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# Examining administrative attitudes regarding the determinants for the expansion and eliminations of intercollegiate athletic programs

Matthew A. Martin

*Eastern Washington University*

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EXPLORING ADMINISTRATIVE ATTITUDES REGARDING THE  
DETERMINANTS FOR THE EXPANSION AND ELIMINATIONS OF  
INTERCOLLEGIATE ATHLETIC PROGRAMS

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A Thesis

Presented To

Eastern Washington University

Cheney, Washington

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In Partial Fulfillment of the Requirements

for the Degree

Master of Science

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By

Matthew A. Martin

Spring 2013

THESIS OF MATTHEW A. MARTIN APPROVED BY

\_\_\_\_\_  
CHADRON HAZELBAKER, GRADUATE COMMITTEE CHAIR

DATE \_\_\_\_\_

\_\_\_\_\_  
KELLEY CULLEN, GRADUATE STUDY COMMITTEE

DATE \_\_\_\_\_

\_\_\_\_\_  
LYN MEGOW, GRADUATE STUDY COMMITTEE

DATE \_\_\_\_\_

## MASTER'S THESIS

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## Chapter I

On June 23, 1972, President Richard Nixon signed the Education Amendments of 1972. According to the president, the new legislation included comprehensive higher education provisions, authority for a new effort to revitalize educational research, and authority to provide financial assistance to schools in order aid with desegregation (Nixon, 1972). One amendment in particular, however, was designed to prohibit discrimination in any federally funded educational program or activity based on gender. The law stated:

No person in the United States shall on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance. (Office for Civil Rights, 1979)

Although this modification of the law originally made no direct reference to athletics; Title IX, as it became known, would go on to garner most of its attention over the next 30 years through the lens of athletics, most notably at the high school and collegiate levels.

Since Title IX's implementation in 1972, there have been numerous interpretations and regulations put forth by the Office for Civil Rights (OCR) in order to attempt to clear up confusion stemming from the law (Office for Civil Rights, 1979; Office for Civil Rights, 1996; Office of Civil Rights, 2003). However, as more regulations are created and upheld, decisions made by athletic administrators become more important than ever. The present study will analyze how Title IX's regulations and

subsequent interpretations have shaped today's National Collegiate Athletic Association (NCAA) Institutions, as well as identify the main factors that cause intercollegiate athletic departments to add or discontinue certain sports in order to achieve Title IX compliance.

### **Problem Statement**

The present study compared attitudes among experts concerning the factors associated with the decisions of NCAA athletic departments to add or discontinue certain sports programs in order to achieve Title IX compliance. The study aimed to determine the different factors that intercollegiate athletic departments recognize as reasons for adding certain women's programs, and analyzed the attitudes reflected in the data in order to identify the specific sports programs that are best fits for certain types of institutions.

The study explored three independent variables in order to determine any differences, consistencies, or patterns within the data. The first independent variable (IV) of this study is the type of administrators who often play a role in the decisions to add or discontinue programs: the athletic director, the Senior Woman Administrator, and the school president. The second IV is the level of operating revenue of each school, as listed in the 2011 EADA Report. This IV consists of four levels (High Revenue, Above Average Revenue, Below Average Revenue, and Low Revenue) and allows the investigator to compare attitudes among various sizes of institutions which may view certain sports or factors differently. The last IV will explore any similarities, differences,

or patters among institutions based upon the Title IX prong that they choose to comply with (the three prongs will be defined and discussed further in Chapter Two).

The dependent variable(s) consist of the various sports and factors that respondents listed in the first two rounds of surveying. Due to the study's use of a series of questionnaires in order to develop a final survey listing the most important factors facing institutions, the specific dependent variables could not be determined until after the first two questionnaires were analyzed and scrubbed for data. After the dependent variables were identified, the final survey was formulated and sent out to administrators. The questions asked for the various sports that administrators would hypothetically add or discontinue, as well as the different factors that play a role in those decisions. This ultimately lead to a number of separate dependent variables for: (a) sports that administrators would hypothetically wish to add (see Figure 1), (b) factors that would go into the decision to add certain sports (see Figure 2), (c) sports that administrators would hypothetically wish to eliminate (see Figure 3), and (d) factors that would go into the decision to eliminate certain programs (see Figure 4).

*Figure 1. Women's sports that administrators would hypothetically wish to add*

Rugby	Skiing
Softball	Lacrosse
Rowing	Triathlon
Swimming	Sand Volleyball
Bowling	Handball

Note. Based on the answers from the first two rounds of questionnaires

*Figure 2. Factors playing a role in the decision to add women's sports*

State & Regional Competition	High School Participation Rates
Participation & Scholarship Numbers	Interest on Campus
Popularity in the Community & Region	Budgetary Constraints

Note. Based on the answers from the first two rounds of questionnaires

*Figure 3. Sports that administrators would hypothetically wish to eliminate*

Men's Track & Field	Women's Tennis
Men's Soccer	Men's Golf
Women's Golf	Men's Tennis
Men's Cross Country	Women's Cross Country
Women's Gymnastics	Women's Track & Field
Men's Gymnastics	

Note. Based on the answers from the first two rounds of questionnaires

*Figure 4. Factors playing a role in the decision to eliminate sports*

Danger of Injury to Student-Athletes	Title IX Compliance Issues
Inclusion of Program in Primary Conference	Amount of Programs Competing
Recruiting Challenges	Programs Not Protected in Conference
Budgeting Challenges	Facilities Challenges

Note. Based on the answers from the first two rounds of questionnaires

## Operational Definitions

**Revenue categories.** This study has certain operational definitions that are important for overall clarification. In collecting data from institutional administrators, each school was categorized based upon the school's total amount of revenue. These categories are based on the 2011 U.S. Department of Education's Equity in Athletics Data Analysis (EADA) reports from each Division-I institution. For simplicity, the present study categorized the participant's institutions into four sections: High Revenue, Above

Average Revenue, Below Average Revenue, and Low Revenue. Because private schools are not required to report their financial records to the EADA, the report lists 246 public Division-I institutions. Using this database, the revenue categories were split into quartiles, with each quartile consisting of either 61 or 62 institutions. Therefore, institutions categorized as High Revenue rank from 1 to 61 in total revenue. The University of Texas at Austin ranks first in total revenue at \$150,295,932. Mississippi State University ranks 61st in total revenue at \$49,893,731. Therefore, any school accruing revenue between those two amounts will be categorized as High Revenue. Above Average Revenue, then, is any school ranking below Mississippi State and equal to the median amount, which is Stony Brook University at \$20,595,678. Below Average Revenue is classified as schools with revenues below the median and larger than the 185th ranked school, Eastern Illinois University, whose revenue is listed as \$11,731,975. The last category, Low Revenue, is any revenue ranking from 186 to 247. The University of New Orleans is the lowest ranked Division I institution at 246th, and has a revenue of \$2,253,594 (Equity in Athletics Data Analysis, 2010).

**Roster sizes.** Roster sizes were categorized based upon the scholarship allotments for all NCAA Division I women's sports. The different categories were derived using the mean scholarship allotment for all Division I women's sports (10.96) and the standard deviations of the data (4.49) (Richter, 2009). Therefore, "large roster sizes" for women's sports were categorized as any team with greater than 16 allowed scholarships. Examples of these teams would be women's hockey (18 scholarships) and women's rowing (20 scholarships). Those sports with a range of 11 to 15 allowed scholarships were defined as "above average roster sizes." Examples of these teams

would be women's lacrosse (12 scholarships) and women's basketball (15 scholarships). Additionally, sports with a range of 7 to 10, and 0-6 allowed scholarships were defined as "below average" and "small roster sizes," respectively. Examples of "below average roster sizes" would be women's tennis (8 scholarships) and skiing (10 scholarships). Examples of "small roster sizes" would be synchronized swimming (5 scholarships) and women's golf (6 scholarships). Any amount larger than one standard deviation from the mean was therefore classified as a "large" or "small," depending on its direction.

**Title IX proportionality.** In addition, Title IX proportionality is evaluated by comparing the male to female ratio of student-athletes receiving a scholarship to the male to female ratio of the overall student body (Randall, 2003). Thus, a university athletic department is in compliance if the percentage of females receiving athletic scholarships (out of all scholarships) is the same as the percentage of females (out of all students) on campus. A common misconception is that the Office of Civil Rights (OCR), which governs Title IX compliance, allows a "buffer zone" that allows athletic departments to be considered substantially proportionate when they are within five to ten percent of true proportionality. This misconception may stem from the fact that no school has ever been found in violation of substantial proportionality when their shortfall is five percent or less (Sigelman & Wahlbeck, 1999). However, the OCR has never actually ruled on this matter, and instead states that a school reaches substantial proportionality when it cannot move any closer to actual proportionality by adding a viable sport (Randall, 2003).

### **Hypothesis**

With a majority of the literature on Title IX focusing on the Prong 1 and the financial constraints of many Division-I athletic departments, it was believed that

achieving Title IX compliance through proportionality and overall program costs would be the most important factor in adding certain women's sports. As a result, investigators expected to see significant statistical evidence supporting the importance of "Participation & Scholarship Numbers" and "Budgetary Constraints" when looking to add sports; and "Title IX Compliance Issues" and "Budgeting Challenges" when looking to eliminate sports. Previous studies (Gray & Pelzer, 1995; Williamson, 1983) listed important factors such as lack of student interest, high costs, inconvenient travel, and lack of spectators as reasons for discontinuing programs. Investigators in the current study believe that many of these factors are still prevalent today. However, this study aimed to present factors that play a role in the decision to both eliminate and add women's sports, which may provide different results.

Furthermore, for the addition of women's programs, it was hypothesized that there would be statistical evidence supporting the likeliness of adding women's sports with large and above average roster sizes compared to adding women's sports with smaller roster sizes, which in turn would help athletic departments increase their proportionality. Based upon the sports listed in the first two rounds of questionnaires, the only option to add that is classified as a large roster size sport is rowing (20 scholarships). Above average roster size sports include: swimming (14 scholarships), softball (12 scholarships), lacrosse (12 scholarships), and rugby (12 scholarships). Below average roster size sports include: handball (10 scholarships) and skiing (7 scholarships). The only small roster size sport included was bowling (5 scholarships). Because triathlon is still on the verge of becoming an emerging NCAA sport (which will be explained in more detail later), the present study is assuming, based upon the relatively low popularity of the sport, that it



would be classified as a small roster size, at least in the early stages of being a NCAA-sponsored sport.

For the elimination of programs, this study hypothesized that institutions would be most interested in eliminating men's programs, especially those with large and above average roster sizes, which again would help with the institution's proportionality numbers. Based upon the sports listed by SWAs in the first two questionnaires, the scholarship numbers for sports to be eliminated are: Men's Track & Field (12.6 scholarships); Men's Cross-Country (12.6 scholarships); Women's Golf (6 scholarships); Women's Gymnastics (12 scholarships); Men's Soccer (9.9 scholarships); Men's Gymnastics (6.3 scholarships); Women's Tennis (8 scholarships); Men's Golf (4.5 scholarships); Men's Tennis (4.5 scholarships); Women's Cross Country (18 scholarships); and Women's Track & Field (18 scholarships). Therefore, the present study expected to see Men's Track & Field and Men's Cross Country as the most likely to be eliminated.

### **Assumptions**

The main assumption this study made was that institutions in each revenue category are facing similar economic and social constraints. Based upon this assumption, it was also assumed that these constraints would cause institutions to think similarly when analyzing factors that go into the decisions to add or discontinue certain athletic programs.

Additionally, this study made the assumption that the athletic and school administrators participating in the surveys were truthful with their answers. According to

L.M. Hatfield, Hatfield, and Drummond (2009) the primary job functions of SWAs are to advocate for women's athletics, gender equity, and to serve as a role model as the highest ranking woman in the athletic department. It was assumed, based upon these job duties, that SWAs would be aware of Title IX legislation and could therefore be considered "experts" in their field. Similarly, the athletic director, while not necessarily an expert in gender equity concerns, was identified as an expert in the field as a decision maker in the athletic department. According to Copeland and Kirsch (1995), since the 1970s, the daily functions of the athletic director have evolved from simply "budgeting, hiring, public relations, etc. and to be more accountable for emerging tasks such as complying with gender and legislative regulations..." (p. 70). Lastly, the present study also considered university presidents to be experts in the field of intercollegiate athletics. While some school presidents may be more involved with the athletic department than others, it is assumed that presidents are taking strides to increase their control in athletics, in accordance with the recommendations made in the Knight Commission's 2001 report titled "A Call to Action: Reconnecting College Sports and Higher Education." The report adds to its 1991 report, where it recommended a "one-plus-three" model of intercollegiate athletics where university presidents increase their control directed at academic integrity, financial integrity, and independent certification of its athletics programs. The 2001 report found that the NCAA had made considerable progress toward the goals laid out in the commission's 1991 report, but the report also wanted to develop more presidential control. As a result, they proposed the Coalition of Presidents, a model directed toward more academic reform, de-escalation of the athletics arm race, and a de-emphasis of the commercialization of intercollegiate athletics (Knight Foundation, 2001). As a result of

these recent efforts by the Knight Commission and the NCAA to increase presidential control within NCAA athletic departments, the present study considers them on par with SWAs and athletic directors in terms of being an expert in the field.

The final assumption contended that these experts were interested in the topic and would readily participate. One concern was that perhaps due to the high demands of their job, the opportunity cost of participating could prevent them from completing the questionnaires. Steps were taken to make the survey as simple, yet as effective as possible.

### **Limitations**

The limitations of this study included the fact that all three of the questionnaires were voluntary, with no real incentive for experts to participate other than the offer to share results with each of the respondents. It was assumed that subjects would be intrigued by the study and would understand the importance of continued research on gender equity issues. Additionally, the present study had no way to control bias in participant answers. For example, each administrator may think differently than the rest of his or her respective athletic department, as the roles of the SWAs, athletic directors, and university presidents vary from school to school. Therefore, it is possible for discrepancies to exist in which sports each administrator personally may want to add versus what the athletic department as a whole believes is the best decision. To combat this discrepancy, the survey emphasized that it is asking them to answer on behalf of their institution and based upon the goals of their respective athletic departments.

## **Delimitations**

There are a number of delimitations in the present study that were decided on for convenience. First of all, only administrators at Division-I institutions were surveyed. The reasoning behind this decision stems from the variety of goals throughout the different divisions of the NCAA. Divisions II and III are often smaller schools whose ideologies of athletics may differ from that of Division-I schools. Division-I institutions are highly competitive and therefore are more likely to behave similarly in making economic and social decisions about athletics. Another delimitation is that not every Division-I school was surveyed. In fact, in the first two rounds of questionnaires, only 10 SWAs were contacted and asked to fill out the initial survey. This survey consisted of open-ended questions in order to collect a wide range of observations. The number of initial participants for the first two rounds is based on the manageability and flexibility of the present study, as advised by Skulmoski, Hartman, & Krahn's (2007) research on the various sample sizes of Delphi method studies. Although this study is not a true Delphi study, the first two rounds were modeled after the Delphi method as investigators searched for a consensus among experts in the field. After the first two rounds were complete, the third questionnaire was sent to 136 more SWAs, 136 athletic directors and 136 university presidents. With the limited time frame and limited resources to analyze results, a stratified sampling method was preferred over the alternative of surveying the entire population of Division-I schools.

## **Significance of the Study**

This study is important because it can ultimately act as a model for institutions looking to achieve Title IX compliance by adding women's sports programs. As will be described in Chapter II, most of the existing research centers on the discontinuation of men's sports in order to save money and increase proportionality at the same time (Kennedy, 2007; Rimbach & Alex, 2006; Sports Litigation Alert, 2006). However, an alternative to discontinuing men's sports can be found by choosing to add women's programs instead. While the expenses of this are the most obvious obstacle, the fact is that if complying with Title IX is "the right thing to do," and institutions want to avoid the controversy associated with dropping men's sports, the most viable solution may be to spend money on adding women's sports.

In 1972, the original intention of Title IX, in athletics, was to increase opportunities for females and provide gender equity. While female opportunities have increased, controversy remains over whether male opportunities have suffered as a result. In her book *Tilting the Playing Field: Schools, Sports, Sex and Title IX*, Jessica Gavora argues that the idea of substantial proportionality has led to the use of quotas, which has negatively affected men's non-revenue athletic programs such as baseball and wrestling. According to her, the law was meant to provide equal opportunity, not necessarily equal outcomes (Gavora, 2002, pp. 24). Ultimately, the vast number of arguments over Title IX have aided in making it one of the major social justice issues in today's society. The fact is that regardless of proportionality, facilities, or scholarships, the basic premise of

Title IX was to promote gender equity because it was the right thing to do. Still, if Title IX was implemented as an aspect of social justice, it seems that the same type of argument could be made for male opportunities, and eliminating them would therefore be "the wrong thing to do."

Yet, if Title IX is in fact a social justice issue, it means that today's society believes that collegiate athletics are important and can be used to promote values, such as hard work, leadership, and teamwork. Contrary to this belief, some have argued that college athletics has become an "arms race" for revenue and sponsorships, leading to a growing divide in the success of athletic programs and the core educational values that they are supposed to promote as a part of the overall university (Bowen & Levin, 2003). The January 2009 State of the Association speech, written by former NCAA President Myles Brand and delivered by NCAA Vice-President Wallace Renfro, found increased spending on college sports that "exceeded the rate of increase in the general university budgets by a factor of three to four" (Brand, 2009, p. 3). At the same time, in the 2009 edition of the NCAA revenues and expenses report, Fulks (2009) discovered that approximately 80% of Division I Football Bowl Subdivision (FBS) athletic departments average a net operating deficit of roughly \$10 million. Adding to the evidence that intercollegiate athletics expenditures have become out of control, one study found that less than a quarter of Division-I FBS university presidents believed athletic programs were sustainable in their current form based upon modern trends and economic output (Hesel & Perko, 2010).

