINANCIAL IMPACT SUBSCALE**

**Financial Impact Subscale:  
Reliability Statistics**

Cronbach's Alpha	N of Items
.584	5

**Financial Impact Subscale: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Eliminating athletics would benefit our institution financially.	16.968	6.823	.423	.478
Funding our athletic programs diverts valuable financial resources away from other mission-related components of our campus.	17.449	7.405	.397	.497
Although athletics requires considerable expenditures, it brings substantial indirect benefits to our institution in forms that escape financial reports.	17.118	8.456	.359	.528
Our athletic programs generate substantial donations for our institution that we would not receive otherwise.	18.621	7.278	.258	.592
When our athletic fundraising is successful, it tends to cut into fundraising for our general fund.	17.334	8.428	.316	.543

**CRONBACH'S ALPHAS: ENROLLMENT IMPACT SUBSCALE**

**Enrollment Impact Subscale:  
Reliability Statistics**

Cronbach's Alpha	N of Items
.673	7

**Enrollment Impact Subscale: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
When prospective students decide whether or not to attend our institution, our athletics is a considerable factor.	24.526	15.164	.432	.623
Overall, our athletes enter college less prepared academically than our non-athletes.	23.605	19.780	-.006	.723
Our athletic programs greatly enhance the diversity of our student body.	23.889	15.511	.412	.630
Our current students are more likely to persist at our institution due to our intercollegiate athletics.	24.022	15.766	.361	.645
Intercollegiate athletics helps us when recruiting students who are non-athletes.	24.369	15.103	.501	.605
Winning and losing in athletics does not affect how many admission applications we receive from prospective students.	25.124	14.627	.474	.610
When our athletic teams are winning, it is easier to recruit students with stronger academic credentials.	24.548	15.469	.491	.610

**CRONBACH'S ALPHAS: MARKETING IMPACT SUBSCALE**

**Marketing Impact Subscale:  
Reliability Statistics**

Cronbach's Alpha	N of Items
.733	5

**Marketing Impact Subscale: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Our institutional brand has little to do with our athletic programs.	15.921	10.863	.505	.683
People draw conclusions about the overall quality of our institution based on their opinion of our athletic programs.	16.206	11.062	.575	.655
The publicity generated from our athletic programs rarely translates into real, tangible benefits for our institution.	15.940	11.707	.391	.731
Ongoing lackluster athletic outcomes are harmful to our institution's prestige.	16.064	11.951	.472	.695
Our athletic programs expose our institution to many individuals who otherwise would not be aware of us.	15.235	12.104	.563	.669

**CRONBACH'S ALPHAS: STUDENT IMPACT SUBSCALE**

**Student Impact Subscale:  
Reliability Statistics**

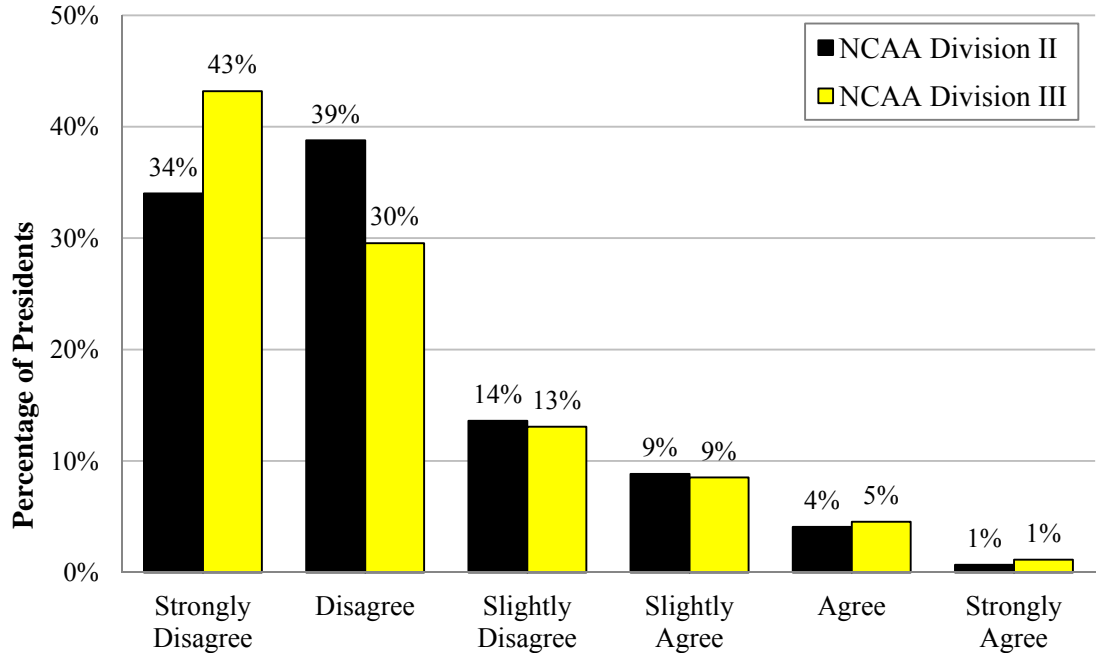
Cronbach's Alpha	N of Items
.649	6

**Student Impact Subscale: Item-Total Statistics**

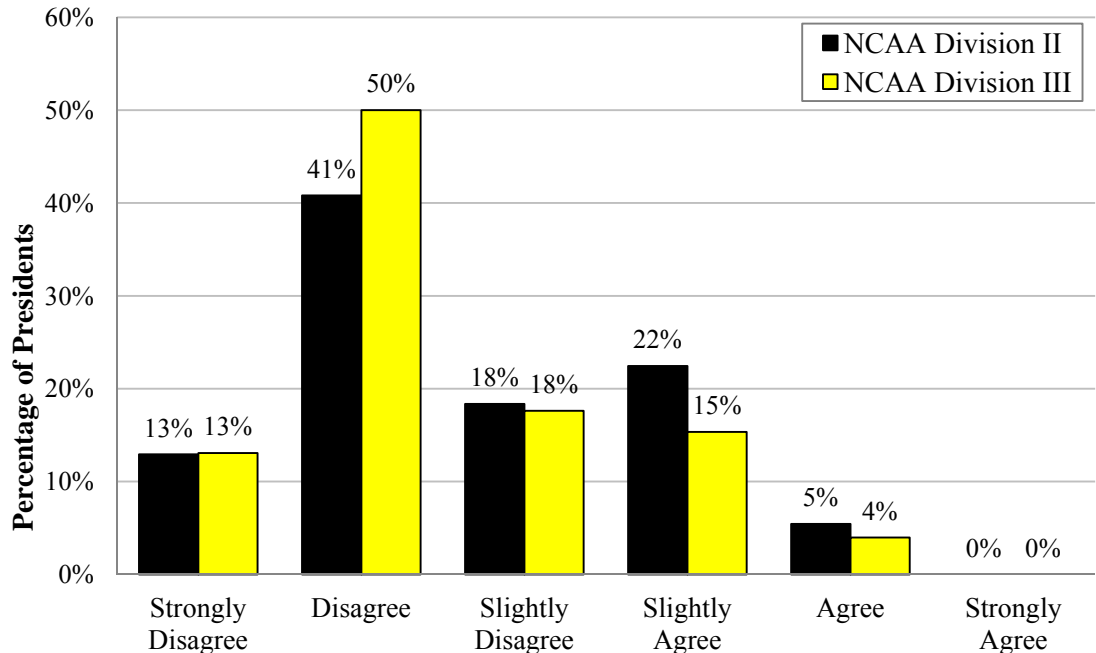
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Athletic participation makes it difficult for our student-athletes to reach their full academic potential.	21.819	10.381	.363	.611
Our student-athletes have higher character/moral traits as a result of their participation in our athletic programs.	22.518	9.409	.465	.571
There is a tendency for our athletes to socially isolate themselves into their own subculture that is separate from the rest of the campus community.	22.604	11.366	.126	.706
Our student-athletes are better leaders as a result of their participation in athletics.	21.828	9.858	.576	.545
Our graduating athletes take with them enhanced skills and valued experiences that give them an advantage in the job market over our graduating non-athletes.	22.155	9.728	.478	.569
For our non-athlete students, being involved with intercollegiate athletics as fans and/or spectators enhances their personal development.	22.558	10.453	.351	.616