Despite the accelerating expenditures and visibility of college athletes, many advocates maintain hope that intercollegiate athletics still make a difference on a social level.

Although the media, society, and higher education, as well as many of those involved with intercollegiate athletics, have trivialized athletics as simply entertainment, college athletics has the potential to become a significant contributor to the higher education team. Because of its visibility and the tremendous influence in our society, college athletics' potential to promote educational excellence and provide educational leadership is enormous. (Gerdy, 1997, pp. vii)

If intercollegiate athletics does indeed have the potential to support the mission statements and educational values of the universities, then the argument for the importance of Title IX in athletics again becomes prevalent. Since Title IX wasn't originally intended to have a profound effect on athletics, the law should attempt to help instill the core educational values of the university, making "the right thing to do," much more important than ticket revenue, television deals, and corporate sponsorships. Fortunately, when it comes down to dropping men's sports in order to comply with Title IX, institutions do have other options, and can avoid the consistent controversy and bad press by exploring the addition of women's programs as an alternative.

While the decision to add women's programs in order to comply with Title IX may seem obvious, the main argument against it is the additional costs of adding a program in harsh economic times. However, many institutions are finding ways to make

the dollars count. In 2004-2005, Colorado State University added women's water polo in order to meet the NCAA requirement of at least 16 varsity sports, and at least nine for women. At the time, women's water polo had a relatively low start-up cost at \$175,000. By 2013, the cost to run the team was at \$400,000 per year. In 2013, the university decided to drop the program in favor of adding a women's soccer program instead. The start-up costs for the soccer program is \$1 million for the first year and between \$500,000 to \$700,000 for each following year. The reasoning behind the decision included a lack of water polo interest in the state of Colorado, the water polo facility being located over 50 miles from campus, and Colorado State being the only one of 16 four-year colleges in Colorado that did not have a women's soccer program. While this decision was made at the expense of the women's water polo team, it was also made during tough economic times. Colorado State University showed that big-time universities are not only looking at their specific economic situations when making their decisions, but also are still willing to spend money for the good of the department overall. According to CSU athletic director Jack Graham, "We just think it's the right thing to do" (Lyell, 2013).

### **Summary**

This study intended to not only explore the different women's sports that Division-I athletic departments would be willing to add, but also whether the SWAs, athletic directors, and university presidents are on the same page as to the factors that play a role in such decisions. The ultimate goal was for institutions to be able to identify with schools in similar situations and to understand the benefits of adding women's programs versus discontinuing men's programs. It is hoped that the present study can be used to aid institutions in deciding which sport may be best for them to add in their



current situation. Whether they have existing facilities for that sport, have nearby competition, or just purely need a sport with a large roster size to increase their proportionality, this study aimed to help identify the specific factors that go into the decisions to add certain women's sports as well as discontinue sports. Additionally, this study sought to open up the lines of communication between SWAs, athletic directors, university presidents, and other administrators as to the most important factors that play a role in the decision to add certain women's sports as opposed to others.

## Chapter II

Title IX was officially implemented on June 23, 1972. Due to initial confusion around whether Title IX applied to athletics, the U.S. Department of Health, Education, and Welfare (HEW) published draft regulations for public comment in June of 1974 (Ridpath, Yiamouyiannis, Lawrence, and Galles, 2009). The published regulations confirmed that Title IX covered all public educational programs, including athletics. The National Collegiate Athletic Association (NCAA), the College Football Coaches Association (CFCA), and other men's sporting groups quickly began lobbying for the HEW to modify the regulations (Ridpath, et al., 2009). Originally, they sought to exclude Title IX from athletics altogether, arguing that sharing funds would take away opportunities for males. Once men's groups realized what they were up against, they began fighting for "revenue-producing" sports, specifically football, to be excluded from the regulations. When the HEW refused to change the regulations, the men's groups then began lobbying Congress to reject the provisions. Congress held firm, stating that since they did not write the statute to exclude athletics, football, or any other program, the new regulations could not exclude them (Ridpath, et al., 2009).

Since its passage in 1972, Title IX has withstood an incredible amount of praise, scrutiny, and criticism on its way to redefining amateur athletics in the United States. Supporters of the law point out that female participation in both high school and college athletics has increased exponentially over the past forty years. In 1972, only 294,000 girls participated in high school athletics in the United States, compared to over 2.8 million girls playing in the 2002-2003 school year. At the college level, female participants rose from just 66,000 participants to 205,492 in the 2004-2005 school year

(Kolpin, 1997; Cheslock, 2007). Unfortunately, other evidence suggests that Title IX has caused certain men's non-revenue programs to be unfairly eliminated in order to comply with the law. Challengers of Title IX argue that the law has expanded beyond its scope, and has been used as a scapegoat to eliminate sports such as men's wrestling and cross country in order to spend more money growing their football and basketball programs.

### **Social Justice and Title IX**

As discussed in Chapter I, one the major arguments for Title IX was that gender equity was the right thing to do. The language of the law had been modeled after the Civil Rights Act of 1964, and many of its supporters looked at Title IX as an extension of the Civil Rights Movement, fighting against discrimination based upon race, ethnicity, religion, and gender. Title IX supporters point out that, four decades after its passage, opportunities for female athletes, public interest, and support for women's sports have never been higher. As Deborah Brake (2001) points out, the increase in women's sports participation has come with a significant cultural change. By 1997, a report looking at 25 years of progress in Title IX showed that 87% of parents felt that sports were equally important for boys and girls (Riley & Cantu, 1997). Title IX supporters maintain that this shift in attitude illustrates how Title IX has not only been successful in creating opportunities for women, but also in adapting society's view of women's sports and the importance of gender equity in athletics.

**The role of intercollegiate athletics.** In addition to the cultural change associated with Title IX, the role of intercollegiate athletics in higher education institutions must also be addressed when analyzing the law's controversy. In the beginning, university administrators never intended for sports and recreation to be part of

their curriculum. Yet as times changed and ideas evolved, sports and recreational education became a signature way for students to relieve stress and spend their leisure time. Today, intercollegiate athletics have become an integral part of higher educational institutions, and, in theory, are designed to promote the university mission statement and the values associated with higher education. As the 2012 NCAA Manual states:

1.3.1 Basic Purpose. The competitive athletics programs of member institutions are designed to be a vital part of the educational system. A basic purpose of this Association is to maintain intercollegiate athletics as an integral part of the educational program and the athlete as an integral part of the student body and, by doing so, retain a clear line of demarcation between intercollegiate athletics and professional sports (NCAA Academic and Membership Affairs Staff, pp.1).

**Scandal in intercollegiate athletics.** Unfortunately, not everyone agrees that NCAA institutions are truly exhibiting the values set forth by their respective educational systems. In fact, some look back as early as the 19th century to point out corruption in college sports. According to Davenport (1985), even during the 1890s, sports were looked at as small business enterprises on college campuses, as administrators realized that having winning teams meant more publicity, more admissions, and more money. Wilson & Brondfield (1967) added that this was a critical time for the evolution of American intercollegiate athletics, as large universities began engaging in excessive win-at-all-cost strategies such as bringing in professional baseball pitchers to play intercollegiately and football coaches putting themselves into their own lineups.

What is obviously disturbing in these accounts is that scandals such as these haven't gone away in the past century. From the City College of New York's men's

basketball points shaving scandal in the early 1950s, to the Southern Methodist University football scandal in 1986, and most recently to the Penn State child sex abuse scandal in November of 2011, intercollegiate athletics have seemed to consistently been linked to both economic and social scandals and controversies. Fortunately for college athletics, however, the NCAA has stepped in to attempt to regulate and govern the business and experience of intercollegiate athletics. While they have been far from perfect, the lawlessness of the early days, at least, has been gone for some time. In his book *The Successful College Athletic Program*, John Gerdy reminds readers that change needs to happen within college athletics, but he also instills a sense of hope that the goal for athletic departments to consistently model the values and ethics associated with higher education institutions is somehow attainable. Gerdy notes that while the entertainment value and pride associated with a winning team shouldn't be underemphasized, athletic departments should not be about winning, making money, and providing entertainment. He challenges both educational and athletic leaders to "refocus" their efforts toward bringing back the purpose, standards of conduct, and the standard operating procedures of athletic departments to fall in line with the initiatives of academia (Gerdy, 1997). Gerdy's ideas are echoed by Bowen and Levin (2003), in that, "Colleges and universities, at the end of the day, are *academic* institutions" (pp.11). However, they go on to note that intercollegiate athletics still have a place on college campuses. "Education takes many forms, and some of the most valuable learning experiences occur outside the classroom, laboratory, and library" (p.11).

**Intercollegiate athletics and society.** All in all, the arguments for and against what intercollegiate athletics have become does little to provide insight as to why Title IX

was so important in 1972. Most would agree that the commercialization of major, revenue-generating sports such as football and basketball have overshadowed the original objectives for recreational education and competition. However, the majority of these arguments are focusing on the administrators, fans, and the money, rather than looking at the opportunities and experiences of the student-athletes. For the student-athlete, participation in college athletics offers a number of rewarding experiences and advantages. Among these experiences are the satisfaction and "fun" from practices and games, the health benefits of being active (both physically and mentally), and the chance to be on a competitive team with other like-minded individuals from varying places, opening doors for friendship and social progress. Such progress can be seen today in the data submitted from NCAA institutions for the 2010-11 academic year, which shows for the second year in a row a majority for black student-athletes in Division I football participation. Additionally, minorities and women in NCAA administrative leadership positions also increased (Brown, 2011). In addition to these advantages, being part of an intercollegiate team can be a unique learning experience. "As countless athletes have testified, by competing, one learns 'life lessons': teamwork, discipline, resilience, perseverance, how to 'play by the rules' and accept outcomes one may not like" (Bowen & Levin, 2003, pp. 243). Former Yale President Bartlett Giamatti once stated that "Athletics teaches lessons valuable to the individual by stretching the human spirit in ways that nothing else can" (Giamatti, 1981, pp. 82). As Bowen and Levin point out, these "life lessons" are difficult to quantify, thus causing some argument as to whether sports can actually "build character." A longitudinal study from 1951 to 1976 analyzing attitudes toward leadership and actual manifestations of leadership in athletes and their

classmates showed that athletes were no more likely to become CEOs of companies, to earn top salaries in professional fields such as law or medicine, or to be leaders in civic activities (Shulman & Bowen, 2001). However, more recent studies suggest otherwise. Stevenson (2010) concluded that increases in female participation in athletics lead to increases in future women's labor force participation, especially in male-dominated high-skill, high-wage occupations. Additionally, a study conducted by MassMutual Financial Group in 2002 found that four out of five executive businesswomen participated in sports growing up, with the vast majority reporting that the lessons they learned through athletics contributed to their success in business (MassMutual Financial Group, 2002).

In looking at the unique opportunities and experiences associated with college sports and student-athletes, the reasoning behind the strong push for gender equity and Title IX becomes more and more evident. By 1972, women sports had evolved from merely physical education classes to highly-competitive intercollegiate athletics, and it was only fair to allow females the same opportunities to succeed and learn the same "life lessons" through sport as the males. In the end, while Title IX didn't originally intend to involve athletics, when people began to question whether or not the law would include athletics, the answer was a firm, "Yes, because it's the right thing to do."

### **Controversy Over Title IX in Intercollegiate Athletics**

One common misconception within the debate over Title IX is that the influx of opportunities for females has cost opportunities for males to participate. A recent study by Cheslock (2008) analyzed NCAA participation rates from 1995-2005. The study found that both male and female opportunities increased over the ten-year span, with male opportunities increasing 6% and female opportunities increasing 20% (Cheslock,

2008). Opponents of Title IX, however, argue that while the overall participation numbers for males may be increasing, the opportunities for males playing certain sports are being unfairly eliminated. Title IX reformists maintain that Title IX's regulations and interpretations promote the use of quotas, which has caused athletic departments to drop non-revenue producing sports for men such as men's swimming, wrestling, and track and field. Gavora (2002) points to the example at Miami University of Ohio in 1998, where the school cut men's wrestling, soccer, and tennis, citing a budget deficit and pressure to achieve gender equity. While no females had complained of discrimination or unequal treatment, and the three men's programs only accounted for 4.7% of the athletic department's \$10.5 million budget, by cutting the three programs and the 27 scholarships, the university was able to balance their proportionality numbers. While many men's non-revenue programs have been eliminated in the recent past, men's wrestling programs have seen the most cuts, losing 171 teams from 1981-2001 (Hatlevig, 2005). In addition, fifty-five men's NCAA Division I gymnastics teams were discontinued in a similar time span (Ridpath, 2007).

### **Title IX Compliance**

Since its implementation forty years ago, Title IX's regulations and interpretations have never stopped being challenged. In 1974, Congress passed the Javits Amendment, which allowed the Office of Civil Rights (OCR) the authority to draft new regulations aimed at the athletics portion of the law (Hatlevig, 2005). These drafts developed into a provision of the amendment with three important regulations. First, "no person should be denied the opportunity to participate in athletics" based on his or her sex. Secondly, "separate sex-based teams are permissible if team membership is based



on competitive skill or for contact sports." And lastly, the OCR listed ten criteria that it would review when determining whether an institution was providing equal opportunity for men and women (Hatlevig, 2005). The ten factors were:

1. Whether the selection of sports and levels of competition effectively accommodate the interests and abilities of members of both sexes.
2. The provision and maintenance of equipment and supplies
3. Scheduling of game and practice time
4. Travel and per diem allowance
5. Opportunity to receive coaching and academic tutoring
6. Assignment and compensation of coaches and tutors
7. Provision of locker rooms, practice and competitive facilities
8. Provision of medical and training facilities and services
9. Provision of housing and dining facilities and services
10. Publicity

While the OCR hoped that this new set of rules and regulations would provide more explicit interpretations of the law's application, it actually seemed to bring about more questions and complaints from institutions (Hatlevig, 2005; Klinker, 2003). By 1977, the HEW had received approximately 100 complaints about discrimination by more than fifty institutions. As a result, the HEW implemented their 1979 Policy

Interpretation, which went into even further detail in order to help colleges and universities in complying with Title IX (Hatlevig, 2005; Klinker, 2003).

**Three-prong test for compliance.** Included in the HEW's 1979 Policy Interpretation were the three program components for intercollegiate athletics under Title IX: (a) athletic financial assistance, (b) equivalence in other athletic benefits and opportunities, (c) and effective accommodation of student interests and abilities (HEW, 1979). Listed within these program components were three specific ways in which Title IX compliance could be achieved. This has become known as the "Three-Prong Test for Compliance." The Policy Interpretation states that an institution can demonstrate compliance by meeting any one of the three prongs. The three prongs are:

1. Whether intercollegiate level participation opportunities for male and female students are provided in numbers substantially proportionate to their respective enrollments; or
2. Where the members of one sex have been and are underrepresented among intercollegiate athletes, whether the institution can show a history and continuing practice of program expansion which is demonstrably responsive to the developing interest and abilities of the members of that sex; or
3. Where the members of one sex are underrepresented among intercollegiate athletes, cited above, whether it can be demonstrated that the interests and abilities of the members of that sex have been fully and effectively accommodated by the present program (HEW, 1979).

As a result of the three-prong test, intercollegiate athletic directors are forced to make the decision as to which prong(s) they wish to fulfill. The majority of athletic departments choose to fulfill the proportionality prong (Randall, 2003). In order to fulfill the proportionality prong, institutions must allocate their scholarships and resources according to the proportional enrollment of the student body. Therefore, rather than splitting resources and opportunities equally for each gender, if an institution's enrollment is made up of 60% females and 40% males, in order to be considered compliant with the first prong, athletic departments must allocate 60% of their opportunities to women's programs. According to Randall (2003), the vagueness of the other two prongs' explanations forced athletic directors to look at the proportionality prong as a type of "safe haven." Since the proportionality prong deals with tangible numbers, it is much easier to control the distribution of athletic scholarships than it is to attempt to show a history of women's program expansion or that the interests and abilities of female student-athletes have been fully accommodated (Randall, 2003).

While opponents of the proportionality aspect of Title IX contend that the prong supports the use of quotas and discriminates against male opportunities, data found by Sabo (1998) shows that from 1976 to 1996 the increase in women's programs did not contribute to a significant decrease in men's programs across all NCAA divisions. For the two largest divisions (Divisions I-A and I-AA), however, there was a significant decrease in men's programs. Yet, Sabo contends that this is most likely due to overspending on certain programs, such as football, which accounted for 63% of total increases in expenditures in Division I-A and I-AA schools from 1992 to 1997. Consequently, despite the popular contention that the proportionality prong has caused

increases in women's sports and decreases in opportunities for men, there was no significant relationship in Sabo's study (Sabo, 1998). Therefore, the data from Sabo's study, the vagueness that Randall mentions about the second and third prongs, and the fact that the proportionality prong is the "easiest, quickest, cheapest, legally foolproof" way of complying with Title IX, the majority of NCAA institutions choose to "live and die" by the substantial proportionality prong (Randall, 2003; Hatlevig, 2005).

Still, while the proportionality prong may seem to be the most convenient option, actually complying with it is much easier said than done. Research by Sigelman & Wahlbeck (1999) shows that the majority of Division I schools, especially those with football programs, are nowhere near compliance when looking at substantial proportionality. Division I Football Subdivision teams are allowed 85 student-athletes on full scholarships, and Football Championship Subdivision teams are allowed 63 scholarship to be divided up amongst their roster as they see fit (Football Recruiting, 2011). The closest number of scholarships available for females is women's rowing, which offers 20 scholarships, followed by cross country/track & field and ice hockey, which each allow 18 scholarships (Richter, 2009). The discrepancy between football and the largest women's scholarship allotment makes it extremely difficult for athletic departments to achieve proportionality. Ultimately, this results in athletic departments having to decide whether to expand opportunities for females or cutback opportunities for males in order to reach proportionality. What makes this decision even more difficult is the fact that athletic departments cannot base their decisions solely on their proportionality numbers. While it is an important issue, schools must also factor in start-up costs, existing facilities, and logistics, among other things, that may not necessarily

line up with their goals for proportionality. All in all, these different factors contribute to make the difficult decision as to which sports an athletic department decides to add or eliminate in order to achieve Title IX compliance.

**Alternatives to the proportionality prong.** Some experts, however, believe that there are alternative ways to show compliance by avoiding the proportionality prong. While Klinker (2003) argues that the three-prong test is “not only impractical, but limited,” and that the substantial proportionality prong is the only one that has been proven useful, he also argues that, using statistics, a case could be made for showing compliance with the third prong, dealing with full and effective accommodations for the interest and abilities of the student-athletes. Klinker explains that in *Cohen v. Brown University*, the university provided evidence stating that eight times as many male students participated in its intramural programs, and that 75,000 more men participated in intercollegiate athletics than women. Therefore, Klinker (2003) arrives at the conclusion that, at that particular university, men are more interested in sports (both intramural and intercollegiate), and the uneven interests in athletics between the two sexes should be accommodated accordingly.

If universities assessed the interests of the students, the plaintiff claims, they would be effectively putting the money into programs that would yield the most benefit for the students. It makes little, if any, sense to eliminate programs in which males show strong interest, while preserving female athletic teams in which few express interest (Klinker, 2003, pp. 88).

Gavora (2001) would agree with Klinker's argument, as she also argues that there are more men interested in sports than women. According to Gavora, the substantial proportionality prong is causing athletic directors to cut men's athletic programs in order to become more "proportional" when in reality the interest in intercollegiate sports is not a 50% split between males and females. In addition to the data provided by Brown University, a similar study was conducted at James Madison University (JMU) in 2000 to measure student interest in athletics, fitness, and sports activities. The survey was developed by the NCAA in 1992, adapted in 1995, and was modified for students to be able to complete it online by JMU (National Collegiate Athletic Association, 1995; Office of Institutional Research, 2000). The survey found that 94% of males reported being extremely or somewhat interested in athletics, fitness, and sports activities, while only 81% of females reported such interests. In addition, the survey found that 94% of males reported being extremely or somewhat interested in participating in athletics, fitness, or sports activities, while females reported just 83% interest in participating. Overall, the study found that "male students report interest in athletics, fitness, and sports significantly more often than do female students" (Office of Institutional Research, 2000, pp. 29).

### **Program Expansion and Elimination**

In 2001, as required by Congress, the General Accounting Office (GAO) conducted a study analyzing different universities' experiences in both adding and discontinuing athletic programs (Bellis & Pfeiffer, 2001). The study evaluated the athletic teams of 1,191 four-year universities in the United States. Of these schools, 948

institutions added one or more women's teams, and 72% of those did so without eliminating any men's teams. The study also found that nearly three times as many women's teams were added as men's teams and nearly twice as many men's programs were eliminated than women's programs. According to the study, the most popular reason for discontinuation of both men's and women's programs was insufficient student interest. The other two reasons for discontinuing men's programs are linked back to gender equity goals and requirements, as well as the resources needed for sports (Hatlevig, 2005). Conversely, Ridpath et al. (2009) argue that the true reasons behind the elimination of certain men's programs stem from competitive advantages in revenue-producing sports and the financial gains that coincide with them.

The driving force behind the loss of many men's sport programs over the past 20 years has been a shift in institutional priorities related to achieving excellence in football and basketball coupled with economic factors involving the arms race, not the drive for equality (Ridpath et al., 2009, pp. 267).

Former University of Michigan President James Duderstadt also supports the contention that the arms race in intercollegiate athletics has been one the main factors contributing to the discontinuation of programs. Duderstadt (2003) blames this on insufficient presidential leadership for allowing football and basketball programs to be commercialized and immersed in the entertainment industry, leading to the corruption of college sports. He looks back to rule changes and decisions made in the 1960s to allow football rosters to balloon to over 100 players per team. At the time, unlimited substitution was viewed as an advantage for football, as keeping players fresh and healthy

only helped to improve the product on the field. However, Duderstadt argues that tolerating such large roster sizes acted as a disservice to institutions hoping to achieve gender equity as well as other sports with much smaller roster sizes. Rather than continue to eliminate both men and women's programs, Duderstadt argues that athletic leaders should first answer the question as to "whether we should continue to accept a football paradigm with so many players, coaches, and expenses at the expense of other sports programs" (Duderstadt, 2003, p. 212).

Research by Kennedy (2007) supports the claim of the arms race in college sports by identifying some of the major spending on men's football and basketball by large universities over the past decade. In the 2003-2004 academic year, total college sports expenditures hit an all-time high at \$3.6 billion with the average spending from a Big Ten Conference program at \$26.19 million. At the time of Kennedy's research, total spending was expected to increase over the next year to well over \$4 billion. For the 2005-2006 Football Bowl Subdivision bowl games, it was estimated that sponsoring communities generated over \$1.1 billion across the 28 total bowl games. The 56 teams that participated in those bowl games received a total of approximately \$193 million. In the Big Ten Conference, seven of the eleven teams played in bowl games, yet all eleven universities split evenly the \$31.5 million made in gross revenue from the bowl games. While this research reinforces the idea of an arms race, Kennedy also asserts that athletic directors face an interesting dilemma when deciding whether to expand or eliminate programs. One of the main aspects of their job is to increase revenue, and the simplest way to do that is to keep successful football and men's basketball programs. At the same time, they must also comply with Title IX and continue to increase opportunities for



women. Therefore, as Kennedy puts it, athletic directors find themselves “between the proverbial rock and a hard place” (Kennedy, 2007, pp. 35).

**Rutgers University.** An example of the arms race in football and men’s basketball can be found in Rutgers University, which was seeing a surge of donation money with the hiring of a new football coach in 1999. Just seven years later, as the program was starting to become more competitive, the athletic department decided to drop seven sports (heavyweight crew, lightweight crew, men’s fencing, women’s fencing, swimming and diving, and tennis) in order to meet their financial bottom line as well as gender equity requirements (Rimbach & Alex, 2006). While the athletic department contended that the programs had to be dropped in order to meet Title IX regulations and save \$2 million during major in-state budget cuts, ironically they simultaneously showed increases in expenditures for football facilities and coaching salaries for a total of \$2 million (Associated Press, 2006). Former Montana State University Athletic Director Ginny Hunt noted that by “increasing expenditures for ‘big-time’ sports like football and men’s basketball, institutions are left financially strapped and are forced to cut smaller men’s programs like wrestling and swimming” (Hatlevig, 2005, pp. 102).

**James Madison University.** One institution that found itself in the midst of this controversy was James Madison University in September 2006, when it announced that the athletic department would be cutting ten sports due to Title IX regulations. According to the school, the percentage of scholarships offered to female student-athletes at JMU was 51%, and their percentage of female undergraduate students was at 61%, forcing their hand under the proportionality prong. In response to questions as to whether

the decision was actually financially based, JMU Athletics Director Jeff Bourne stated that “these 10 sports cost us about \$550,000 in a sports budget of \$21 million. There’s no way we’re going to take all this heat and cause all the negative feelings for those affected athletes over \$550,000” (James Madison, 2006, pp.12). Supporters of Title IX maintain that the school had plenty of options. In fact, there are numerous examples of other schools who have found ways to comply with Title IX without eliminating programs. Interestingly, JMU did not attempt to argue that they were in compliance with the third-prong after their 2000 survey found that their male students were significantly more interested in athletics, fitness, and sports activities than female students (Office of Institutional Research, 2000).

**Addition of women’s programs.** Contrary to popular belief, studies show that intercollegiate athletic departments today are more likely to improve gender equity by adding female athletes than eliminating male opportunities. A 2007 report from the Women's Sports Foundation found that the schools who were considered far from Title IX compliance in 1995-96 were more likely to add women's programs over the next nine years than they were drop men's programs (Cheslock, 2008). This verifies a similar study by Anderson and Cheslock (2004), which used regression analysis to examine how institutions changed their participation levels from 1995-96 to 2004-05. The results showed that a 10-point increase in a school's initial proportionality gap was associated with an increase in female participation of 15 student-athletes. For male participation, however, there was no significant relationship between the initial proportionality gap and the changes in men's participation, again suggesting that schools primarily improve their

Title IX compliance (based on substantial proportionality) by adding women's programs and female opportunities (Anderson & Cheslock, 2004).

The movement toward adding more female opportunities rather than cutting men's programs may have been influenced by the NCAA's 1993 decision to identify nine "emerging sports" for women in order to help aid universities in achieving proportionality. The Gender Equity Task Force suggested that each NCAA institution should add at least two of these emerging sports, which included synchronized swimming, handball, water polo, archery, badminton, bowling, ice hockey, squash, and later equestrian (Gavora, 2002). While not listed as one of the emerging sports, one of the most popular programs to add in recent years has been women's rowing, as it allows athletics departments to add a program with a large roster and scholarship allocation (20) that rivals some all-male sports. Large roster and scholarship allotments allow athletic departments to come closer toward achieving proportionality as well as to increase the total number of opportunities for women to compete in intercollegiate athletics.

**University of Alabama.** In the fall of 2005, the University of Alabama saw the opportunity to add a women's sport with a large roster size and announced their addition of a women's rowing team to their varsity athletic department. By choosing women's rowing, Alabama increased their overall proportionality to comply with Title IX regulations, as NCAA Division-I Women's Rowing allows for 20 full-scholarships to be divided accordingly amongst athletes. The division of scholarships allows the average women's rowing team to field between 50 and 70 female student-athletes. From 1997 to 2005, intercollegiate women's rowing added more than 30 teams at the NCAA Division I

level (University of Alabama, 2005; Bordeau, 2006). All in all, the research looking at trends in participation and sponsorship of women's programs shows that in recent years, athletic departments have chosen to respond to Title IX by "equalizing up rather than equalizing down to improve gender equity in intercollegiate athletics" (Cheslock, 2008, pp. 11).

**Other women's sports.** Like Alabama, many other schools are looking for ways to increase compliance with Title IX by adding women's programs. Many schools have begun adding relatively uncommon Olympic sports for women, such as water polo and rugby. Not only does this increase their proportionality numbers, but it also helps recruit potential Olympic hopefuls to their respective schools (Hatlevig, 2005). A 2007 study on trends in intercollegiate participation showed that from 1995-96 to 2004-05, the top three women's programs added in NCAA institutions were golf (64.7% increase), lacrosse (51% increase), and soccer (45.4% increase) (Cheslock, 2007).

Another recent trend that has caused even more controversy with Title IX has been the introduction of varsity cheerleading teams to intercollegiate and high school athletic programs. In the fall of 2003, the University of Maryland promoted cheerleading to varsity status in its athletics department and began awarding athletic scholarships. Although this created much debate about whether cheerleading was considered a "real sport," it did help the University of Maryland increase its compliance with Title IX proportionality. Despite the Office of Civil Rights (which took over regulating Title IX when the HEW was split into two groups in 1980) warning schools that drill teams and cheerleaders were not considered athletic programs, the University of

Maryland found a loophole in the rules and split their squad into a "spirit squad" that will cheer at football and basketball games, and a 22-member competitive cheer team, comprised of all females who train year round to compete against other institutions (Hatlevig, 2005).

However, in 2010, Quinnipiac University (in Connecticut) was found in violation of Title IX after they eliminated their women's volleyball team. Quinnipiac officials argued to the district court that the OCR should have counted the 30 female student-athletes on its competitive cheerleading team, which would put them in compliance through substantial proportionality. The argument eventually went to the U.S. Second Circuit Court of Appeals, which agreed with U.S. District Judge Stefan Underhill in that competitive cheerleading cannot yet be considered a varsity sport (Carroll & Wilcox, 2012; Paul & Regan, 2012). However, Underhill did not rule out the possibility of it someday being considered a varsity sport. "Competitive cheer may, sometime in the future, qualify as a sport under Title IX...Today, however, the activity is still too underdeveloped and disorganized to be treated as offering genuine varsity athletic participation opportunities for students" (Carroll & Wilcox, 2012, para. 3).

Unfortunately, as a result of this ruling and growing budget concerns, the University of Maryland, who had famously begun the push for varsity cheerleading to be considered a sport in 2003, announced that they would be eliminating their competitive cheerleading squad along with seven other teams in their athletic department. The university reportedly invested over \$4 million on competitive cheerleading over the past nine years (Clarke, 2012).

While adding women's programs seems to be a simple solution, it remains a costly alternative. Adding new sports brings new costs for facilities, coaching salaries, equipment, and other ventures that are key elements in any intercollegiate program (George, 1999). For example, in 2001, the reported start-up costs alone for women's rowing programs could rise to almost \$400,000, depending on the size of the program (Rosner, 2001). Furthermore, the annual cost ranged from \$120,000 to \$250,000, which is far more expensive than many other emerging women's sports (Rosner, 2001).

Therefore, while many universities may look to women's rowing due to the large amount of student-athletes on each team, they also must weigh the financial burdens of the sport. Other sports such as ice hockey or water polo may not provide the same participation rates as rowing, but they are far less expensive, both in start-up and annual costs.

However, Rosner (2001) suggests that while "on a per team basis, women's rowing at the intercollegiate level is not a sensible financial investment...one must look beyond these daunting numbers when looking at women's rowing and take an athletic department-wide perspective" (Rosner, 2001, pp. 298). According to Rosner, the ability of women's rowing programs to attract three to four times the number of athletes than any other women's program far outweighs the financial burdens it places on an athletic department. Still, athletic departments with little left in their budgets are forced to make a decision.

One regional Division I institution anecdotally reported that they had considered a number of new women's sports to add, including rowing, swimming, lacrosse, softball, and even equestrian. They looked at factors such as cost, facilities, weather, and community interest. They used a feasibility study to survey junior high and high school students in their area, as well as female students on campus to gauge interest among both

participants and potential spectators. To them, rowing rated high in most categories, yet ultimately the start-up costs, teamed with the costs of maintaining equipment, were too much to bear.

**Keys for successful program expansion.** Since the majority of the institutions in the GAO study reported adding teams without eliminating other teams, the GAO identified several “innovative strategies” aimed at increasing athletic revenue while adding sports rather than simply cutting costs through program discontinuation (Hatlevig, 2005). According to the study, there were four keys to facilitating successful program expansion: the school’s governing board or president must be supportive of expanding the athletic program without discontinuing sports teams, the athletic director’s philosophy must emphasize the importance of increasing participation opportunities for both males and females, the administration must be able to identify new funding sources, and the school’s athletic program must enjoy support from fans and the community. Also included in the study were factors given by athletic directors that helped increase revenue and decrease expenditures in order to avoid eliminating teams. Examples of these methods included recruiting prospective student-athletes by phone rather than in person, denying requests for some teams to be elevated to varsity status, replacing faculty members with a coach who also assumed other administrative roles, limiting the size of the football team roster, trimming administrative costs, not awarding the maximum number of scholarships allowed, and minimizing travel expenses. Another way to help balance budgets and stop the discontinuation of men’s athletic teams is to stop the excessive spending on “big-time” sports such as football and men’s basketball. Hefty recruiting budgets, large player rosters for football, and other perks such as hotel stays for

home games could easily be cut from the overall budget and reallocated throughout the different teams (Hatlevig, 2005).

The argument against some of the GAO's strategies, however, contends that the large sums of money being spent on recruiting, hotel rooms, and other lavish amenities are what bring in talented players to the football and basketball programs in order to generate revenue through ticket sales, merchandise, and media earnings. The revenue from successful football and basketball programs, therefore, helps fund both men and women's non-revenue sports. According to this argument, athletic departments *must* compete in the arms race in order to keep other programs afloat. Unfortunately, this argument only holds water for a handful of schools. As Matheson, O'Conner, and Herberger (2012) point out, the majority of Division I athletic departments operate in the red. Only 10% of football programs, and 15% of men's basketball programs produce profits. Furthermore, most departments also rely heavily on direct and indirect subsidization of their programs by the student body, the university, and the state governments in order to balance their books. Without this funding, only one-third of BCS schools (institutions from the six largest NCAA conferences: Big Ten, Big 12, Pac-12, Southeast Conference, Big East, and Atlantic Coast Conference) would show profits, and zero non-BCS schools would operate in the black. Still, athletic directors at the handful of institutions producing enough revenue to help fund its non-revenue sports may see the arms race as inevitable.