**APPENDIX N: Histograms of Results of Individual Likert-type Items**

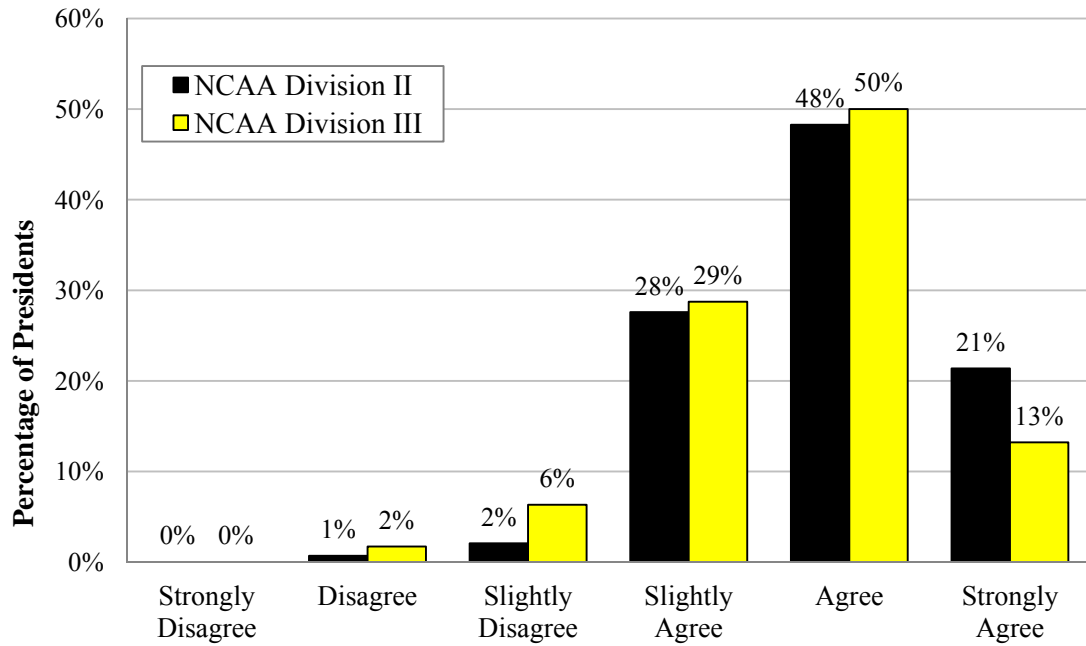
**#8 Eliminating athletics would benefit our institution financially.**



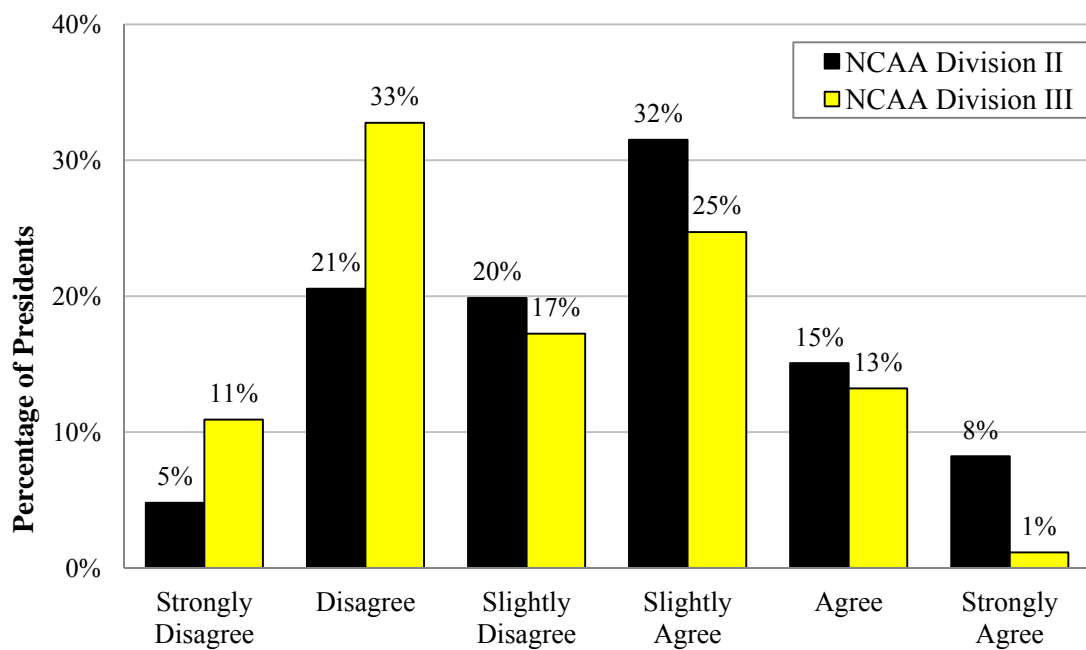
**#9 Funding our athletic programs diverts valuable financial resources away from other mission-related components of our campus.**



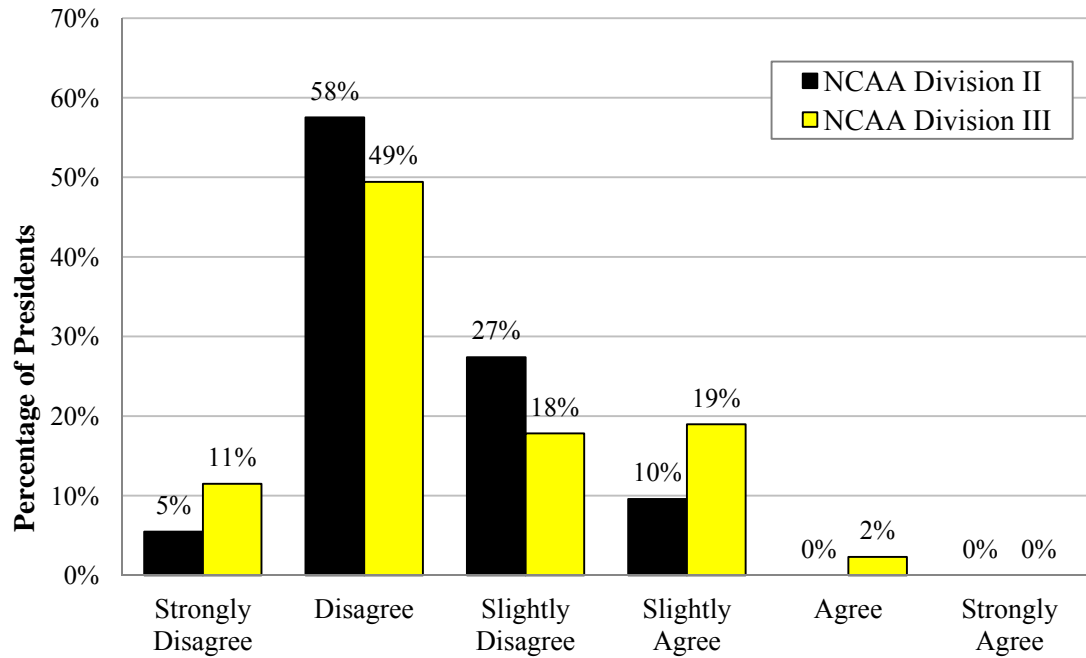
**#10 Although athletics requires considerable expenditures, it brings substantial indirect benefits to our institution in forms that escape financial reports.**



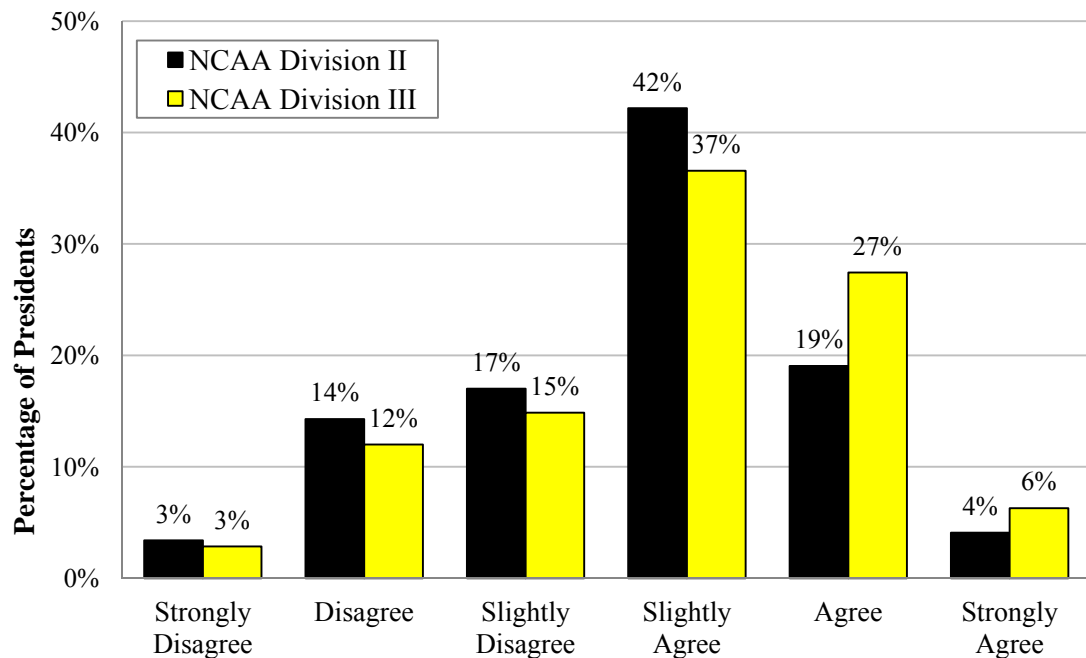
**#11 Our athletic programs generate substantial donations for our institution that we would not receive otherwise.**