In a study focusing on the program expansion standard under Title IX, Lamber (2002) explored both the proportionality prong as well as the history of program



expansion in athletic departments. Lamber collected data from 246 NCAA universities: 89 Division I-A schools, 50 Division I-AAA schools, and 107 Division III schools. The study collected data again in 1999 with an even higher response rate totaling 329 NCAA universities: 92 Division I-A schools, 65 Division I-AAA schools, and 172 Division III schools. One thing the authors point out is that, especially with different sizes of institutions, each school has a unique situation when it comes to factors such as financial stability, proportionality, etc. Therefore, the different institutions had to be categorized based upon size and how well they complied with Title IX's regulations. While the comparisons in proportionality proved interesting, the most relevant information came in Part IV: Comments by Individual Institutions. In this portion of the study, participating athletic directors answered questions about their specific strategies for program expansion and why their school was or was not in compliance with Title IX. Among the proportionality complying schools, several mentioned adding women's teams and increasing the money to women's sports to upgrade coaches or full-fund athletic scholarships, and two compliers mentioned dropping a men's team. Answers from the "Big Non-Compliers" were very similar in that a smaller number mentioned adding women's teams and increasing their financial support for women's programs, but no schools commented on the possibility of dropping men's teams. According to the study, those schools who were listed as compliers with Title IX agreed that one effective strategy to complying with the proportionality prong of Title IX was to impress among coaches the importance of gender equity. As for explanations as to why some institutions were not in compliance with proportionality regulations, there were numerous different answers. Some athletics directors mentioned that they were "victims of their own

success," as they had three high profile men's teams that they couldn't account for in women's scholarships. One Division III school blamed having more women students than men, with more men participating in sports, especially when they were fielding a large football team. Others pointed out that some commuter schools have unique problems with proportionality because their student-athletes can never reflect their off-campus student body (Lamber, 2002).

In reviewing the literature on the history, regulations, and controversy of Title IX, there is an incredible amount of research surrounding the numerous aspects of the amendment. In analyzing its effects on intercollegiate athletics, in particular, it has been observed that much of the research and opinions in the literature focus on the decisions from some intercollegiate athletics directors to discontinue men's programs in order to reach equality and proportionality in their respective departments, resulting in public uproar and numerous lawsuits. While much of the research and data has focused on the elimination of men's programs, very little has been published about the addition of women's programs in intercollegiate athletics departments in order to reach proportionality. While the reasons for this gap in the research are unknown, the available literature can help create a basic understanding as to the different methodologies intercollegiate athletics directors use in attempting to achieve gender equality and proportionality. By doing so, the overall goal to create a model identifying the different factors that athletics directors use in deciding which women's program to add to their department becomes much clearer.

## **Summary**

All in all, the controversy surrounding Title IX compliance is made up of a variety of factors that must be taken into account when looking at decisions being made for program expansion. In observing numerous case studies, court decisions, and other examples, some of these factors include financial resources, number of scholarships, community and university involvement, etc. In addition, many separate factors come into play when deciding which of the three prongs an athletic director or department wishes to pursue. The difference in strategy for proportionality, showing a history of program expansion, or fully accommodating the interests and abilities of the student-athletes can play a huge part in deciding which women's program to add. In reviewing the literature surrounding the history of intercollegiate program expansion and elimination, it seems apparent that there is a gap in the research when it comes to identifying the specific programs that university athletic directors decide to add based upon their unique situations.

### Chapter III

The present study explored the determinants and factors associated with the addition of specific women's athletic programs in NCAA Division-I institutions. As discussed in Chapter II, much of the existing research (Gavora, 2002; Hatlevig, 2005; Randall, 2003; Ridpath, 2009; Sabo, 1998) points to Title IX pressures and financial obstacles as the main determinants for both adding women's programs as well as dropping men's programs. However, there are gaps in the research when looking at these types of factors and how they affect which specific sports programs are being added throughout the country.

Using a series of questionnaires modeled after the Delphi technique, the present study sought to reach consensus among a group of Title IX experts to identify the factors that play a role in determining whether to add or eliminate certain sports. Upon reaching this consensus, the investigators used the first two rounds of surveys to develop a third and final questionnaire in order to identify any similarities, differences, or trends among various types of administrators, sizes of schools, and specific Title IX compliance techniques. Previous research suggested that the factors playing a role in the decisions to add or eliminate sports may include, but are not limited to the aspects listed in Williamson's (1983) research, which surveyed athletic directors in search of the most influencing factors leading to the discontinuation of nonrevenue programs. The main factors listed in the study were (a) lack of student interest, (b) high cost, (c) lack of recruitable prospects, and (d) lack of spectator appeal. A 1995 follow-up study by Gray and Pelzer aimed to find whether or not the factors in Williamson's research were still prevalent 12 years later. Their research found that while there were some similarities in a

few of the main factors, some new reasons for eliminating sports also surfaced. Overall, the most significant factors for discontinuing sports in 1995 were:

1. Conference alignment
2. Shifting resources
3. Inconvenient travel
4. Cost
5. Lack of spectators
6. Lack of student interest

The present study, however, intended to identify the factors that go into the decision-making process for adding women's sports programs in order to comply with Title IX rather than eliminating non-revenue programs. While the questionnaires in the present study did ask about eliminating programs, the main focus of the study was the addition of women's sports as an alternative to discontinuing their department's existing programs.

### **Subjects**

The subjects in this study were Senior Women's Administrators (SWAs), athletic directors, and university presidents in NCAA Division I athletic departments.

**Senior Woman Administrators.** The Senior Woman Administrator (SWA), originally named the Primary Woman Administrator (PWA), is a position within all NCAA Division-I athletic departments whose role is designed to "return to women a

voice in the operations of intercollegiate athletic departments that was lost as a result of the takeover of the AIAW by the NCAA” (L.M. Hatfield, Hatfield, & Drummond, 2009, para. 1). Plainly, the role of the SWA is designated to be the highest-ranking woman in athletic administration among NCAA institutions, and to oversee the women's athletic programs (Hoffman, 2010). According to a study administered to all Division I SWAs in 2009, the primary job functions of SWAs were to advocate for women’s athletics, to work for gender equity, and to serve as a role model (L.M. Hatfield et al., 2009).

**Athletic directors.** The athletic director is the highest position within an athletic department, whose job functions range from budgeting, hiring, and public relations, as well as overseeing the department's compliance with legislative regulations, such as gender equity issues (Copeland & Kirsch, 1995).

**University presidents.** The role of the university president is to oversee each of the major elements of university life, including the athletic program (Knight Foundation of Intercollegiate Athletics, 1991). Over the past few decades, higher education has made a point to "reform" intercollegiate athletics by pushing toward more presidential control within the athletic department. According to Seidler, Gerdy, and Cardinal (1998), higher education leaders are not only paying particular attention to the need for increased presidential involvement in athletics, but also in creating a "structure to permit presidents to exert such control more effectively" (p. 37). Furthermore, the Knight Commission of Intercollegiate Athletics (1991) stated that "The burden of leadership falls on [university presidents] for the conduct of the institution, whether in the classroom or on the playing field. The president cannot be a figurehead whose leadership applies elsewhere in the university but not in the athletics department" (p.12).

**Reasons for choosing subjects.** The subjects of this study were chosen for a number of specific reasons. First, SWAs were chosen due to their role as advocate for women's athletics and equity. Based upon their experience and daily role in these fields, SWAs are presumed to be the administrators who are most familiar with Title IX legislation in their respective athletic departments. While much of the existing research surrounding Title IX tends to survey athletic directors and coaches, SWAs are responsible for gender equity issues on a daily basis. Additionally, SWAs may tend to see things differently than athletic directors or university presidents, who, at the Division I level, may be caught up in the “arms race” of big-time college athletics or other university issues rather than the interests or community involvement of their student-athletes. On the other hand, athletic directors and university presidents are figureheads of the athletic department and university, respectively. As a result, they are often responsible for the budgetary decisions made in athletic departments, including the decision to add or eliminate athletic programs.

**Response rate.** Another factor that came into play when deciding which type of athletic administrators to survey was response rate. Since SWAs are trained to deal with Title IX and gender equity issues, it was assumed that they would be most likely to respond with great interest in this study. In order to both discover truth and increase participation in this study, it was important for the subjects to be genuinely excited about and interested in the research. A 2008 study conducted by Grappendorf, Pent, Burton, and Henderson surveying SWA's perceptions regarding financial decisions within their respective athletic departments received a 40.8% response rate. Additionally, L.M. Hatfield et al. (2009) explored the role of the SWA as it exists today, and received a 46%

usable response rate. Therefore, based upon the previous research in the field, it was determined that since SWAs are trained to deal with Title IX and gender equity issues, they would be most likely to respond with great interest in and excitement for the present topic. In looking over these factors, along with the job responsibilities of SWAs, it was decided that SWAs could be considered “experts” in Title IX and gender equity problems.

While athletic directors and university presidents may not be as well-versed in gender equity legislation as SWAs, the present study expected them to be intrigued by the economic side of the decision of adding women's athletic programs. This study can be used to compare their athletic departments to other schools facing similar economic, geographic, or legislative situations. In 1998, a study by Seidler, Gerdy, and Cardinal explored how university presidents' increased involvement in intercollegiate athletics affected the role of the athletic director. The study sampled 180 NCAA Division-I athletic directors and 180 university presidents. The overall response rate was 69.5%, which, according to Babbie (1990), is generally considered very good among social and behavioral scientists.

### **Instruments/Apparatus**

**The Delphi Method.** The present study used the Delphi technique as a formalized method of creating a final survey to compare attitudes of SWAs, athletic directors, and university presidents concerning the addition and elimination of certain sports. Thus, the study used two rounds of the Delphi technique to establish a consensus among SWAs in order to create a third and final, quantitative survey that enabled a



variety of statistical analyses to compare the attitudes of SWAs, athletic directors, and university presidents.

According to Rowe and Wright (1999), the classical Delphi method is characterized by four key features:

1. Anonymity of Delphi participants: allows the participants to freely express their opinions without undue social pressures to conform from others in the group. Decisions are evaluated on their merit, rather than who has proposed the idea.
2. Iteration: allows the participants to refine their views in light of the progress of the group's work from round to round.
3. Controlled feedback: informs the participants of the other participant's perspectives, and provides the opportunity for Delphi participants to clarify or change their views.
4. Statistical aggregation of group response: allows for a quantitative analysis and interpretation of data.

Although Rowe and Wright argue that in order for a study to be considered a true Delphi method, it must contain all four of these characteristics, others contend that the Delphi method comes in many different forms, making it very difficult to define. Overall, the method is perhaps best described in a more broad sense, as "a method for structuring a group communication process so the process is effective in allowing a group of individuals, as whole, to deal with a complex problem" (Lindstone & Turoff, 1979, p. 3). In simpler terms, Thomas, Nelson, and Silverman (2005), define the method as a "survey technique that uses a series of questionnaires in such a way that the respondents (usually experts) reach a consensus about the subject" (p. 280). At any rate, in most

cases, including the present study, the Delphi method utilizes a series of questionnaires to survey the opinions of a group of experts on a certain topic. However, it possesses a distinct difference from other group interactions, such as focus groups, which can often provoke groupthink, confusion, or arguing amongst a group of learned individuals. According to Helmer (1967), the method "in its simplest form, eliminates committee activity among experts altogether, and replaces it with a carefully designed program of sequential individual interrogations...interspersed with information and feedback" (p. 7). All in all, this method of gathering qualitative information will allow investigators to create a relevant, quantifiable survey instrument in order to compare attitudes of SWAs, athletic directors, and university presidents.

The history of the Delphi concept can be traced back to the early 1950's, when an Air-Force-sponsored RAND Corporation study attempted "to obtain the most reliable consensus of opinion of a group of experts...by a series of intensive questionnaires interspersed with controlled opinion feedback" (Dalkey & Helmer, 1963, pp. 458). Throughout the years, the method has been used extensively in a number of different fields. Its rise in popularity since the 1950's is often attributed to the fact that there is an ever-growing need for better communication among people from different backgrounds, which is common in military and defense research, education, and various medical fields (Lindstone & Turoff, 1979).

The first step in the procedure for the Delphi method includes the selection of a panel of experts in the selected field. Each stage of the technique is referred to as a "round." In the first round, the panel of experts are asked for their opinions, goals, or experiences relating to a certain issue. After each respondent has finished the first round,

the questionnaire is then revised based upon the different answers from the first round. The second round, then, is sent to the respondents, allowing them to reconsider their original answers in light of the overall analysis of all respondents' answers to the first questionnaire. Subsequent rounds are then carried out, each time summarizing the previous results and allowing respondents to again revise their answers. Eventually, consensus among experts is achieved through this series of rounds (Thomas, Nelson, & Silverman, 2005).

**Differences from the Delphi Method.** This study incorporated a two-round Delphi method, which was sent electronically to ten Division-I SWAs. A third and final round of questionnaires, which did not follow the Delphi protocols, was subsequently sent to a larger, stratified sample of SWAs, athletic directors and university presidents in order to compare their opinions on the programs they would hypothetically add or eliminate, as well as the factors that would play a role in those decisions. The number of rounds of questionnaires for this study was selected based on the observations listed in the Gordon-Helmer landmark Rand study of 1964, which listed observations from their experience using the Delphi method. The researchers observed that a point of diminishing returns is reached after a few rounds, as more rounds yielded very little change. The researchers found that, most commonly, three rounds proved to be sufficient in order to attain stability in the respondents' answers (Gordon & Helmer, 1964; Lindstone & Turoff, 1979). In the present study, the third round's questionnaire was set-up like a true Delphi technique, as the questions were formulated from the first two rounds. However, it ultimately strayed from the Delphi method as it sought to compare

attitudes among SWAs, athletic directors, and university presidents rather than to generate a consensus among the SWAs.

The first questionnaire was made using Google Docs, a free online survey generator, which allowed for an easy, convenient way to provide qualitative answers. The second and third rounds of questionnaires were made using Survey Monkey, another online survey generator, which investigators found to be simpler in terms of analyzing Likert scales and quantitative data. The questionnaires were sent to each administrator's work email, as found on their athletic department or university website. Each subject was assured in their email that the questionnaire would take no more than 10 to 15 minutes to complete. By submitting their answers, the data was sent back to researchers and entered in a datasheet to analyze the answers and scrub the data in order to begin developing the next round of questions. The first two rounds of the questionnaire were sent out to a small sample of 10 SWAs. After obtaining the 10 initial surveys, the principal investigator worked with his research committee members in categorizing the numerous observations into a set of statements that best represented consensus amongst the group, leading to the establishment of credibility based upon the consensus among experts in the field.

The validity of this instrument is best categorized as logical validity, or face validity. Logical validity is defined as the "degree to which a measure obviously involves the performance being measured" (Thomas, Nelson, & Silverman, 2005, p. 193). The questions in the survey were straightforward, asking subjects to simply list factors. Once data was collected from Round I, the data was assembled and analyzed in order to draw conclusions and similarities from the surveys in order to formulate questions for

Round II. After Round II, data was analyzed to find a general consensus among SWAs and to create the final round of questionnaires, which was then sent out to a new, larger sample of SWAs, as well as athletic directors and university presidents. Therefore, criterion validity increased as researchers formulated more questions based on the answers of experts (SWAs) in the field. The present study also offered reliability in that it could be easily replicated by others. University and athletic administrator emails and information are readily available on the internet, and the study's survey methods are both free and easy to use.

### **Procedures**

**Round I.** Round I consisted of seven questions asking each subject to list which programs they would want to add or discontinue in the next five to ten years. It also asked what specific factors would go into such a decision. Respondents had the opportunity to list three to five answers for each question, a strategic effort by the investigators to widen the overall range of answers. Existing research on the Delphi method states that the first round is often used to brainstorm (Schmidt, 1997). By allowing multiple answers for each question, the intent was to increase the total amount of answers to be highlighted for Round II. The purpose of Round I was to create a list of observations and statements for Round II that best represent the themes listed in respondent's Round I answers. The last question asked if their athletic program is currently Title IX compliant, and which prong(s) they subscribe to. This question was strategically placed last in order to attempt to control any bias that may be formed throughout the survey. While subjects did have the control to go back and change answers, it was believed that listing the compliance question last would help control for

biases as respondents would be unaware it was a Title IX study until the end of the survey. Demographic information was not asked in Round I or Round II. Since athletic directors and university presidents were surveyed in the first two rounds, all demographic information was withheld until Round III, which enabled the data to be statistically analyzed. A pilot study for Round I was conducted among colleagues in May of 2012 to identify and eliminate any misunderstandings. Changes and adaptations were made as necessary.

**Round II.** According to Schmidt (1997), if the object of Round I is to create a list, then the object for Round II is to pare down the list. For the present study, the various factors and observations that SWAs listed in Round I were all kept for Round II. The statements that were similar to each other were combined in order to avoid redundancy. These statements were then out with a 5-point Likert Scale allowing subjects to answer how likely they would be to add or drop each sport (as derived from Round I) or how important each factor was in the decision making process to add or eliminate those sports. The Likert scale ranged from Not Important (1) to Very Important (5). Once this data was submitted and returned electronically, researchers began developing Round III. Originally, data from Round II was to be analyzed so that only statements with Likert scale means greater than or equal to three would be used. However, only one of the sports to add (Softball), and none of the sports to eliminate, ended up yielding means greater than three. As a result, the decision was made to pass all of the sports into Round III. In contrast, only one of the factors (Weather Challenges), rated on importance, yielded a mean less than three. The decision was made to drop "Weather Challenges" from Round III and keep the rest of the factors.

In looking at sample sizes, Skulmoski, Hartman, & Krahn (2007) analyzed a number of Delphi studies and concluded that there is a wide-range of possibilities for constructing and using the Delphi method. When it comes to the number of participants used as experts, they evaluated studies ranging from 4 to 171 participants, and therefore stated that there are "no hard and fast rules" (p. 10). However, they did point out that there are some factors to be considered when choosing a sample size, such as whether it is a heterogeneous or homogeneous sample, the manageability of the sample, and whether the researchers are searching for internal or external verification. The present study includes a relatively small, homogeneous sample size and is therefore manageable for qualitative coding and a simple Likert scale.

**Round III.** The last round of questionnaires was sent electronically to 136 Division-I Senior Woman Administrators (N=246), 136 Division-I athletic directors (N=246) and 136 Division-I university presidents (N=246) throughout the country. Random, stratified sampling was used for this round, using the operationally defined four revenue classes (High Revenue, Above Average Revenue, Below Average Revenue, and Low Revenue). Therefore, 34 SWAs, 34 athletic directors, and 34 university presidents from each of the four revenue classes were sent questionnaires. Demographic information was obtained from Survey Monkey, the online survey generator, which provided the email address of each respondent. Upon data entry, each respondent was given an identification number. All information is confidential and identities will never be released.

The sample size was selected based upon the procedures outlined by Wang, Fitzhugh, and Westerfield (1995). A study conducted by Seidler, Gerdy, and Cardinal

(1998) comparing Division I athletic director and university presidents' perceptions on the authority of athletic directors in Division I institutions used very similar procedures, and decided to oversample their population by 25% to account for non-respondents. According to Wang, Fitzhugh, and Westerfield's sampling formulas, the present study would need a sample size of 64 participants per group in order to obtain a representative sample (95% confidence level). By using Seidler, Gerdy, and Cardinal's (1998) methods of oversampling to account for non-respondents, the present study arrives at 80 participants per group. Originally, Round III was sent to 80 participants in each group (SWAs, athletic directors, and university presidents). However, due to a very slow response rate over the first two weeks of data collection, the sample size was increased to 136 participants in each of the three groups. A desired return rate for Round III was 50%, as based on the a priori assumptions of the Seidler, Gerdy, and Cardinal (1998) study. Unfortunately, however, the response rate remained low for the duration of the study.

### **Design/Analysis**

The statistical analyses used in this study varied for each round, as the present study used three different methods of collecting data. In Round I, subjects were asked to list their answers and give specific reasons for their answers. In Round II, subjects used a Likert scale to identify the most important factors that go into certain decisions. Similarly, Round III surveyed SWAs, athletic directors, and university presidents on the most important factors that go into the decisions to add or discontinue certain sports. Additionally, by categorizing each institution into one of four categories based upon total accrued revenue, as well as which Title IX prong(s) they were in compliance with, data



could be compared among groups rather than strictly between individual institutions. One of the interesting issues associated with using the Delphi method as a tool to create a quantifiable survey was that researchers were unable to identify the dependent variables until data has been collected from Round I. The initial data analysis revealed which sports athletic departments would be interested in adding and eliminating, as well as which factors play a role in those decisions to add or discontinue programs. These programs and factors eventually became the dependent variables of the study.

Round I responses were analyzed using qualitative methodologies. The researcher worked with the research committee members to identify any trends and the meanings within unclear statements. Round II examined descriptive statistics such as frequencies and averages based on the Likert scale scores in order to create Round III. Round III analyzed the data using SPSS Statistics 20.0 and STATA 12, two statistical programs capable of running a variety of analyses.

**Ordered logistic regression.** As defined by Field (2000), logistic regression "is multiple regression but with an outcome variable that is a categorical dichotomy and predictor variables that are continuous and categorical" (pp. 163). In other words, it allows for certain variables to predict which categories a respondent belongs to based upon certain information. Thus, an ordered logistic regression views the Likert scales uses in the questionnaires as ordinal categories, where the distance from each category (not likely, unlikely, neutral, likely, very likely) is assumed to be the same. Ultimately, the "ordered logit" model, as it is often referred to, estimates the cumulative probability of being in one category versus all lower or higher categories. In this study, the ordered

logit model is used to predict whether administrators would be more or less likely to add or eliminate each sport based on their ratings of the different predictor variables.

**Bivariate correlations.** Bivariate correlations were run to showcase any significant correlations between the sports to add or eliminate and the factors associated with those decisions.

**One-Way Analysis of Variance (ANOVA).** To determine how varying levels of attitudes reflecting the different sports and factors associated with addition and elimination of programs varied among the administrators, a series of one-way ANOVAs were run. The ANOVAs were performed to determine if there were significant differences in the overall means of each variable among the different groups. Separate sets of ANOVAs were run to compare the different levels of administrators, the revenue classes, and the Title IX compliance strategies.

### **Summary**

This study was conducted from approximately February 2013 to June 2013. Due to a considerably slow response rate, a number of weekly reminder emails were sent out to each of the respondents who had not yet replied. While the response rate remains low, the present study has, hopefully, opened up some lines of communication and provided an avenue for further research into the most important factors that go into adding a women's sport in NCAA Division-I athletic departments; how departments are using their specific situations to best comply with Title IX; and any similarities or differences in attitudes of SWAs, athletic directors, and university presidents when it comes to making these decisions. Ultimately, the findings are available for institutions to identify

with their specific situation and see how their plans to comply with Title IX and to increase women's opportunities in athletics compare with other institutions facing similar situations. Additionally, the findings begin to illustrate the similarities and differences in the way certain administrators feel about the possibility of adding certain women's sports, and demonstrates any disconnect in the way of thinking among these administrators.

Chapter Four will begin the Results section, which will analyze the findings of the study and display the statistical measures and assessments.

## Chapter IV

This chapter will provide a summary of the results of the statistical analysis described in the previous chapter. This chapter is separated into three main sections: (a) Round I, (b) Round II, and (c) Round III. The first section will describe the results of the first round of questionnaires, which was mostly qualitative and open-ended answers that helped form the second questionnaire. The second section will focus on the descriptive statistics and results of the questionnaire in Round II, which ultimately helped define and shape the third and final questionnaire. The third section will detail the results from the final questionnaire, which is explored through a variety of statistical analyses, including an ordered Logistic regression, bivariate correlations, and multiple one-way analyses of variances (ANOVAs).

### Round I

Round I's qualitative, open-ended questions yielded the following results for women's sports that institutions would hypothetically add over the next five to ten years if possible: (a) Rugby, (b) Softball, (c) Rowing/Crew, (d) Swimming, (e) Bowling, (f) Skiing, (g) Lacrosse, (h) Triathlon, (i) Sand Volleyball, and (j) Handball.

Respondents then listed the following factors that would go into the decision making process for adding such sports: (a) State & Regional Competition, (b) Participation & Scholarship Numbers, (c) Popularity of the Sport in the Community/Region, (d) High School Participation Rates, (e) Popularity and Interest on Campus, and (f) Budgetary Consideration. Next, participants listed the following sports that their institutions would hypothetically be willing to eliminate in the next five to ten

years: (a) Men's Track & Field, (b) Men's Soccer, (c) Women's Golf, (d) Men's Cross Country, (e) Women's Gymnastics, (f) Women's Tennis (g) Men's Golf (h) Men's Tennis, (i) Women's Cross Country, (j) Women's Track & Field, and (k) Men's Gymnastics.

Finally, respondents listed the following factors that would go into the decision making process for eliminating those sports: (a) Amount of Programs Competing in the Sport, (b) Budget Constraints, (c) Danger of Injury to Student-Athletes, (d) Facility Challenges, (e) Programs that are not in their Primary Conference, (f) Programs that are not on the Protected List of the Conference, (g) Programs that do not impact their Title IX Compliance (h) Recruiting Challenges, and (i) Weather Challenges.

## **Round II**

Round II's questionnaire used the lists from Round I in order to pare down the list to a more manageable number of sports and factors. Based upon the descriptive statistics and frequencies that were collected, however, only "Weather Challenges" was taken off of the list. All of the other sports and factors were kept for Round III.

## **Round III**

**Ordered Logistic regressions for the addition of women's sports.** An ordered logistic regression was run for each of the women's sports that administrators rated on their hypothetical likeliness to add over the next five to ten years (see Table A1, Table A2, and Table A3). This model is commonly used in social sciences for describing human behavior, as it allows investigators to not only observe the relationship among variables, but also calculate the relative probability of the effect of certain variables. Unlike the other statistical analyses in this study, this model interprets the likert scale as

an "ordered" scale. In this interpretation of the data, the scales used to score the dependent variables are assumed to have equal distances between numerical values. Therefore, the distance from "Not Likely" to "Unlikely" is equal to the distance from "Likely" to "Very Likely." The use of odds ratios then show the relative likelihood of one dependent variables relationship with another.

**Rugby.** The data showed that administrators in the Above Average Revenue classification were significantly less likely to add Rugby compared to High Revenue (Odds Ratio=.0026,  $p=0.002$ ). Additionally, administrators who rated State & Regional Competition as important or very important were four times more likely to add Rugby than those who did not rate State & Regional Competition as an important factor. Likewise, administrators in schools subscribing to Prong 2 were 25 times more likely to add Rugby than administrators in institutions subscribing to the other two prongs. The Pseudo R-squared of .3584 suggests that approximately 35.84% of the variation in the scores for the likeliness of adding rugby are explained by this set of independent variables and factors.

**Softball.** No significant data was found through the ordered logistic regression analysis for adding women's softball.

**Crew/Rowing.** No significant data was found through the ordered logistic regression analysis for adding women's crew/rowing. However, administrators rating Participation & Scholarship Numbers as important factors were nearly significantly (Odds Ratio=.0181,  $p=0.051$ ) less likely to add crew/rowing than administrators who did not rate it as important. Administrators who rated Budget Constraints as important were

also nearly significantly (Odds Ratio=.0798,  $p=0.053$ ) less likely to add crew/rowing than administrators who did not rate it as important. Although no factors proved to be significant, the Pseudo R-squared of 0.4211 suggests that 42% of the variation in the various scores for the likeliness of adding crew/rowing are explained by the set of independent variables and factors.

**Swimming.** The ordered regression analysis for the attitudes toward adding women's swimming show a number of statistically significant factors. The first significant factor is in the Popularity of the Sport in the Community & Region scores (Odds Ratio=17072.27,  $p=0.025$ ), in which those rating it as important were more likely to add swimming. Along the same lines, those rating High School Participation (Odds Ratio=6.937,  $p=0.049$ ) and Budget Constraints (Odds Ratio= $8.06 \times 10^8$ ,  $p=0.021$ ) were significantly more likely to add swimming than those who did not rate them as important. As for the Title IX prongs, those administrators whose institutions subscribed to Prong 3 were significantly (Odds Ratio= $5.95 \times 10^8$ ,  $p=0.023$ ) more likely to add swimming than administrators of institutions meeting the qualifications of the other two prongs. The last significant data was found between administrators in the Below Average Revenue classification, who were significantly (Odds Ratio= $9.59 \times 10^6$ ,  $p=0.020$ ) more likely to add swimming than those in the High Revenue classification. Overall, the Pseudo R-squared of 0.5628 suggests that approximately 56.28% of the variation in the scores on the likeliness of adding swimming is explained by this set of independent variables and factors.

**Bowling.** Significant results for adding women's bowling were found in administrators in schools complying with Title IX through Prong 2, which were

significantly (Odds Ratio=47.398,  $p=0.043$ ) more likely to add bowling than schools who subscribed to Prongs 1 or 3. Likewise, administrators who ranked Prong 2 (Odds Ratio=338.824,  $p=0.031$ ) and Prong 3 (Odds Ratio=0.019,  $p=0.019$ ) as the most important prongs were significantly more likely to add bowling than that of administrators who believed Prong 1 was the most important prong. Lastly, the Above Average Revenue classification was significantly less likely (Odds Ratio=0.002,  $p=0.003$ ) to add bowling than the High Revenue classification, while the Low Revenue classification was significantly more likely (Odds Ratio=47.713,  $p=0.028$ ) to add bowling than the High Revenue classification. The Pseudo R-squared of 0.3845 shows that approximately 38.45% of the variation in the bowling scores can be explained by this set of independent variables and factors.

***Skiing.*** No significant data was found through the ordered logistic regression analysis for adding women's skiing.

***Lacrosse.*** For administrators interested in adding women's lacrosse, those in institutions subscribing to Prong 1 were shown to be significantly (Odds Ratio=0.029,  $p=0.015$ ) less likely to add the sport than administrators in Prong 2. Administrators subscribing to Prong 2 were significantly more likely (Odds Ratio=17.626,  $p=0.028$ ) to add lacrosse than those in both Prong 2 and Prong 3. The Pseudo R-squared of 0.2989 shows that approximately 29.89% of the variation in the lacrosse scores can be explained by this set of independent variables and factors.

***Triathlon.*** Significant results for adding women's triathlon were found in administrators in institutions who were in Title IX compliance through Prong 1, who



were less likely (Odds Ratio=0.0404,  $p=0.031$ ) to add triathlon than administrators in schools who chose to comply with Prong 2 and Prong 3. Also, institutions that were currently in compliance with Title IX were significantly more likely (Odds Ratio=119.125,  $p=0.017$ ) to add triathlon to their department. As for revenue classes, those in the Above Average Revenue class (Odds Ratio=0.016,  $p=0.005$ ) and the Below Average Revenue class (Odds Ratio=0.020,  $p=0.006$ ) were significantly less likely to add triathlon than the High Revenue classification. Similarly, the Low Revenue class was very close to statistical significance (Odds Ratio=0.049,  $p=0.051$ ) in being less likely to add triathlon than the High Revenue schools. The Pseudo R-squared of 0.2351 shows that approximately 23.51% of the variation in the triathlon scores can be explained by this set of independent variables and factors.

*Sand volleyball.* Administrators citing Participation & Scholarship numbers as an important factor in adding sports were significantly less likely (Odds Ratio=0.213,  $p=0.039$ ) to want to add sand volleyball than those administrators who did not cite it as important. Additionally, administrators in institutions complying with Title IX through Prong 3 were significantly more likely (Odds Ratio=114.638,  $p=0.012$ ) to add sand volleyball than administrators in the other two prongs. Also, administrators who rated Prong 2 as the most important of the prongs were significantly more likely (Odds Ratio=3720.66,  $p=0.003$ ) to add sand volleyball than those who believed Prong 1 was most important. As for revenue classifications, administrators in the Above Average Revenue class were significantly less likely (Odds Ratio=0.009,  $p=0.003$ ) to add sand volleyball than administrators in the High Revenue classification. The Pseudo R-squared

of 0.2939 shows that approximately 29.39% of the variation in the sand volleyball scores can be explained by this set of independent variables and factors.

*Handball.* No significant data was found through the ordered logistic regression analysis for adding women's handball.

**Ordered Logistic regressions for the elimination of sports.** An ordered logistic regression was run for each of the sports that administrators rated on their hypothetical likeliness to discontinue over the next five to ten years (See Table A4, Table A5, and Table A6).

*Men's track and field.* A number of significant results were found in the ordered logistic regression for the elimination of men's track and field. First, those administrators who cited whether a sport was part of their primary conference as an important factor in their decisions to eliminate sports were significantly less likely (Odds Ratio=0.003,  $p=0.037$ ) to eliminate men's track and field than those who did not rate it as an important factor. Similarly, administrators who rated Facility Challenges (Odds Ratio=0.004,  $p=0.043$ ) or Programs that are not on the Protected List of the Conference (Odds Ratio=0.001,  $p=0.014$ ) as important factors were significantly less likely to drop men's track and field than those who did not rate them as important. Conversely, administrators who rated the Amount of Programs Competing in the Sport as important were significantly more likely (Odds Ratio= $1.06 \times 10^8$ ,  $p=0.015$ ) to discontinue men's track and field than those administrators who did not rate it as important. Lastly, in exploring the revenue classifications, the Above Average Revenue (Odds Ratio= $6.47 \times 10^8$ ,  $p=0.016$ ), the Below Average Revenue (Odds Ratio= $3.38 \times 10^{17}$ ), and the Low Revenue

(Odds Ratio= $9.06 \times 10^{15}$ ,  $p=0.018$ ) were all significantly more likely to eliminate men's track and field than the High Revenue classification. The Pseudo R-squared of 0.6412 shows that approximately 64.12% of the variation in the men's track and field scores can be explained by this set of independent variables and factors.

***Men's soccer.*** No significant data was found through the ordered logistic regression analysis for eliminating men's soccer.

***Women's golf.*** No significant data was found through the ordered logistic regression analysis for eliminating women's golf.

***Men's cross country.*** Much like men's track and field, there were a number of significant values in the regression analysis for eliminating men's cross country. Administrators who rated Danger of Injury to Student-Athletes (Odds Ratio=0.104,  $p=0.048$ ), Programs that are not in their Primary Conference (Odds Ratio=0.001,  $p=0.007$ ), and Facility Challenges (Odds Ratio=0.019,  $p=0.005$ ) as important factors that go into eliminating a sport were significantly less likely to eliminate men's cross country as those who did not rate them as important factors. On the other hand, administrators who rated Amount of Programs Competing in the Sport as an important factor were significantly more likely (Odds Ratio=385495.9,  $p=0.006$ ) to eliminate men's cross country than administrators who did not rate it as an important factor. As for Title IX compliance, administrators in institutions who were currently compliant with Title IX were shown to be significantly more likely (Odds Ratio=139169.3,  $p=0.046$ ) to discontinue men's cross country than institutions who were not in compliance. Additionally, schools compliant with Prong 1 of Title IX were significantly less likely

(Odds Ratio=0.001,  $p=0.049$ ) to eliminate men's cross country than schools complying with Prong 2 and Prong 3. On the other hand, schools complying with Prong 2 were shown to be significantly more likely (Odds Ratio= $1.21 \times 10^7$ ,  $p=0.022$ ) to eliminate men's cross country than those subscribing to Prongs 1 and 3. Administrators who rated Prong 2 to be the most important prong were also more likely (Odds Ratio= $5.56 \times 10^6$ ,  $p=0.025$ ) to discontinue men's cross country as administrators who believed the other prongs were most important. Finally, the Below Average Revenue classification looks to be significantly more likely (Odds Ratio=787.963,  $p=0.030$ ) to eliminate men's cross country than administrators in the High Revenue class.

***Women's gymnastics.*** No significant data was found through the ordered logistic regression analysis for eliminating women's gymnastics.

***Women's tennis.*** No significant data was found through the ordered logistic regression analysis for eliminating women's tennis.