**#12 When our athletic fundraising is successful, it tends to cut into fundraising for our general fund.**

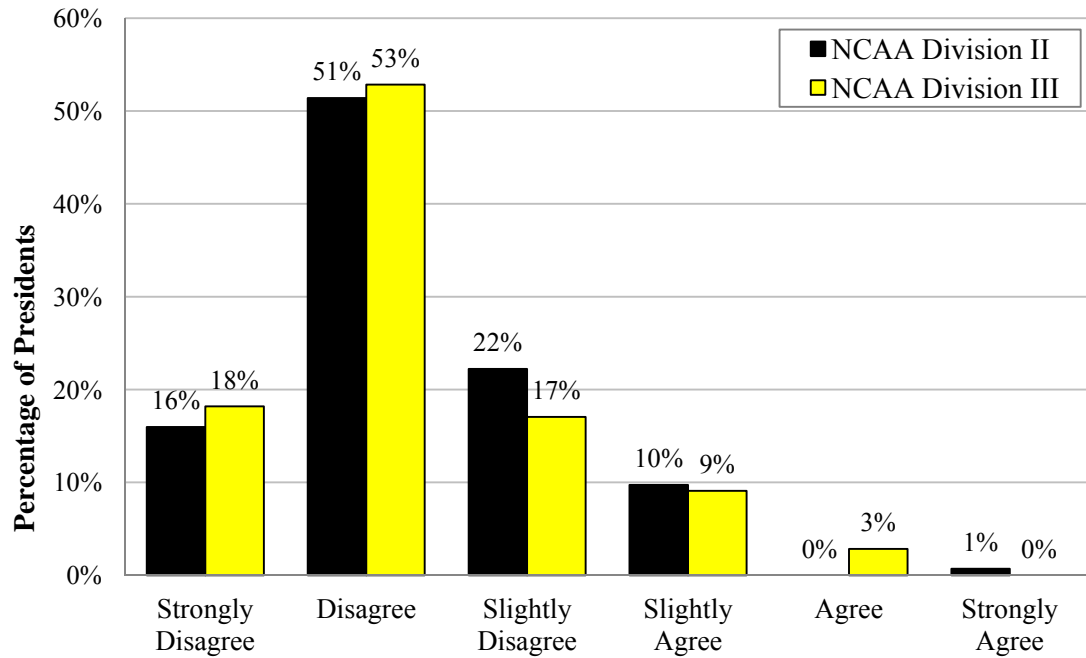


**#13 When prospective students decide whether or not to attend our institution, our athletics is a considerable factor.**

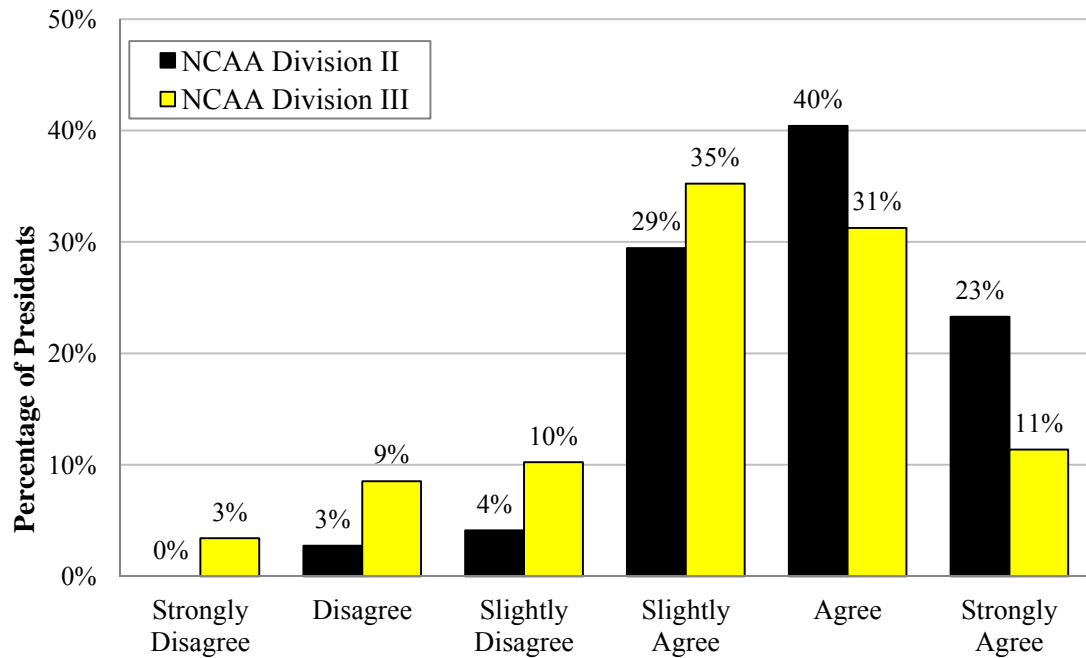




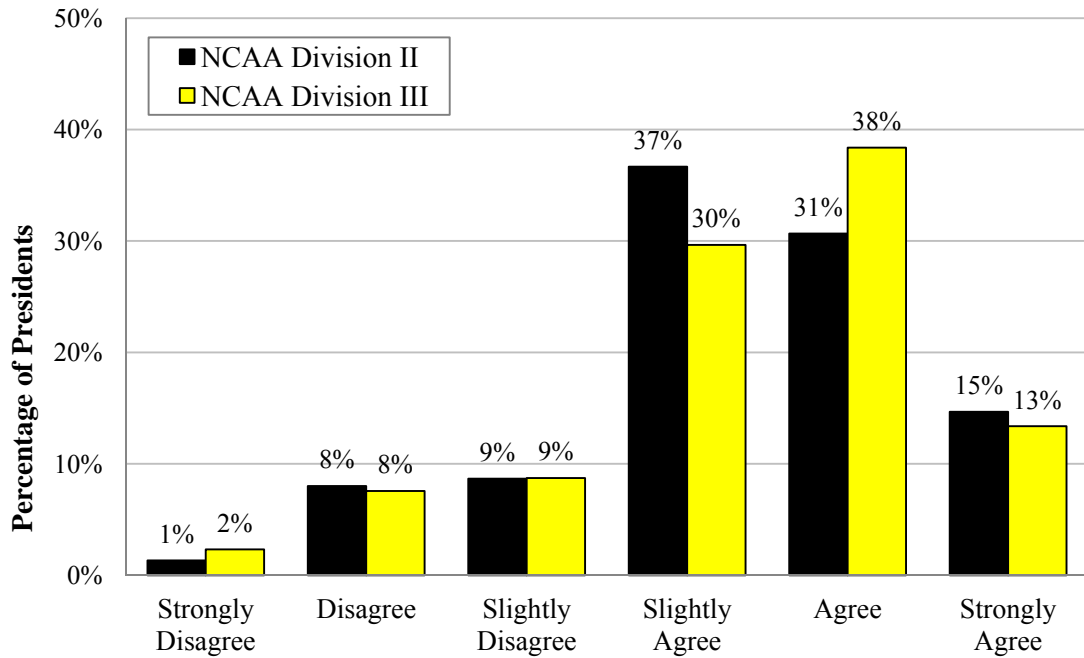
**#14 Overall, our athletes enter college less prepared academically than our non-athletes.**



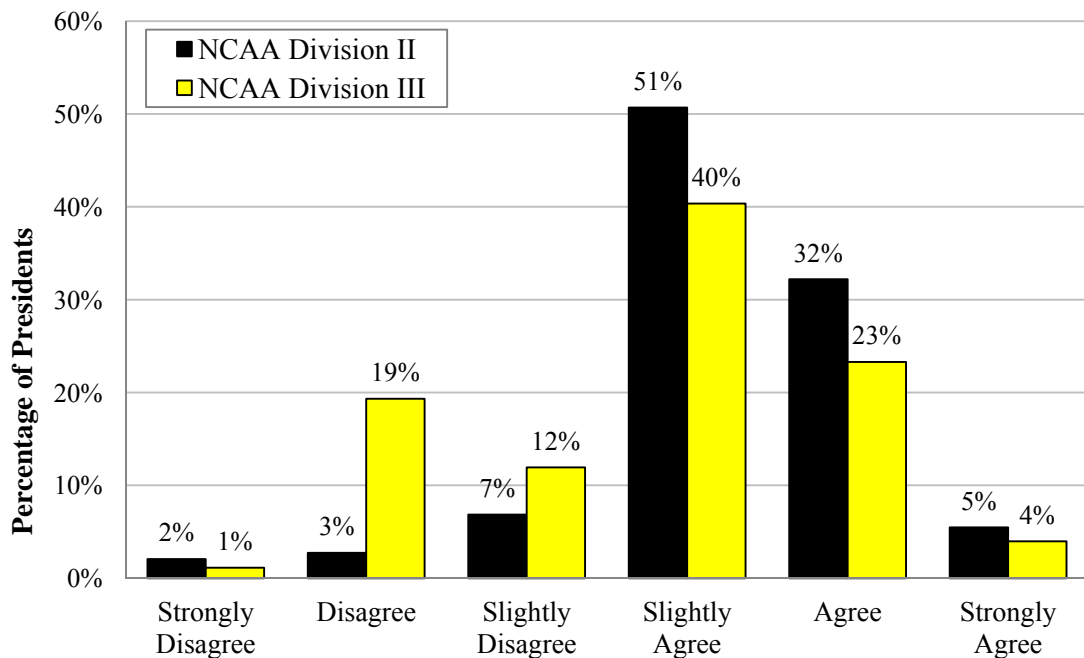
**#15 Our athletic programs greatly enhance the diversity of our student body.**