***Men's golf.*** No significant data was found through the ordered logistic regression analysis for eliminating men's golf.

***Men's tennis.*** No significant data was found through the ordered logistic regression analysis for eliminating men's tennis.

***Women's cross country.*** No significant data was found through the ordered logistic regression analysis for eliminating women's cross country.

***Women's track and field.*** No significant data was found through the ordered logistic regression analysis for eliminating women's track and field.

*Men's gymnastics.* No significant data was found through the ordered logistic regression analysis for eliminating men's gymnastics.

**Bivariate correlations for the addition of women's sports.** Each of the women's sports that administrators rated on likeliness to add possessed low to moderate correlations with the various factors that play a role in those decisions (see Table A7). Softball possessed significant moderate correlations with State & Regional Competition (.380) and Popularity in the Community & Region (.411). Likewise, Sand Volleyball also correlated at significant, moderate levels in State & Regional Competition (.343) and Popularity in the Community & Region (.313). The only other significant correlation was found in Swimming, which had a negative, moderate correlation with Budgetary Consideration (-.394). All other sports and factor correlations were found to be statistically insignificant.

**Bivariate correlations for the elimination of intercollegiate sports.** For the sports that administrators rated on likeliness to discontinue, there were eight significant correlations with the factors that played roles in those decisions (see Table A8). The likeliness of eliminating Men's Track & Field had significant, positive correlations with Title IX Compliance Issues (.405) and Budgeting Challenges (.327). It also possessed a significant, negative correlation with whether or not the sport was prevalent in their Primary Conference (-.380). Men's Cross Country also possessed a positive, significant correlation with Title IX Compliance Issues (.358), as well as a negative, significant correlation with whether it was prevalent in their Primary Conference (-.347). Two other sports, Men's Soccer (.589) and Women's Tennis (.392) showed positive significant correlations with Title IX Compliance Issues as well. The final significant correlation for

reasons to eliminate women's sports was found in Women's Gymnastics and the Danger of Injury to Student-Athletes (.667), which was the highest of any of the correlations.

**Differences in attitudes among administrators.** In order to gauge any differences in the attitudes among the three categories of administrators (SWAs, athletic directors, and university presidents), a series of One-Way Analysis of Variances (ANOVAs) were computed for each of the dependent variable groups.

***Likeliness to add sports based upon administrator type.*** The first ANOVA compared SWAs, athletic directors, and university presidents in their likeliness to add the following women's sports, as derived from the answers of SWAs in the first two rounds of questionnaires: (a) Rugby, (b) Softball, (c) Rowing/Crew, (d) Swimming, (e) Bowling, (f) Skiing, (g) Lacrosse, (h) Triathlon, (i) Sand Volleyball, and (j) Handball (see Table A9). Only one sport, Bowling, showed a significant difference ( $p=.013$ ) in the mean attitudes of the administrators. A Tukey HSD Post Hoc Test showed that the significant difference was between athletic directors and SWAs, where athletic directors had a significantly larger mean score in their likeliness to add bowling than that of the SWA group. Although not statistically significant, the data did show Lacrosse ( $p=.053$ ) and Handball (.067) to be trending toward significant differences, with SWAs having a higher mean score for adding Lacrosse, and school presidents having a higher mean score for adding Handball.

***Reasons for adding sports based upon administrator type.*** The second ANOVA compared SWAs, athletic directors, and university presidents in their opinions for which factors were most important in the decisions to add women's sports. The following

factors were derived from the answers of SWAs in the first two rounds of questionnaires: (a) State & Regional Competition, (b) Participation & Scholarship Numbers, (c) Popularity of the Sport in the Community/Region, (d) High School Participation Rates, (e) Popularity and Interest on Campus, and (f) Budgetary Consideration. As can be seen in the descriptive statistics, all of the factors had relatively high mean scores, with the lowest mean score among groups being in the High School Participation rates of the sport (mean=3.8936) and the highest mean score among groups being in the Participation & Scholarship Numbers of each sport (mean=4.2553) and the Budgetary Consideration associated with the sport (mean=4.2553). With such high means for each factor, there were no significant differences in the mean scores of SWAs, athletic directors, or university presidents for the main factors involved in adding women's sports.

*Likelihood to eliminate sports based upon administrator type.* A third ANOVA compared SWAs, athletic directors, and university presidents in their likelihood to eliminate the following sports, as derived from the answers of SWAs in the first two rounds of questionnaires: (a) Men's Track & Field, (b) Men's Soccer, (c) Women's Golf, (d) Men's Cross Country, (e) Women's Gymnastics, (f) Women's Tennis (g) Men's Golf (h) Men's Tennis, (i) Women's Cross Country, (j) Women's Track & Field, and (k) Men's Gymnastics (see Table A10). Two sports, Men's Cross Country ( $p=.028$ ) and Men's Golf ( $p=.029$ ) showed significant differences between the administrators. A Tukey HSD Post Hoc Test showed significant mean differences between university presidents and SWAs for Men's Cross Country, with university presidents having significantly higher mean scores in their likelihood to eliminate the sport than SWAs. For Men's Golf, athletic directors showed significantly higher mean scores in their likelihood to eliminate the sport

than that of SWAs. Similarly to Men's Cross Country, Men's Track & Field ( $p=.053$ ) came close to having significant mean differences at the  $p<.05$  level between groups, with university president's having a significantly higher mean score in their likeliness to drop the program compared to SWAs.

***Reasons for eliminating sports based upon administrator type.*** The final ANOVA comparing attitudes among the three categories of administrators compared their opinions on which factors were of most importance in the decisions to eliminate athletic programs. Just as in their attitudes as to the most important factors for adding a sport, there were no significant differences between groups for the factors playing a role in discontinuing a sport. A Tukey HSD Post Hoc Test found no significant differences between any of the three categories for any of the factors playing a role in the decisions to eliminate sports.

**Differences in administrator attitudes among revenue classifications.** In order to explore any differences in the attitudes among administrators at different levels of Division-I institutions, schools were categorized into four revenue classes (High Revenue, Above Average Revenue, Below Average Revenue, and Low Revenue) based upon their overall operating revenue, as listed in the 2010 EADA Report. A series of One-Way Analysis of Variances (ANOVAs) were computed to determine any significant differences in the attitudes of administrators among different revenue classifications for each of the dependent variable groups.

***Likeliness to add sports based upon revenue classification.*** The first ANOVA compared the four revenue classes based upon their likeliness to add the following



women's sports, as derived from the answers of SWAs in the first two rounds of questionnaires: (a) Rugby, (b) Softball, (c) Rowing/Crew, (d) Swimming, (e) Bowling, (f) Skiing, (g) Lacrosse, (h) Triathlon, (i) Sand Volleyball, and (j) Handball (see Table A11). Significant differences were found between groups in Bowling ( $p=.002$ ) and Handball ( $p=.044$ ). A Tukey's HSD Post Hoc Test found that the significant difference in Bowling came between the Above Average Revenue group and the Low Revenue group, with Above Average Revenue schools rating significantly more likely to add Bowling as a women's sport than Low Revenue schools were. For Handball, the significant difference came between High Revenue schools and Above Average Revenue schools, with High Revenue schools rating significantly more likely to add Handball than Above Average Revenue schools were.

***Reasons for adding sports based upon revenue classification.*** A second ANOVA compared the four revenue classes based upon their opinions as to the most important factors playing a role in their decisions to add women's sports. The following factors were derived from the answers of SWAs in the first two rounds of questionnaires: (a) State & Regional Competition, (b) Participation & Scholarship Numbers, (c) Popularity of the Sport in the Community/Region, (d) High School Participation Rates, (e) Popularity and Interest on Campus, and (f) Budgetary Consideration. Just as was found with the administrator categories, no significant differences were found between groups of revenue classes. The descriptive statistics again show very high means for each of the factors, resulting in very little differences among the four groups.

***Likelihood to eliminate sports based upon revenue classification.*** A third ANOVA compared the four revenue classifications in their likelihood to eliminate the

following sports, as derived from the answers of SWAs in the first two rounds of questionnaires: (a) Men's Track & Field, (b) Men's Soccer, (c) Women's Golf, (d) Men's Cross Country, (e) Women's Gymnastics, (f) Women's Tennis (g) Men's Golf (h) Men's Tennis, (i) Women's Cross Country, (j) Women's Track & Field, and (k) Men's Gymnastics (see Table A12). Significant differences were found for Women's Tennis ( $p=.000$ ), Men's Tennis ( $p=.048$ ), and Men's Gymnastics ( $p=.036$ ). The mean scores for Men's Track & Field ( $p=.054$ ) also showed notable results, although not statistically significant at the  $p<.05$  level. A Tukey's HSD Post Hoc Test found significant differences between Low Revenue and all three other classifications for Women's Tennis. Low Revenue school administrators were significantly more likely to eliminate Women's Tennis than High Revenue ( $p=.002$ ), Above Average Revenue ( $p=.000$ ), and Below Average Revenue ( $p=.015$ ) administrators. The Tukey test also found significant differences in Low Revenue administrators attitudes for eliminating Men's Tennis compared to Above Average Revenue ( $p=.042$ ) administrators, and nearly that of Below Average Revenue administrators ( $p=.055$ ).

***Reasons for eliminating sports based upon revenue classification.*** The final ANOVA comparing attitudes among the four categories of operating revenues compared administrator opinions for which factors were of most importance in the decisions to eliminate athletic programs (see Table A13). In this case, only one factor, the Amount of Programs Competing in the Sport ( $p=.034$ ), yielded a significant difference between the groups. A Tukey HSD Post Hoc Test found the significant difference to be between the High Revenue classification and the Below Average Revenue classification ( $p=.029$ ), where the High Revenue administrators found the total Amount of Programs Competing

in the Sport to be more important in the decision making process to eliminate sports than administrators in the Below Average Revenue category.

**Differences in administrator attitudes based upon Title IX prong compliance.**

In order to explore any differences in the attitudes among administrators who subscribe to the one or more of the Three-Prong Test for Title IX Compliance, a series of One-Way Analysis of Variances (ANOVAs) were computed to determine any significant differences in the attitudes of administrators complying with the three different prongs for each of the dependent variable groups.

*Likeliness to add sports based upon Title IX prong compliance.* The first ANOVA compared the likeliness for administrators to add certain women's sports based upon their institution's compliance with the three Title IX prongs (see Table A14). Again, the sports they were asked to rate on their likeliness of adding were derived from the answers of SWAs in the first two rounds of questionnaires: (a) Rugby, (b) Softball, (c) Rowing/Crew, (d) Swimming, (e) Bowling, (f) Skiing, (g) Lacrosse, (h) Triathlon, (i) Sand Volleyball, and (j) Handball. Significant differences were found between groups in Rowing/Crew ( $p=.011$ ), Swimming ( $p=.047$ ), Lacrosse ( $p=.012$ ), and Handball ( $p=.040$ ). A Tukey's HSD Post Hoc Test found that the significant difference in Rowing/Crew came between administrators whose institutions were in compliance with Prong 2 and administrators in compliance with Prong 3 ( $p=.010$ ). For Swimming, the significant difference was found between Prong 1 and Prong 2 ( $p=.044$ ). Like that of Rowing/Crew, differences in administrators' attitudes among those in compliance with Prong 2 and Prong 3 were also significant in their likeliness to add Lacrosse ( $p=.009$ ) and Handball ( $p=.031$ ).

***Reasons for adding sports based upon Title IX prong compliance.*** A second ANOVA compared administrator's attitudes as to the most important factors playing a role in their decisions to add women's sports based upon their institutions' compliance with Title IX. Again, the answers were based off of the following factors: (a) State & Regional Competition, (b) Participation & Scholarship Numbers, (c) Popularity of the Sport in the Community/Region, (d) High School Participation Rates, (e) Popularity and Interest on Campus, and (f) Budgetary Consideration. No significant differences were found between the three groups.

***Likelihood to eliminate sports based upon Title IX prong compliance.*** A third ANOVA compared administrator's likelihood to eliminate sports based upon their institution's compliance with the three Title IX prongs. The following sports were listed as options to eliminate, as derived from the answers of SWAs in the first two rounds of questionnaires: (a) Men's Track & Field, (b) Men's Soccer, (c) Women's Golf, (d) Men's Cross Country, (e) Women's Gymnastics, (f) Women's Tennis (g) Men's Golf (h) Men's Tennis, (i) Women's Cross Country, (j) Women's Track & Field, and (k) Men's Gymnastics. No significant results were found between the three groups.

***Reasons for eliminating sports based upon Title IX prong compliance.*** A final ANOVA compared the three Title IX prong categories of administrators' views on which factors were most important in the decisions to eliminate athletic programs. In this case, no significant results were found between the three groups. However, the Title IX Compliance factor ( $p=.052$ ) did come close to being a significant difference. A Tukey HSD Post Hoc Test found the most notable difference to be between administrators

whose institutions were in compliance with Prong 1 and institution in compliance with Prong 2 ( $p=.081$ ).

## Chapter V

The present study examined the attitudes of various NCAA Division-I administrators concerning the decisions to add or eliminate athletic programs. The study examined the various sports that administrators would hypothetically add or eliminate in the next five to ten years, as well as the specific factors that go into that decision. Specifically, the primary purpose of the study was (a) to discover which factors played the biggest roles in the decision to add or eliminate sports; (b) to determine whether there were differences in attitudes among Senior Woman Administrators, athletic directors, and university presidents; and (c) to explore any differences in attitudes of the administrators based on the amount of operating revenue of the athletic department. Additionally, the present study aimed to understand the effect of Title IX on the various decisions.

Based upon studies with similar interests (Williamson, 1983; Gray & Belzer, 1995), the present study hypothesized that the factors going into the decisions to add or eliminate sports would be (a) student interest, (b) cost, (c) amount of recruitable prospects, (d) spectator appeal, (e) conference alignment, (f) shifting resources, (g) facilities concerns; and (h) travel challenges. Furthermore, it was hypothesized that administrators would be most interested in adding women's sports with large roster sizes in order to increase Title IX proportionality as efficiently as possible. Additionally, it was believed that administrators would be most interested in eliminating men's sports. The present research is the first known study to compare the attitudes of SWAs, athletic directors, and university presidents on these matters. Moreover, it is the first study to use the Delphi method as a model for creating a survey to explore the various factors and

variables that go into the decision making process to add or eliminate sports in intercollegiate athletics.

The sections of this chapter are (a) significance of the study; (b) discussion of hypotheses; (c) factors for adding a women's sport; (d) factors for eliminating a sport; (e) attitudes across university administrators; (f) attitudes across revenue classifications; (g) a discussion on Title IX; (h) the Delphi Method as a model; (i) limitations; (j) future research directions; and (k) conclusion.

### **Significance of the Study**

As presented in Chapter IV, the various statistical analyses used in this study provided mostly inconclusive and inconsistent results. However, the study was ultimately successful in adding to the general body of research surrounding Title IX as it was able to identify the main sports for addition and elimination in the next five to ten years by a group of Title IX experts. Moreover, the study also identified the various factors, as listed by a group of Title IX experts, that go into the decision making process to add and eliminate sports. In identifying the key factors and various sports that administrators would hypothetically look to add or cut, the present study was able to create a "model," based off of the descriptive statistics, that institutions can refer to in the future when making the decision to add or discontinue sports (see Figure 5). Still, it is important to note that this model is based off of the present study only, and more research is still needed for validation of the model, as this study worked with a very low response rate. However, investigators in the current study hope that this model will create more dialogue and research concerning these aspects and the impact of Title IX.

Figure 5. List of the top sports and factors for addition and elimination as derived from the descriptive statistics among revenue classifications

	<b>Sports to Add</b>	<b>Reasons for Adding</b>	<b>Sports to Eliminate</b>	<b>Reasons for Elimination</b>
<b>High Revenue</b>	Sand Volleyball, Lacrosse	Participation & Scholarship Numbers, Budgetary Constraints	Men's Gymnastics, Women's Gymnastics	Budgeting Challenges, Amount of Programs Competing in the Sport
<b>Above Average Revenue</b>	Lacrosse, Swimming	Participation & Scholarship Numbers, Budgetary Constraints	Men's Golf, Men's Tennis	Inclusion of Program in Primary Conference, Title IX Compliance, Facilities Challenges
<b>Below Average Revenue</b>	Sand Volleyball, Bowling	Participation & Scholarship Numbers, Popularity of Sport in the Community & Region, Budgetary Constraints	Men's Soccer, Men's Tennis	Title IX Compliance, Budgeting Challenges
<b>Low Revenue</b>	Bowling, Softball	Budgetary Constraints, State & Regional Competition, Popularity in the Community & Region, Interest on Campus	Women's Tennis, Men's Soccer	Title IX Compliance, Budgeting Challenges

Despite Gavora's (2002) contention that Title IX has caused administrators to unfairly cut men's sports in order to fit the proportionality prong, the present study suggests that administrators are actually more interested in adding women's sports than cutting at all (see Table 9 & Table 10). Interestingly, as can be seen in Figure 5, "Budgetary Constraints" was found to be one of the top reasons for adding for all four revenue classifications. Likewise, "Participation & Scholarship Numbers" was listed in three of the four revenue classifications. With all four classifications facing budgeting issues, the administrators surveyed in this study were much more likely to add women's sports than eliminate sports, which seems to disagree with Gavora and others who argue that Title IX has overstepped its boundaries and has caused administrators to cut men's programs in order to achieve Prong 1 compliance.