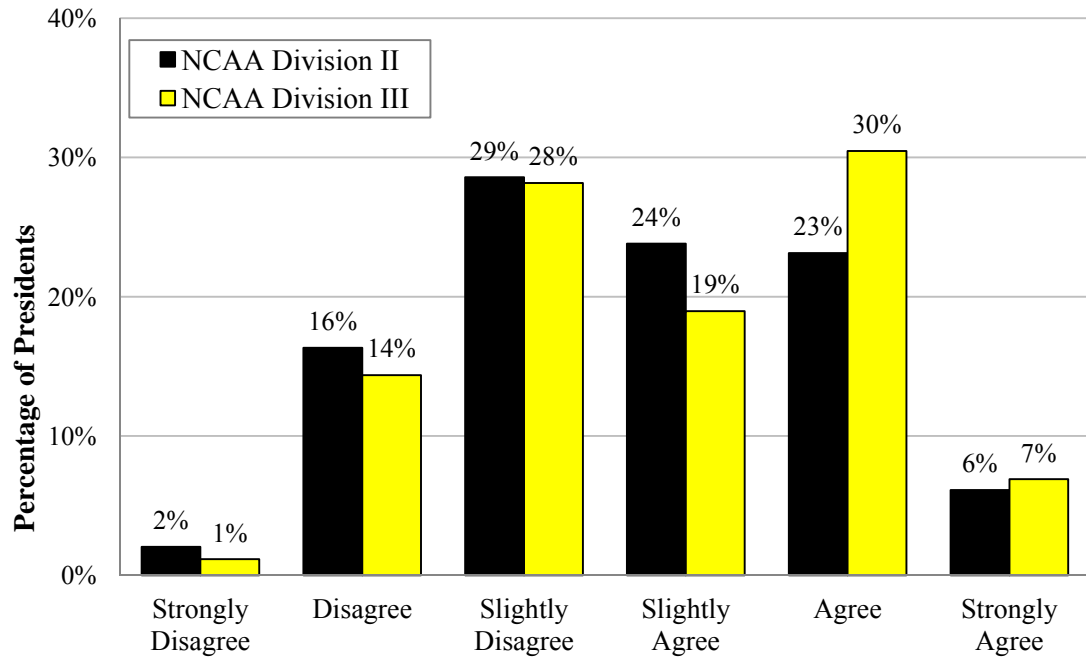
**#16 Our current students are more likely to persist at our institution due to our intercollegiate athletics.**



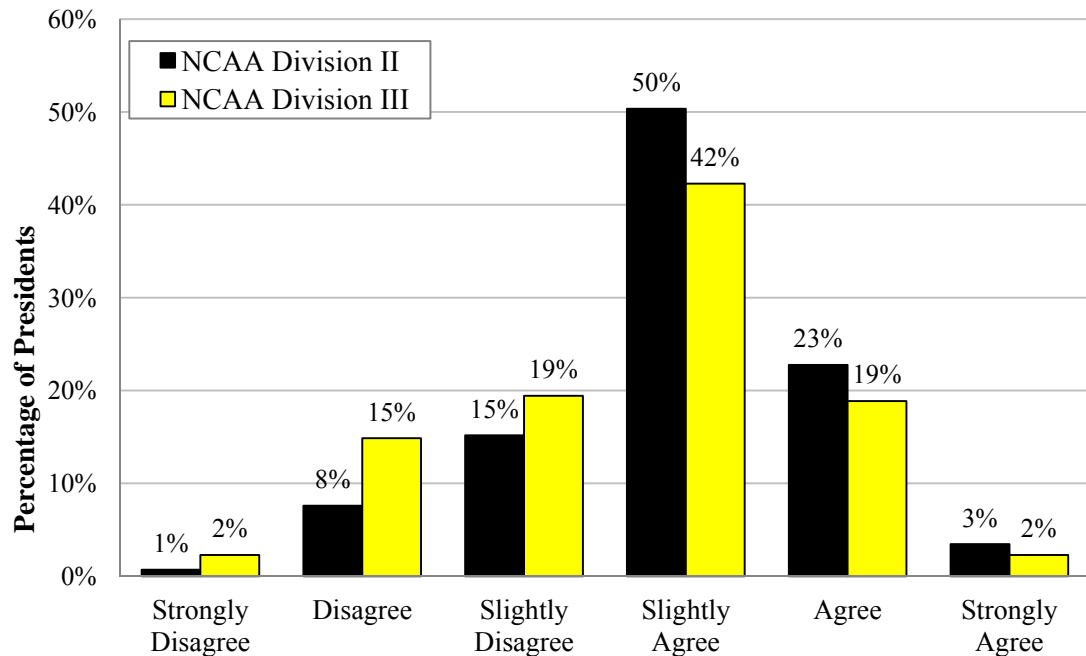
**#17 Intercollegiate athletics helps us when recruiting students who are non-athletes.**



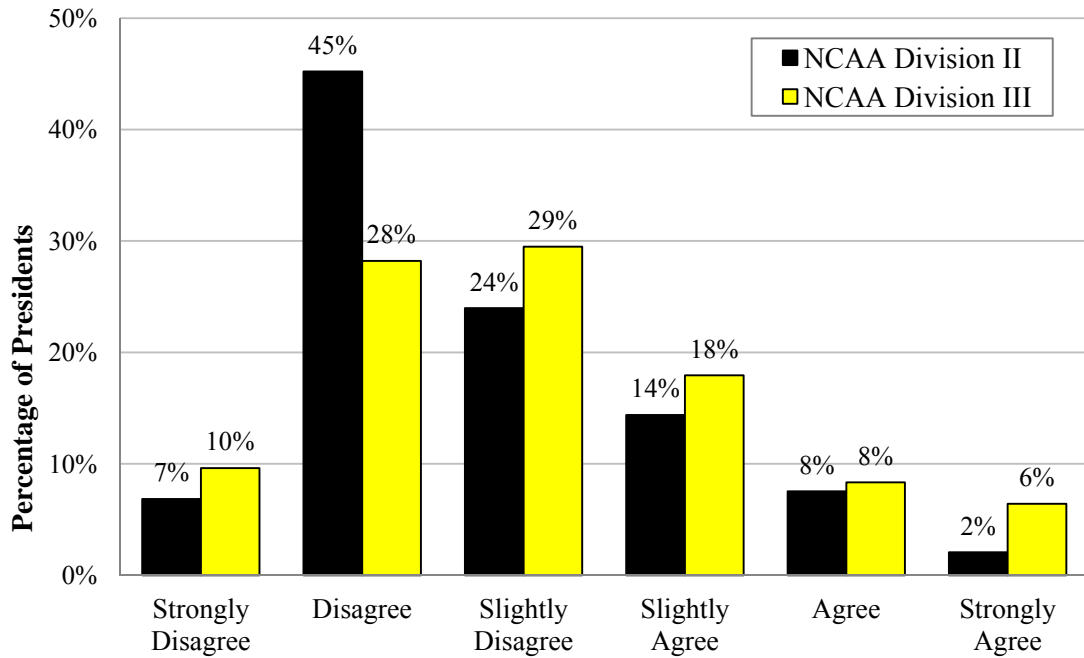
**#18 Winning and losing in athletics does not affect how many admission applications we receive from prospective students.**



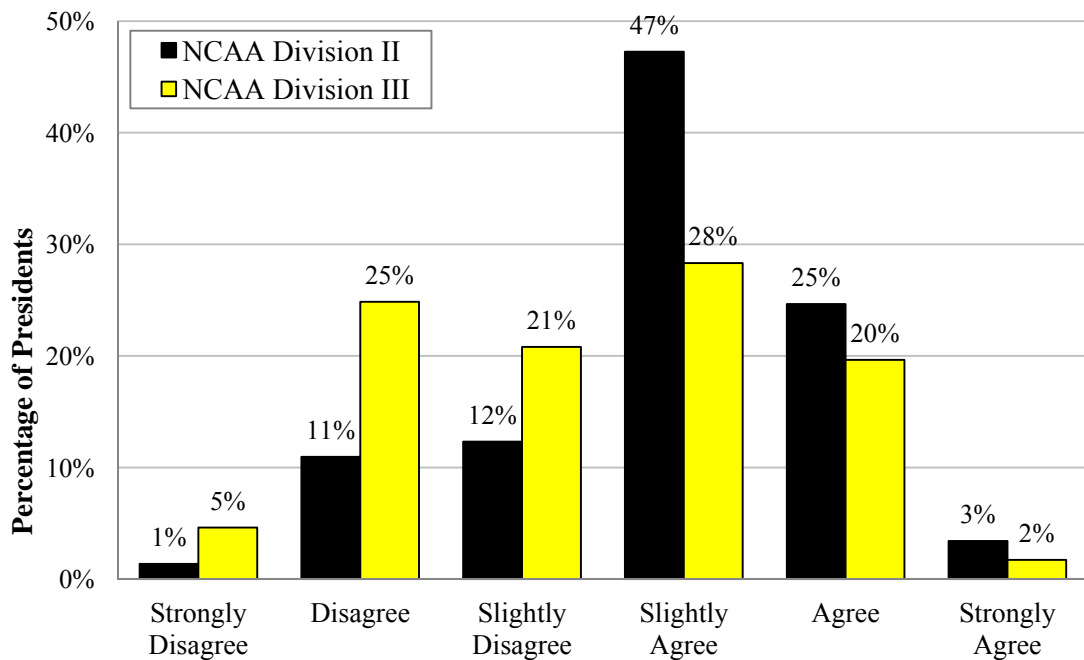
**#19 When our athletic teams are winning, it is easier to recruit students with stronger academic credentials.**