Again, it is important to note that this study used a very small sample of Division-I NCAA administrators, and calls for more extensive research in order to verify the attitudes on Title IX compliance that are displayed in this study. However, this study does open up the conversation on whether attitudes and opinions on Title IX compliance have changed over time. Based upon the findings of this study, it seems that administrators are actively pursuing the idea of adding women's sports as opposed to cutting men's sports, despite the obvious financial challenges that it presents. As discussed in Chapter II, the literature on Title IX compliance presents a unique social justice case, as university administrators must adhere to the gender equity rules outlined in Title IX while also trying to generate revenue and stay afloat. As earlier outlined, some institutions such as Rutgers University and James Madison University decided to eliminate sports in the mid-2000s in order to save on costs (Rimbach & Alex, 2006; James Madison, 2006). It seems that many administrators echo former Montana State University Athletic Director Ginny Hunt's sentiments, in that the increased expenditures for revenue-generating sports have "forced" departments to discontinue non-revenue generating programs such as wrestling and swimming (Hatlevig, 2005). The present study, however, suggests instead that administrators may not feel "forced" to cut programs, and instead seem more willing to add women's programs despite their obvious financial burdens. While the data and statistics in this study are not necessarily overwhelming in suggesting that administrators' attitudes are more accepting to the addition of women's sports than in the past, the present study does provide enough evidence to warrant future research that can hopefully explore the social justice dynamic in more detail. With the majority of the reasons listed for adding having to do with

budgetary constraints and participation numbers, it is apparent that administrators were concerned with Title IX compliance and its effect on the finances of their department. If these factors are in fact the main drivers in the decision to add sports over eliminating sports, then it seems that "the right thing to do" is an important aspect of Title IX compliance. If nothing else, the study lends itself to more research surrounding the fact that administrators are at least willing to entertain the idea of doing the "right thing" in adding women's sports rather than pursuing a more aggressive, business-like approach, which would look to cut non-revenue producing elements of their departments.

### **Discussion of Hypotheses**

The first hypotheses of the present study focused on the reasons for adding and eliminating sports. For adding, it was believed that the most important factors would be "Participation & Scholarship Numbers" and "Budgetary Consideration," as they both relate to the challenges detailed in much of the existing Title IX literature on adding programs. The descriptive statistics showed that "Budgetary Consideration" and "Participation & Scholarship Numbers" tied for the highest cumulative mean of the factors for adding sports ( $M=4.2553$ ). However, there were no significant differences among these means and the other various factors for addition, as all of them were rated relatively similarly and higher than expected. The bivariate correlation between the addition of Women's Swimming and "Budgetary Consideration" factor also provided significant results, showing that the addition of an above average roster size was positively, significantly correlated with budgetary factors, which was expected. Unfortunately, the various statistical analyses rarely agreed as to the most important factors for certain sports, ultimately leading to inconclusive results.

The second hypotheses of the present study was supported in the data. For instance, in the ordered logistic regression analysis, Men's Track & Field and Men's Cross Country both showed significant likeliness to add, although for separate reasons than this study originally hypothesized. However, in the bivariate correlations, both Men's Track & Field and Men's Cross Country were positively, significantly correlated with the Title IX Compliance Issues factor, which was expected. Additionally, Men's Track & Field was also positively, significantly correlated with the Budgeting Challenges factor, which was the other important factor that investigators expected to see. Supporting the bivariate correlations and the hypothesis, Budgeting Challenges (M=3.738) and Title IX Compliance Issues (M=3.683) were the top two cumulative means among administrators.

### **Factors for Adding a Women's Sport**

As Cheslock (2008) describes, many athletic departments have recently chosen to respond to Title IX by "equalizing up rather than equalizing down to improve gender equity in intercollegiate athletics" (pp.11). According to Cheslock's (2007) ten-year longitudinal study from 1995-96 to 2004-05, the top three women's programs added in NCAA institutions were (a) women's golf (64.7% increase); (b) women's lacrosse (51% increase); and (c) women's soccer (45.4% increase). However, little research had been accumulated exploring the specific reasons for the addition of certain women's programs. The present study explored the various factors that go into that decision-making process for ten women's sports, as formulated from administrator opinions in the first two rounds of questionnaires in this study.

**Rugby.** The descriptive statistics for the hypothetical likeliness of administrators adding rugby (n=47) show a relatively low mean of 1.70 with a standard deviation of 1.01. However, the ordered logistic regression analysis showed that administrators who rated State & Regional Competition as important or very important were very close to statistical significance (p=0.051) in being more likely to add rugby than those who did not rate State & Regional Competition as an important factor. The importance of state and regional competition may come from rugby currently being classified as an "emerging sport" in the NCAA. Emerging sports are recognized by the NCAA as full-varsity sports that count toward participation rates, but championships are not yet sponsored by the NCAA. Therefore, the need for state and regional competition seems necessary. Interestingly, however, in the bivariate correlation analysis, no significant correlations existed between State & Regional Competition and the addition of rugby (p=0.282).

**Softball.** The descriptive statistics for the likeliness of adding softball (n=27) show a mean of 2.38 and standard deviation of 1.76. No significance was found in the ordered logistic regression analysis for softball, yet the bivariate correlations show two significant correlations. The addition of softball is significantly correlated with State & Regional Competition (.380, p=0.042) and Popularity of the Sport in the Community & Region (.411, p=0.027). Ultimately, these factors are somewhat similar, as the Popularity of a Sport in the Community & Region is highly, significantly correlated (.827, p=0.000) with the amount of State & Regional Competition.

**Rowing/Crew.** The mean for likeliness of adding women's rowing (n=39), also known as crew, was 1.72 with a standard deviation of 1.10. The ordered logistic

regression analysis yielded no significant results at the  $p < .05$  level; however, Participation & Scholarship Numbers ( $p = .051$ ) and Budget Constraints ( $p = .053$ ) came out very near significance. This data, however, both contradicts and complements various aspects of the literature. Much of the literature, for instance, suggests that women's rowing, due to its large roster size, is a common choice for many departments looking to increase proportionality (Rosner, 2001; University of Alabama, 2005; Bordeau, 2006). The data in the present study for Participation & Scholarship Numbers, however, shows an Odds Ratio of 0.018, suggesting that administrators rating Participation & Scholarship Numbers as being important were actually less likely to add women's rowing than administrators who did not rate Participation & Scholarships as important. Conversely, the data in the current study also complements some of the literature on rowing, which speaks to the high start-up and annual costs compared to other sport options (Rosner, 2001). The ordered logistic regression analysis of the current study shows an Odds Ratio of .0798 for Budget Constraints, suggesting that administrators who rated Budget Constraints as important were less likely to add women's rowing than administrators who did not rate it as important. According to Rosner (2001) "on a per team basis, women's rowing at the intercollegiate level is not a sensible financial investment" (pp. 298). Therefore, for athletic departments who are concerned with their budget, high cost sports such as rowing may not be a viable option. Still, the data is ultimately inconclusive, as the bivariate correlation between Budget Constraints and the addition of women's rowing/crew was weak (-0.151) and insignificant ( $p = 0.359$ ).

**Swimming.** The mean score likeliness for adding women's swimming (n=33) was 2.15 with a standard deviation of 1.30. The ordered logistic regression analysis provided a number of significant results. Administrators rating Popularity of a Sport in the Community & Region (p=0.25) and High School Participation Rates (p=0.049) as important were significantly more likely to add women's swimming than those who did not rate those two factors as important. Interestingly, both of those factors are external factors, while Budget Constraints (p=0.021), is an internal factor. Administrators who rated Budget Constraints as important were also significantly more likely to add swimming. Furthermore, the bivariate correlation analysis shows a significant, negative correlation between Budget Constraints and the addition of women's swimming (-.394, p=0.023). This correlation supports the ordered logistic regression analysis of this study in that schools who are concerned with their budgets are significantly correlated to the likelihood of adding a swimming team.

The reasons for the significant relationship between budget constraints and the addition of women's swimming may vary, but it may be attributed to the fact that much of the cost for adding a swimming team comes through the facility. If teams already have an existing facility, or are able to rent a facility without having to build a new facility, a swimming team can be added at a relatively low cost, supporting the evidence that administrators with concerns about budgets would be more likely to add a swimming team. Obviously, further research into the existing facility situations of the different schools would be needed to make any further conclusions. However, swimming does seem to be a viable option for schools possibly looking to engage high school athletes

and the interest of their community or region at a relatively low cost (assuming they either have an existing facility to use or can rent a community pool).

**Bowling.** The mean likeliness for adding women's bowling (n=46) was 2.43 with a standard deviation of 1.46. The ordered logistic regression analysis did not find any significant factors playing a part in the decision making process to add bowling. High School Participation Rates (p=0.054) were nearly significant at the p<.05 level. It's Odds Ratio of 4.76 suggests that those administrators who rated High School Participation rates as important were more likely to add bowling than those who did not. Bowling is a relatively new sport, with its first NCAA-sponsored championship beginning in 2004, it seems that High School Participation rates would be very important to whether or not a school decided to add bowling as a sport. As with any new sport, it may take awhile for it to catch on at both the college and high school levels, so the participation rates at high schools may have a large effect on which sports colleges decide to take on, especially when a sport is relatively new in the NCAA. Still, using this theory, the same could likely be said for Popularity & Interest on Campus and Popularity in the Community & Region, which draw no significant correlations to bowling. In fact, bowling did not have any significant correlations in the bivariate correlation analysis.

**Skiing.** The mean likeliness for adding women's skiing (n=46) was 1.32 with a standard deviation of 0.790. The ordered logistic regression analysis did not find any significant factors playing a part in the decision making process to add women's skiing. There were also no significant correlations were found for women's skiing in the bivariate correlation analysis. Women's skiing has been an NCAA-sponsored sport since 1983, yet

the unique geographic needs to maintain a program may seem too daunting to some schools.

**Lacrosse.** The mean likeliness for adding women's bowling (n=43) was 2.28 with a standard deviation of 1.22. The ordered logistic regression analysis did not find any significant factors playing a part in the decision making process to add lacrosse. Similarly, in the bivariate correlation analysis, no significant correlations were found. The lack of significance seems interesting, as the literature points out that lacrosse was the second-most added women's sport between 1995 and 2005 (Cheslock, 2007). However, the sport has earned a lot more attention in the past few decades, so many schools already sponsor the sport. Plus, the descriptive statistics do show that it scored one of the higher means for likeliness to add, so it is a possibility that the reasons for wanting to add lacrosse were broader than the scope of this study.

**Triathlon.** The mean likeliness for adding women's triathlon (n=45) was 1.76 with a standard deviation of 0.908. The ordered logistic regression analysis did not find any significant factors playing a part in the decision making process to add women's triathlon. Similarly, in the bivariate correlation analysis, no significant correlations were found. Again, women's triathlon is another sport that has been proposed by the NCAA Women's Committee on Athletics to be an emerging sport. Many schools have club triathlon teams, and some schools are beginning to organize varsity teams, such as Marymount University in Arlington, Va., which will add men's and women's triathlon as varsity programs for the 2013-2014 school year. Thus far, Adams State University, the U.S. Air Force Academy, the University of Arizona, the University of Colorado-Colorado Springs, Monmouth University, Marymount University, Stanford University,



Drake University, the University of Denver, and the University of North Carolina Asheville have reportedly submitted letters to the NCAA displaying their desire to support varsity teams and make women's triathlon an NCAA-sponsored championship sport (FAQs, 2013).

**Sand volleyball.** The mean likeliness for adding women's triathlon (n=45) was 2.47 with a standard deviation of 1.44. The ordered logistic regression analysis provided one significant factor, Participation & Scholarship Numbers (p=0.039). The Odds Ratio of 0.214 suggests that administrators who rated Participation & Scholarship Numbers as important were less likely to add sand volleyball than those who did not rate it as important. This is most likely because the amount of scholarships that a school is able to give out for sand volleyball is directly related to whether or not the school already has an indoor volleyball team. If a school already has an indoor team, which many do, it is only allowed up to three scholarships in 2012, four in 2013, five in 2014, and reach the limit of 6 in 2015. If the school does not have an indoor team, they can give out up to eight scholarships (CollegeSand.org). While the scholarships are "equivalency scholarships," meaning they can be divided up as partial scholarships to a larger group of players, there are better options for schools looking to add a sport based upon its participation and scholarship numbers.

As expected, sand volleyball was significantly correlated in the bivariate correlation analysis with State & Regional Competition (.343, p=0.021) and Popularity in the Community & Region (.313, p=0.036). Again, those two factors are highly correlated (.827, p=0.00), as was already shown with softball. However, since sand volleyball is still an emerging NCAA sport, the majority of its teams are from California, Florida, and

other places with natural beaches. As the sport gains popularity, more schools will likely begin to add sand volleyball. However, undoubtedly a main concern for schools looking to add sand volleyball is who they would play if they are not in a region with natural beaches where sand volleyball is popular. Until more teams commit to sand volleyball, the majority of the schools will probably choose other alternatives due to high costs of travel.

**Handball.** The mean likeliness for adding women's handball (n=46) was 1.26 with a standard deviation of 0.535. The ordered logistic regression analysis did not find any significant factors playing a part in the decision making process to add women's handball. There were also no significant correlations found for women's handball in the bivariate correlation analysis. Women's handball was once an NCAA emerging sport, but was taken off of the list in 2009 for lack of growth. It had the lowest mean for likeliness to add of all of the sports that administrators had listed in the first two rounds of the survey. At this point, it does not seem as if administrators are seriously considering adding handball, let alone pushing for it to be put back on the list of NCAA emerging sports.

### **Eliminating Sports**

The present study did not use Williamson (1983) and Grayson and Belzer's (1995) studies to develop any of the factors that administrators look to in the decision making process to eliminate a sport. Instead, the current study used the Delphi method of a series of questionnaires to experts in the field in order to develop a more current questionnaire. Fortunately, many of the same factors for eliminating sports were listed by the expert

administrators, which ultimately helped bring validity to the model. In addition, the administrators in the first two rounds of the survey also provided eleven sports that they would be most willing to eliminate in the next five to ten years. These sports were compared against the various factors they gave to find correlations and relationships between the two. Unlike the women's sports that were selected as possibilities to add, only five of the eleven sports that were listed as possibilities to eliminate had any statistically significant data.

**Men's track and field.** The mean likeliness for eliminating men's track and field (n=38) was 1.58 with a standard deviation of 1.15. The ordered logistic regression found four significant relationships with the likeliness of eliminating men's track and field. First, the administrators who cited whether a sport was in their primary conference as an important factor in deciding to eliminate a sport were significantly less likely (p=0.037) to discontinue men's track and field. Likewise, administrators rating Facility Challenges (p=0.043) and whether a sport was protected in the conference (p=0.014) as important factors were also significantly less likely to eliminate men's track and field. With many schools having limited facilities, often times they may have to work with whatever they already have in place. If a school already has a track facility, it may not be worth the extra expense to eliminate the sport and potentially add something else where a facility would have to be created. However, administrators who rated Amount of Programs Competing in the Sport as an important factor were significantly more likely (p=0.015) to eliminate men's track and field. Interestingly, Title IX compliance was not a significant result, yet men's track and field has an above average roster size. The bivariate correlation analysis, conversely, did find a significant correlation between the likeliness

of eliminating men's track and field and programs impacting Title IX Compliance (.405,  $p=.014$ ), Budgeting Challenges (.327,  $p=.048$ ), and whether the sport is not in their Primary Conference (-.380,  $p=0.022$ ). The positive, significant correlation to budgeting challenges seems to make sense, as the more challenges a department has with budgeting for a large team makes them more likely to wish to eliminate a team such as men's track and field. The Title IX Compliance correlation, however, ultimately contradicts the ordered logistic regression analysis and brings inconclusive results to the data, meaning that further research is required on this matter.

**Men's soccer.** The mean likeliness for eliminating men's soccer ( $n=20$ ) was 1.45 with a standard deviation of 1.15. The ordered logistic regression analysis found no significant relationships between the elimination of men's soccer and any of the factors. The bivariate correlation analysis found one significant relationship, with Title IX Compliance (.589,  $p=0.010$ ). Like men's track and field, men's soccer fields a relatively large team that effects the substantial proportionality numbers of departments who comply with Prong 1, which as the literature states, is the most commonly used prong.

**Men's cross country.** The mean likeliness for eliminating men's cross country ( $n=36$ ) was 1.64 with a standard deviation of 1.07. The ordered logistic regression analysis found four significant relationships between the elimination of men's cross country and the factors that go into the decision process to eliminate programs. When administrators Danger of Injury to Student-Athletes ( $p=0.048$ ), Programs that are not in their Primary Conference ( $p=0.007$ ), and Facility Challenges ( $p=0.005$ ) as important, they were significantly less likely to want to drop men's cross country. Presumably, this is because there is a low-risk for injury with cross-country being a non-contact sport,

most conferences sponsor cross-country, and there is little need for facilities for cross-country (when it comes to the sport itself). The other significant result was in the Amount of Programs Competing in the Sport ( $p=0.006$ ), in which the administrators who rated that factor as important were significantly more likely to want to eliminate cross-country than administrators who rated it as low importance. With men's cross country being one of the most-hit programs for discontinuation across college campuses since Title IX, the amount of programs competing is a legitimate concern. As a greater number of teams eliminate cross-country, there are less teams to compete against, and therefore more reasons to discontinue the sport.

The bivariate correlation analysis seems to complement the data in the ordered logistic regression analysis in that a negative, significant relationship can be found between the likeliness to eliminate men's cross country and the importance of whether or not a programs is *not* in their primary conference ( $-.347, p=0.041$ ). Therefore, if an administrator feels it is important for a sport to be in the primary conference, then their likeliness of dropping the sport goes down. Similarly, as the importance of programs that do not impact Title IX compliance go up, the likelihood of eliminating cross country goes down.