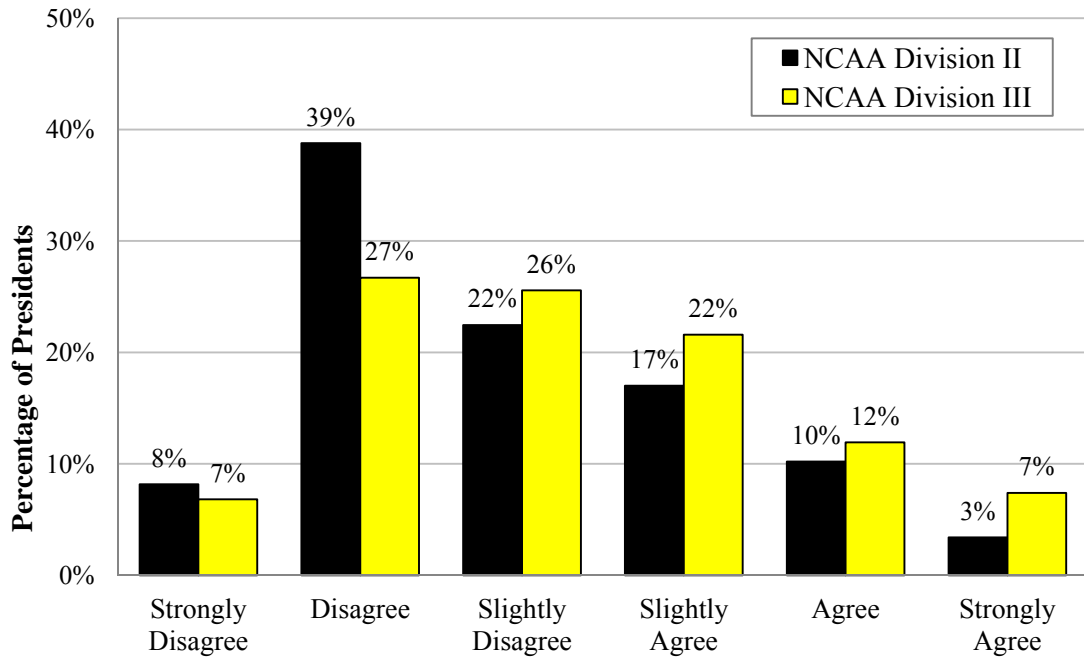
**#20 Our institutional brand has little to do with our athletic programs.**



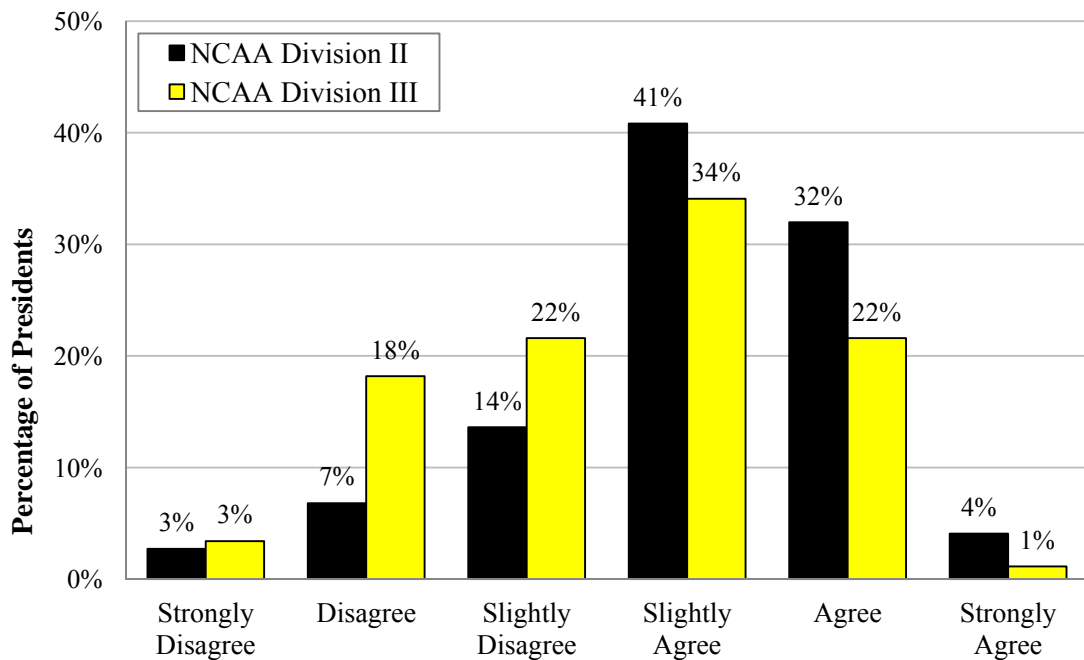
**#21 People draw conclusions about the overall quality of our institution based on their opinion of our athletic programs.**



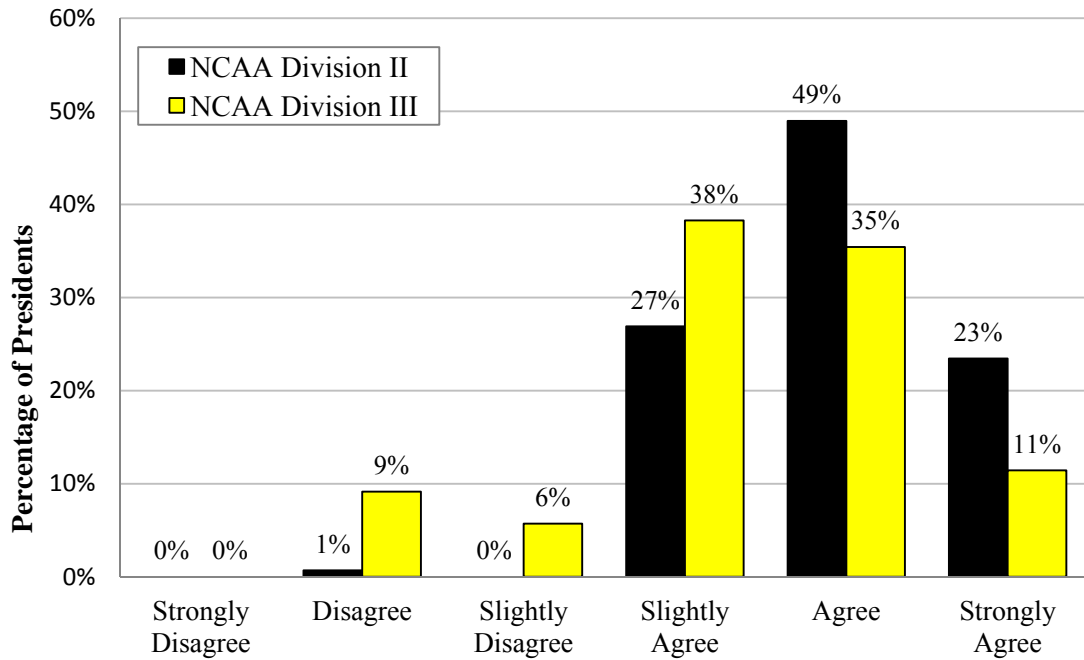
**#22 The publicity generated from our athletic programs rarely translates into real, tangible benefits for our institution.**



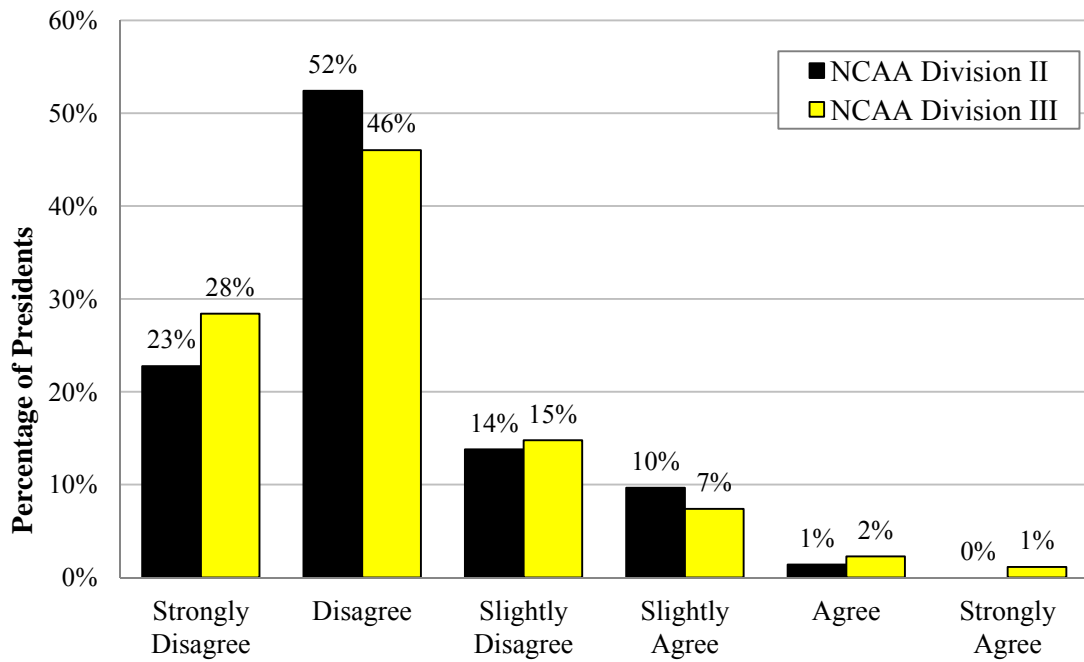
**#23 Ongoing lackluster athletic outcomes are harmful to our institution's prestige.**



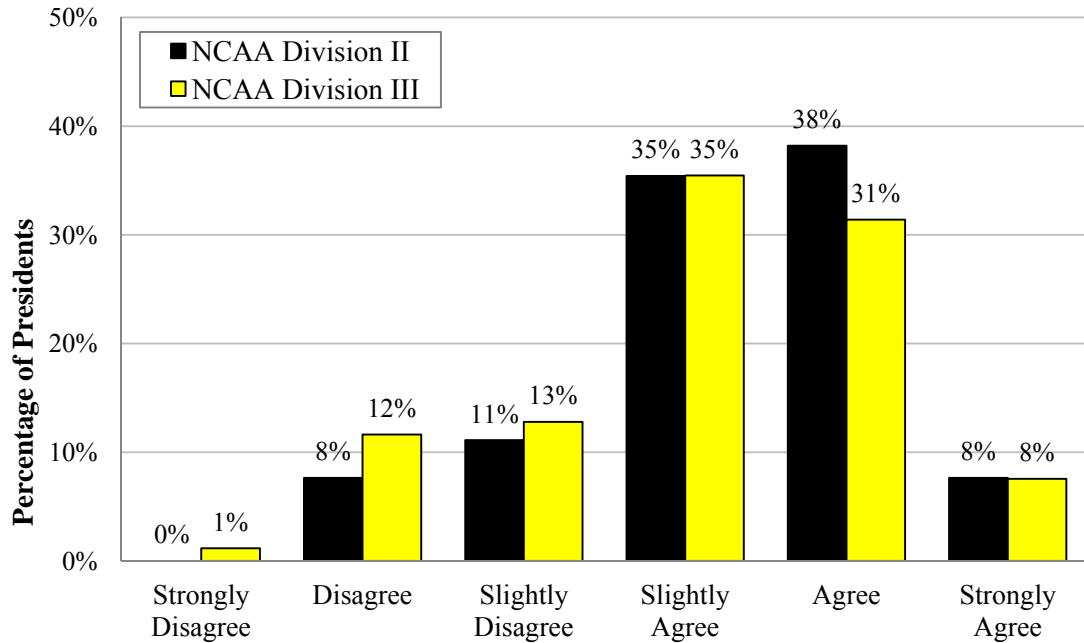
**#24 Our athletic programs expose our institution to many individuals who otherwise would not be aware of us.**



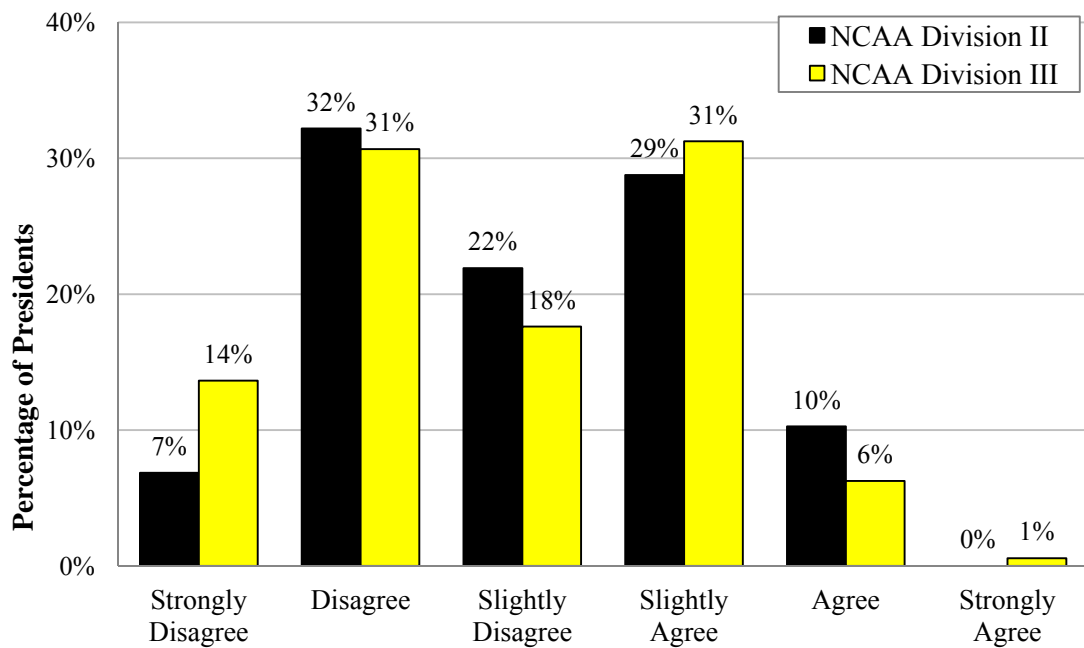
**#25 Athletic participation makes it difficult for our student-athletes to reach their full academic potential.**



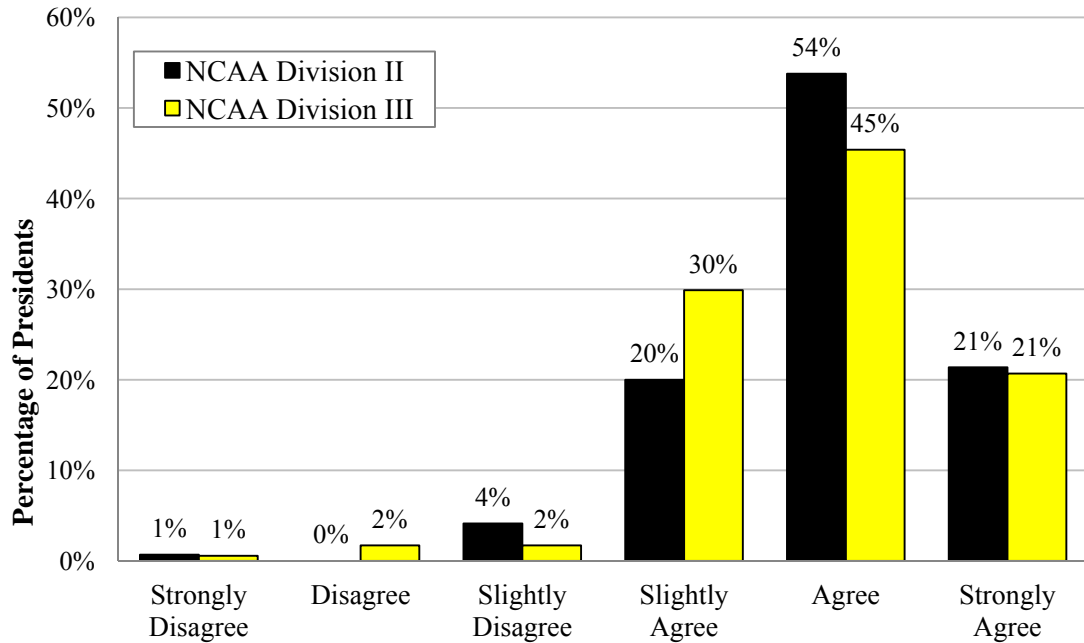
**#26 Our student-athletes have higher character/moral traits as a result of their participation in our athletic programs.**



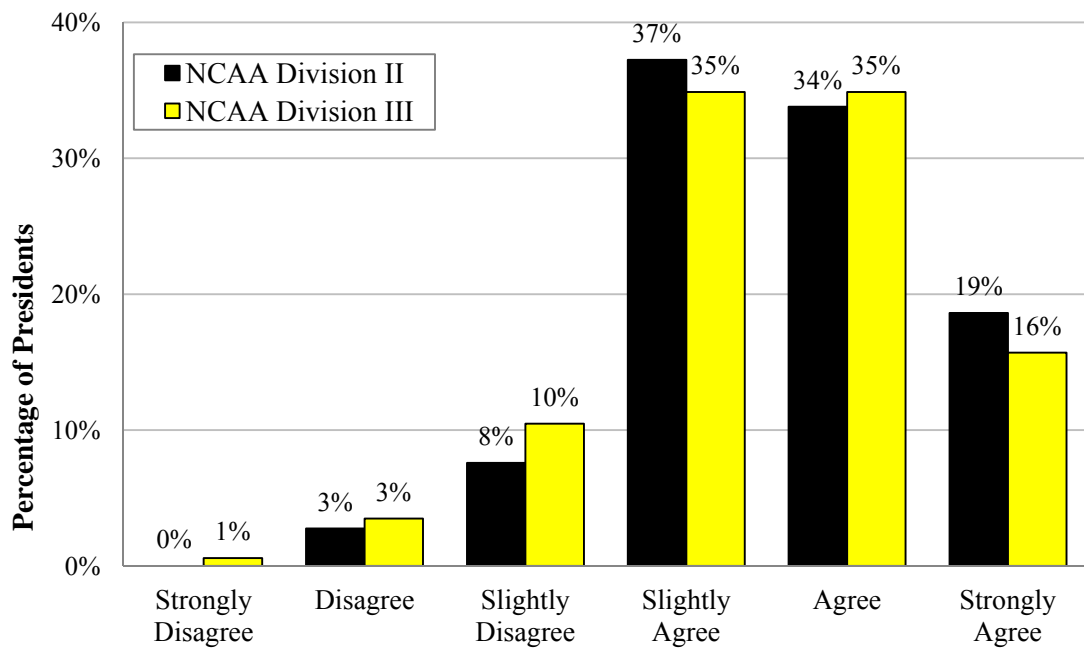
**#27 There is a tendency for our athletes to socially isolate themselves into their own subculture that is separate from the rest of the campus community.**



**#28 Our student-athletes are better leaders as a result of their participation in athletics.**

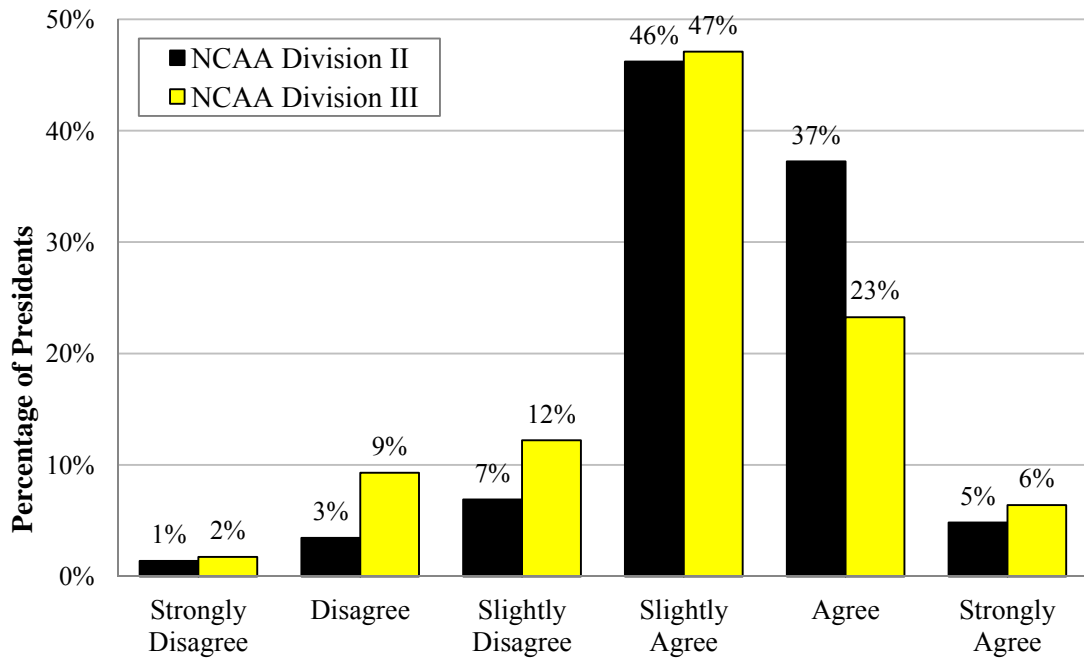


**#29 Our graduating athletes take with them enhanced skills and valued experiences that give them an advantage in the job market over our graduating non-athletes.**

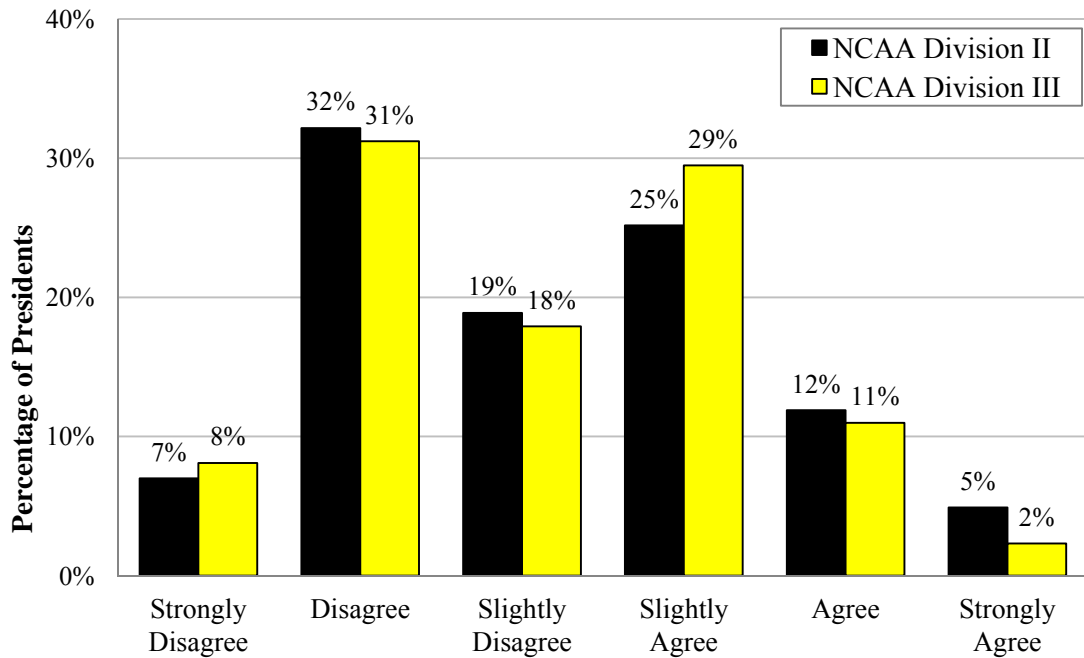




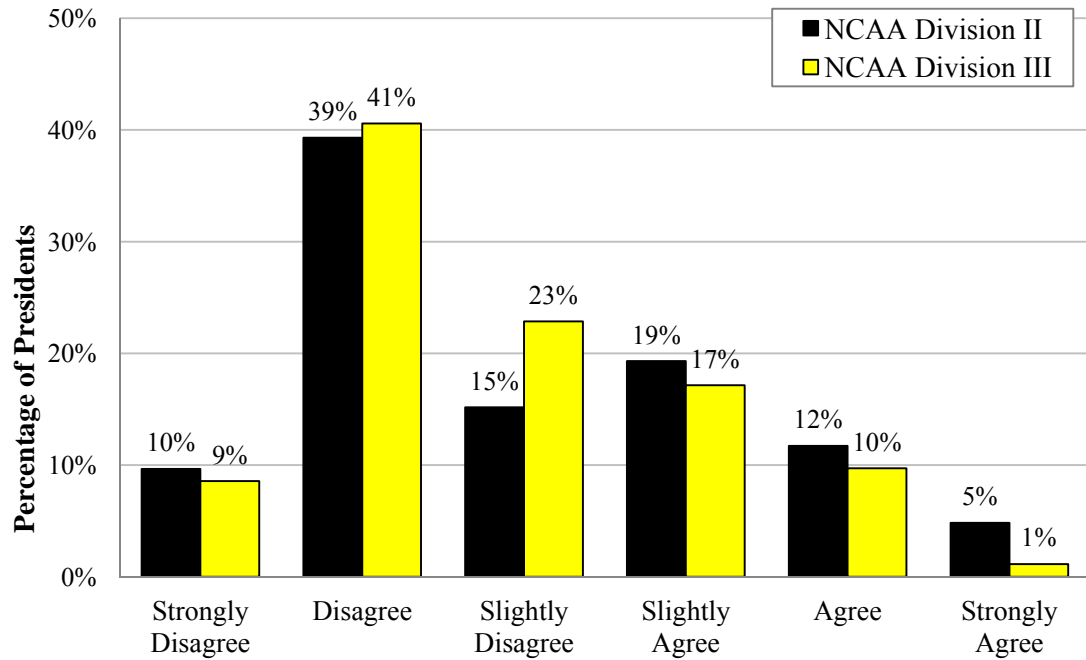
**#30 For our non-athlete students, being involved with intercollegiate athletics as fans and/or spectators enhances their personal development.**



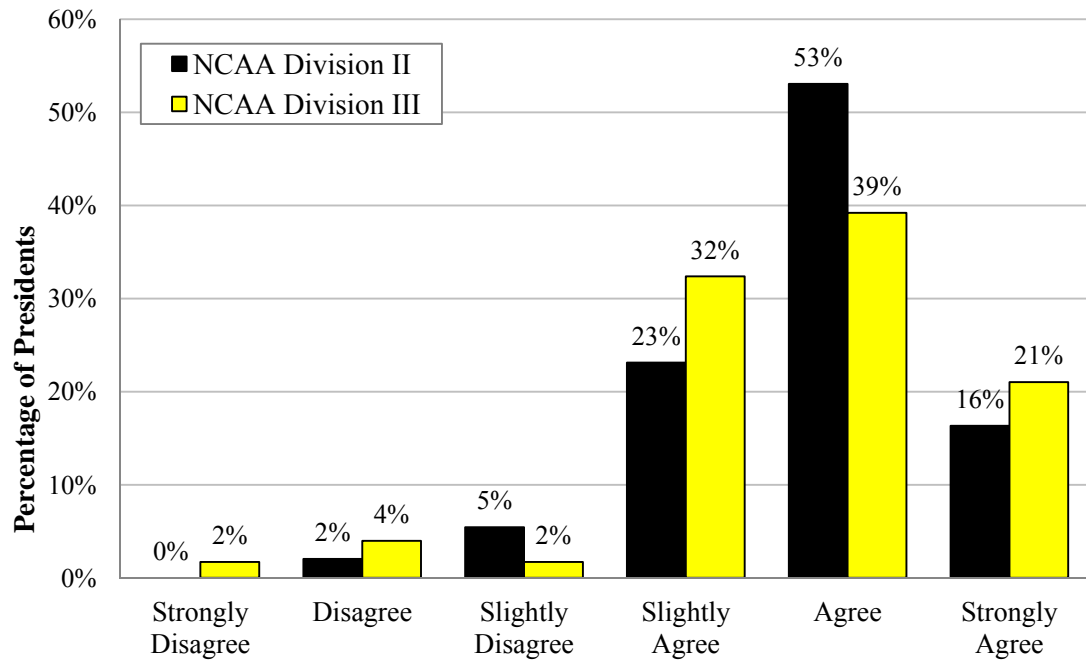
**#31 Athletic reform is needed at our NCAA level.**



**#32 At our institution's NCAA division, athletic spending is getting out of control.**



**#33 Intercollegiate athletics at our institution plays a vital role in contributing to our institutional mission.**



## APPENDIX O: Mann-Whitney U Test Results for Post Hoc Individual Item Comparisons

**\*Note:** These non-parametric individual item comparisons are not part of the a priori hypotheses or the four null hypothesis tests for this study. These are extra post hoc analyses only for the purposes of additional exploration of the data—to investigate patterns that may be present that were not specified a priori—and to potentially guide the subsequent development of the instrument.

**\*MANN-WHITNEY U TESTS FOR ITEMS WITHIN THE FINANCIAL IMPACT SUBSCALE:**

#	Item	NCAA Division II			NCAA Division III			Mann-Whitney U	Exact Sig. (2-tailed)
		n	Mean Rank	Sum of Ranks	n	Mean Rank	Sum of Ranks		
8	Eliminating athletics would benefit our institution financially.	147	167.6	24637.5	176	157.3	27688.5	12112.5	.299
9	Funding our athletic programs diverts valuable financial resources away from other mission-related components of our campus.	147	170.4	25043.5	176	155.0	27282.5	11706.5	.119
10	Although athletics requires considerable expenditures, it brings substantial indirect benefits to our institution in forms that escape financial reports.	145	170.6	24734.5	174	151.2	26305.5	11080.5	.043
11	Our athletic programs generate substantial donations for our institution that we would not receive otherwise.	146	180.4	26333.5	174	143.8	25026.5	9801.5	.000
12	When our athletic fundraising is successful, it tends to cut into fundraising for our general fund.	146	158.3	23112.0	174	162.3	28248.0	12381.0	.671

**\*MANN-WHITNEY U TESTS FOR ITEMS WITHIN THE ENROLLMENT IMPACT SUBSCALE:**

#	Item	NCAA Division II			NCAA Division III			Mann-Whitney U	Exact Sig. (2-tailed)
		n	Mean Rank	Sum of Ranks	n	Mean Rank	Sum of Ranks		
13	When prospective students decide whether or not to attend our institution, our athletics is a considerable factor.	147	152.0	22336.0	175	169.5	29667.0	11458.0	.079
14	Overall, our athletes enter college less prepared academically than our non-athletes.	144	163.6	23555.0	176	158.0	27805.0	12229.0	.559
15	Our athletic programs greatly enhance the diversity of our student body.	146	186.3	27200.5	176	140.9	24802.5	9226.5	.000
16	Our current students are more likely to persist at our institution due to our intercollegiate athletics.	146	160.0	23353.0	176	162.8	28650.0	12622.0	.777
17	Intercollegiate athletics helps us when recruiting students who are non-athletes.	146	181.4	26479.5	176	145.0	25523.5	9947.5	.000
18	Winning and losing in athletics does not affect how many admission applications we receive from prospective students.	147	154.8	22748.5	174	166.3	28932.5	11870.5	.254
19	When our athletic teams are winning, it is easier to recruit students with stronger academic credentials.	145	173.4	25144.5	175	149.8	26215.5	10815.5	.016

**\*MANN-WHITNEY U TESTS FOR ITEMS WITHIN THE MARKETING IMPACT SUBSCALE:**

#	Item	NCAA Division II			NCAA Division III			Mann-Whitney U	Exact Sig. (2-tailed)
		n	Mean Rank	Sum of Ranks	n	Mean Rank	Sum of Ranks		
20	Our institutional brand has little to do with our athletic programs.	146	142.3	20774.5	176	177.4	31228.5	10043.5	.000
21	People draw conclusions about the overall quality of our institution based on their opinion of our athletic programs.	146	181.6	26512.0	173	141.8	24528.0	9477.0	.000
22	The publicity generated from our athletic programs rarely translates into real, tangible benefits for our institution.	147	148.8	21873.0	176	173.0	30453.0	10995.0	.017
23	Ongoing lackluster athletic outcomes are harmful to our institution's prestige.	147	183.3	26945.0	176	144.2	25381.0	9805.0	.000
24	Our athletic programs expose our institution to many individuals who otherwise would not be aware of us.	145	188.5	27327.5	175	137.3	24032.5	8632.5	.000

**\*MANN-WHITNEY U TESTS FOR ITEMS WITHIN THE STUDENT IMPACT SUBSCALE:**

#	Item	NCAA Division II			NCAA Division III			Mann-Whitney U	Exact Sig. (2-tailed)
		n	Mean Rank	Sum of Ranks	n	Mean Rank	Sum of Ranks		
25	Athletic participation makes it difficult for our student-athletes to reach their full academic potential.	145	164.1	23801.0	176	158.4	27880.0	12304.0	.554
26	Our student-athletes have higher character/moral traits as a result of their participation in our athletic programs.	144	166.5	23980.0	172	151.8	26106.0	11228.0	.135
27	There is a tendency for our athletes to socially isolate themselves into their own subculture that is separate from the rest of the campus community.	146	167.9	24515.5	176	156.2	27487.5	11911.5	.244
28	Our student-athletes are better leaders as a result of their participation in athletics.	145	166.2	24094.5	174	154.9	26945.5	11720.5	.239
29	Our graduating athletes take with them enhanced skills and valued experiences that give them an advantage in the job market over our graduating non-athletes.	145	163.2	23661.5	172	155.5	26741.5	11863.5	.434
30	For our non-athlete students, being involved with intercollegiate athletics as fans and/or spectators enhances their personal development.	145	173.2	25111.0	172	147.1	25292.0	10414.0	.007

**\*MANN-WHITNEY U TESTS FOR THE EXTRA ITEMS THAT ARE NOT PART OF THE ANALYSES:**

#	Item	NCAA Division II			NCAA Division III			Mann-Whitney U	Exact Sig. (2-tailed)
		n	Mean Rank	Sum of Ranks	n	Mean Rank	Sum of Ranks		
31	Athletic reform is needed at our NCAA level.	144	160.9	23165.5	173	157.4	27237.5	12186.5	.732
32	At our institution's NCAA division, athletic spending is getting out of control.	145	164.6	23863.0	175	157.1	27497.0	12097.0	.456
33	Intercollegiate athletics at our institution plays a vital role in contributing to our institutional mission.	147	163.5	24037.5	174	158.9	27643.5	12418.5	.633