**Women's Gymnastics.** Women's gymnastics had a very small number of responses ( $n=12$ ), as the sport is not as common as it used to be. However, there was a significant correlation between the elimination of women's gymnastics and the Danger of Injuries to Student-Athletes ( $.667, p=0.035$ ). This concern among administrators backs up the literature, in which intercollegiate gymnastics has had a well-documented history of injuries to its athletes. For example, a five-year longitudinal study by Sands, Schultz,

and Newman (1993) found that NCAA Division-I gymnasts were training with an injury approximately 71% of the time, and they could expect a new injury approximately 9% of the time.

**Women's Tennis.** Women's tennis, like women's gymnastics, did not have any significant data in the ordered logistic regression analysis, but did yield one significant correlation. The likelihood for the elimination of women's tennis is positively, significantly correlated with Title IX Compliance (.392,  $p=0.020$ ). Women's tennis only allows for eight scholarships per team, so as the importance for Title IX compliance goes up, especially with substantial proportionality compliance, the likelihood of dropping women's tennis goes up, and vice versa, as administrators may want to increase proportionality for females by adding a different sport for women with a larger roster size and therefore increasing their proportionality.

### **Differences in Attitudes Among Three University Administrators**

One of the main purposes of the present study was to explore whether there were any differences in the attitudes of Senior Woman Administrators (SWAs), athletic directors, and university presidents regarding the sports to add or eliminate and the reasons for making those decisions. Unfortunately, there were very few significant differences in the overall attitudes. There are a number of reasons for this situation, but the poor response rate (11.52%) was most likely a large part of the overall issue.

Still, of the significant differences in the attitudes of the administrators, it was interesting that SWAs, whose daily job duties revolve around gender equity and Title IX compliance, were always less likely to want to eliminate sports than the university

president (significantly higher means in likeliness to eliminate men's cross country than the SWA) and the athletic director (significantly higher means in likeliness to eliminate men's golf than the SWA). Still, based upon the inconsistencies in the data, it is impossible to have conclusive results in this data set.

### **Differences in Attitudes Among Revenue Classifications**

In comparing the four revenue classifications of (a) high revenue; (b) above average revenue; (c) below average revenue; and (d) low revenue, various statistical analyses were run, including one-way ANOVAs and ordered logistic regression analyses in order to see any differences or commonalities in the data.

For the most part, the one-way ANOVAs did not provide any distinct patterns or generalities from which to draw any conclusions from. In the few statistically significant differences that came up, the revenue classification with more operating revenue was more likely to add the sports than the lower revenue classes, which was assumed to be the case. As for eliminating programs, the one interesting significant relationship was that the High Revenue class felt that the total Amount of Programs to Compete in the Sport was significantly more important than that of the Below Average Revenue classification. Based upon the hypotheses of the current study, it was expected that lower revenue classes would rather see more programs competing in the sport rather than the High Revenue class, which has more resources to be able to travel to find competitive teams. All in all, the data from the ANOVAs proved to be inconclusive and circumstantial.

Using the ordered logistic regression analysis, however, some common themes regarding the amount of revenue can be seen. For example, with the addition of rugby,

the High Revenue classification schools were significantly more likely to add rugby than the Above Average Revenue class, and, while not significant, still more likely to add rugby than the Below Average and Low Revenue classes. The same can be said for the hypothetical addition of women's crew/rowing, lacrosse, triathlon, and sand volleyball. The addition of women's swimming, however, showed schools with Below Average Revenue significantly more likely to add swimming than High Revenue schools. There are a couple of possibilities for this dynamic. First of all, high revenue schools may already have swimming, whereas below average revenue schools may be less likely to have swimming currently and may be more interested in adding it. Secondly, as was briefly discussed earlier, if Below Average Revenue schools already have a facility to use, or have the potential to rent a facility to use for their swimming team, the cost could be kept relatively low. Little equipment is needed for swimming, whereas sports like softball, or women's rowing have more initial and annual costs. The same could be said for women's bowling, another relatively low cost sport which the Low Revenue classification is significantly more likely to add than High Revenue schools.

All in all, while High Revenue departments, as a whole, are more likely to add sports, there are a few sports that Low Revenue and Below Average Revenue departments can feasibly add at a relatively low start-up and annual costs. For schools looking to bolster their proportionality, swimming may be the best choice, especially if they have an existing facility or one they can reasonably rent. Bowling, on the other hand, doesn't give the same boost to proportionality, but can be offered at low cost as well, and may be a better option for those looking to stray away from proportionality and show a continued history of expansion for women's programs.



## **Limitations & Future Research Directions**

There are a number of limitations to this study which need to be discussed. First, the poor response rate does not allow for a true representative sample. A larger sample with more even sized groups (SWAs, athletic directors, and university presidents) is needed in order to draw any conclusions from the data. Unfortunately, while this study can provide a small glimpse into some of the different factors facing schools and their decisions to add or eliminate athletic programs, there are plenty of stones still unturned. Part of the limitation in response rate for this study was the way that the survey instrument was sent out. In a perfect world, it would either have been sent out via email earlier in the school year or been handed out in paper form at various conferences throughout the year. Collecting the information earlier in the year likely would have increased the response rate of the study as well as allowed for more research questions to be developed and answered over a longer period of time.

The other main limitation of this study is in the Delphi methodology. Unfortunately, the answers of the first two rounds did not differ enough to really make any substantial changes to the first survey. Although the wording of a few questions was changed, no real changes were made to the basic survey. The first round was efficient for getting a broad idea as to the specific sports being hypothetically added or eliminated, as well as the factors that played a role in those decisions. However, the second round answers were so similar to the first round that it did not allow for investigators to scrub the data and pare down the information as much as investigators had hoped. Therefore, it is the principal investigator's opinion that the third round of the survey was still too broad, which may have resulted in some of the similarities in the attitudes of the different

administrators and revenue classes. If the Delphi method is to be used again, it needs to be more specific through the second and third rounds, possibly keeping the same group of participants throughout three rounds and then sending the large, final questionnaire out in a fourth or even fifth round, once the investigators have had ample time to really scrub the data and fine tune the various answers.

Future research is recommended exploring the various factors that have gone into specific decisions made to either add or eliminate sports. Perhaps case studies should be used to examine more closely the several factors that played key roles in those decisions. The present study may have been too broad and therefore invited hypothetical, unrealistic answers that watered-down the final data and made the overall analysis inconclusive.

One idea that came up in the design process for the questionnaires was to employ a true ordered ranking system, which would force administrators to show which factors they felt were "most important," or at least more important compared to the other factors. The present study's design allowed for respondents to rate all factors as "important," which resulted in very high means and very little difference among groups. While it is probable that all of the administrators felt that these factors were in fact important, the study was intended for respondents to rate the factors' importance based upon the decision to add or eliminate specific sports. Had the respondents rated the factors like this, the results may have shown significant differences. A ranking system would have prevented this situation. Ultimately, the questions should have been written more clearly, although the pilot study conducted in late 2012 allowed respondents to recommend changes or clarifications, yet they did not recommend any changes to these particular questions. All in all, the present study recommends that future researchers take further

measures when writing their questions to ensure that this phenomena does not repeat itself.

## **Conclusion**

Above all, the present study attempted to explore the attitudes of various NCAA Division-I administrators concerning the decisions to add or eliminate athletic programs. The study examined the various sports that administrators would hypothetically add or eliminate in the next five to ten years, as well as the specific factors that go into that decision. The primary purpose of the study was (a) to discover which factors played the biggest roles in the decision to add or eliminate sports; (b) to determine whether there were differences in attitudes among Senior Woman Administrators, athletic directors, and university presidents; and (c) to explore any differences in attitudes of the administrators based on the amount of operating revenue of the athletic department. Additionally, the research aimed to understand the effect of Title IX on such decisions.

An extensive review of the literature surrounding both the historic and recent decisions to add or eliminate sports in NCAA Division-I athletic departments was performed in order to provide a basis and rationale for the present study. Additionally, an in-depth look at the history and application of Title IX was included in order to provide further background information. While the controversy surrounding Title IX is still prevalent in society today, it cannot be denied that the law has come a fair distance since its inception in 1972.

The present study attempted to use the Delphi methodology to develop a unique survey model that would allow investigators to get to the core issues concerning athletic

departments today. While the data collected is ultimately inconclusive, it was successful in its attempt to add to the body of research concerning both Title IX and the decision making processes in both the overall university as well as the athletic departments. In the end, the present study provides evidence that administrators are actively pursuing the idea of adding women's sports, despite Gavora's (2002) suggestion that Title IX has caused administrators to eliminate programs in order to achieve proper proportionality. While they may be more inclined to add women's programs due to fear of the bad publicity associated with cutting sports, it may also be that administrators are truly interested in helping serve the mission and goals of the university. While much has been said about college athletics evolving into a revenue-generating business that does not fit in with the academic missions of the universities, the present study suggests, rather, that administrators may be more apt to consider adding women's sports in order to achieve proportionality. All in all, the fact that administrators are at least attempting to "do the right thing," is definitely a step in the right direction. While more research on this topic is needed, one aspect that the present study does affirm is that Title IX has played a very important role in changing the way administrators, coaches, and society views gender equity and equality.

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## Appendix A: Tables & Charts

*Table 1. Ordered Logistic Regression Analysis for the Factors Playing a Role in Adding a Women's Sport*

		State & Regional Competition	Participation & Scholarship Numbers	Popularity in the Community & Region	High School Participation Rates	Interest on Campus	Budgetary Constraints
Rugby	Odds Ratio	4.35	0.963	0.126	1.92	0.612	0.524
	Sig.	0.051	0.963	0.167	0.276	0.607	0.36
Softball	Odds Ratio	1.10E-10	39901.71	1.44E+41	0.002	6.73E-20	9.65E-13
	Sig.	-	-	-	-	-	-
Rowing/Crew	Odds Ratio	0.228	0.018	1.76	14.84	1.75	0.08
	Sig.	0.239	0.051	0.764	0.16	0.693	0.053
Swimming	Odds Ratio	2.49	144.99	17072.27	6.94	0.004	8.06E-08
	Sig.	0.63	0.123	.025*	0.049*	0.141	0.021*
Bowling	Odds Ratio	0.565	0.332	0.325	4.76	0.546	2.02
	Sig.	0.345	0.226	0.42	0.054	0.445	0.331
Skiing	Odds Ratio	1.02E+39	1.33E+46	3.00E+258	3.67E-36	1.66E-46	4.30E-11
	Sig.	-	-	-	-	-	-
Lacrosse	Odds Ratio	1.02	0.328	5.76	2.3	0.541	0.515
	Sig.	0.963	0.094	0.114	0.083	0.462	0.2
Triathlon	Odds Ratio	0.838	1.81	1.66	2.02	0.709	0.397
	Sig.	0.757	0.382	0.626	0.174	0.657	0.078
Sand Volleyball	Odds Ratio	2.92	0.214	0.133	2.14	4.34	1.06
	Sig.	0.267	.039*	0.145	0.244	0.108	0.915
Handball	Odds Ratio	0.409	4.7	84.86	0.65	0.002	0.089
	Sig.	-	-	-	-	-	-

Note. Administrators rated the likeliness to eliminate sports on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). The factors associated with the elimination of sports are rated on a 5-point Likert ranging from 1 (not important) to 5 (very important). \*p < .05 level. \*\*p < .01



*Table 2. Continued Ordered Logistic Regression Analysis for the Factors Playing a Role in Adding a Women's Sport based on Title IX Compliance*

		Compliant with Title IX	Prong 1 Compliance	Prong 2 Compliance	Prong 3 Compliance	Most Important Prong- Prong 1	Most Important Prong- Prong 2	Most Important Prong- Prong 3
Rugby	Odds Ratio	0.111	1.68	25.03	1.96	-	38.08	6.42
	Sig.	0.334	0.757	0.053	0.745	-	0.273	0.21
Softball	Odds Ratio	72.65	9.30E-37	1.68E+24	5.17E-45	-	1.94E-47	1.48E+09
	Sig.	-	-	-	-	-	-	-
Rowing/Crew	Odds Ratio	26.859	0.021	16.69	0.016	-	54.99	0.0345
	Sig.	0.458	0.115	0.153	0.148	-	0.305	0.132
Swimming	Odds Ratio	20477.73	2.87E-09	4.54	5.95E-09	-	0.0002	0.064
	Sig.	0.054	.033*	0.509	.023*	-	0.311	0.484
Bowling	Odds Ratio	1.05	1.26	47.4	0.907	-	338.82	14.66
	Sig.	0.981	0.885	.043*	0.957	-	.031*	.019*
Skiing	Odds Ratio	-	-	-	-	-	-	2.00E- 289
	Sig.	-	-	-	-	-	-	-
Lacrosse	Odds Ratio	2.56	0.029	17.63	0.007	-	1.12	0.267
	Sig.	0.565	0.015*	0.028*	0.007*	-	0.0947	0.214
Triathlon	Odds Ratio	119.13	0.04	6.17	0.072	-	0.778	0.072
	Sig.	0.017*	0.031*	0.139	0.142	-	0.905	0.744
Sand Volleyball	Odds Ratio	1.65	8.47	0.121	114.64	-	3720.66	0.144
	Sig.	0.785	0.13	0.114	.012*	-	.003*	0.075
Handball	Odds Ratio	0.456	0.409	3.04	0.17	-	2.76E+15	2.6
	Sig.	-	-	-	-	-	-	-

Note. Administrators rated the likeliness to eliminate sports on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). The factors associated with the elimination of sports are rated on a 5-point Likert ranging from 1 (not important) to 5 (very important). \*p < .05 level. \*\*p < .01.

*Table 3. Continued Ordered Logistic Regression Analysis for the Factors Playing a Role in Adding a Women's Sport based on Revenue Classifications*

		High Revenue	Above Average Revenue	Below Average Revenue	Low Revenue
Rugby	Odds Ratio	-	0.003	0.066	0.233
	Sig.	-	0.002	0.062	0.354
Softball	Odds Ratio	-	0.0019	0.014	0.008
	Sig.	-	-	-	-
Rowing/Crew	Odds Ratio	-	0.002	0.129	0.067
	Sig.	-	0.326	0.723	0.642
Swimming	Odds Ratio	-	0.0001	9.59E-06	0.372
	Sig.	-	0.186	0.02*	0.777
Bowling	Odds Ratio	-	0.002	2.28	47.71
	Sig.	-	.003*	0.476	.028*
Skiing	Odds Ratio	-	-	2.50E-125	-
	Sig.	-	-	-	-
Lacrosse	Odds Ratio	-	0.097	0.197	0.1
	Sig.	-	0.058	0.18	0.09
Triathlon	Odds Ratio	-	0.016	0.02	0.049
	Sig.	-	0.005*	0.006*	0.051
Sand Volleyball	Odds Ratio	-	0.009	0.079	0.104
	Sig.	-	0.003	0.067	0.112
Handball	Odds Ratio	-	7.58E-16	0.031	0.621
	Sig.	-	-	-	-

Note. Administrators rated the likeliness to eliminate sports on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). The factors associated with the elimination of sports are rated on a 5-point Likert ranging from 1 (not important) to 5 (very important). \*p < .05 level. \*\*p < .01.

*Table 4. Ordered Logistic Regression Analysis for the Factors Playing a Role in Eliminating a Sport*

		Danger of Injury to Student-Athletes	Inclusion of Program in Primary Conference	Recruiting Challenges	Budgeting Challenges	Title IX Compliance Issues	Amount of Programs Competing	Facilities Challenges	Programs Not Protected in Conference
Men's Track & Field	Odds Ratio	0.085	0.003	0.011	502.56	0.055	1.06E+08	0.004	0.001
	Sig.	0.288	.037*	0.118	0.1	0.397	0.015	0.043	0.014
Men's Cross Country	Odds Ratio	0.104	0.001	0.355	2.56	4.75	385495.9	0.019	1.96
	Sig.	0.048*	0.007**	0.261	0.381	0.34	0.006**	0.005**	0.402
Women's Gymnastics	Odds Ratio	5.48E+07	0.003	0.004	-	-	-	2751	52.45
	Sig.	1	1	1	-	-	-	1	1

Note. Administrators rated the likeliness to eliminate sports on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). The factors associated with the elimination of sports are rated on a 5-point Likert ranging from 1 (not important) to 5 (very important). Only the three sports listed above were able to achieve convergence \*p < .05 level. \*\*p < .01.

*Table 5. Continued Ordered Logistic Regression Analysis for the Factors Playing a Role in Eliminating a Sport*

		Compliant with Title IX	Prong 1 Compliance	Prong 2 Compliance	Prong 3 Compliance	Most Important Prong- Prong 1	Most Important Prong- Prong 2	Most Important Prong- Prong 3
Men's Track & Field	Odds Ratio	2.24E-11	0.007	1084.57	0.566	6.32	0.002	-
	Sig.	0.569	0.156	0.153	0.877	0.421	0.307	-
Men's Cross Country	Odds Ratio	139169.3	0.001	1.21E+07	0.003	0.498	5.56E-06	-
	Sig.	0.046*	0.049*	0.022*	0.132	0.438	0.025*	-
Women's Gymnastics	Odds Ratio	-	-	-	0.003	-	-	-
	Sig.	1	1	1	1	1	1	1

Note. Administrators rated the likeliness to eliminate sports on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). The factors associated with the elimination of sports are rated on a 5-point Likert ranging from 1 (not important) to 5 (very important). Only the three sports listed above were able to achieve convergence \*p < .05 level. \*\*p < .01.

*Table 6. Ordered Logistic Regression Analysis for the Factors Playing a Role in Eliminating a Sport based on Revenue Classification*

		High Revenue	Above Average Revenue	Below Average Revenue	Low Revenue
Men's Track& Field	Odds Ratio	-	6.47E+19	3.38E+17	9.06E+15
	Sig.	-	0.016	0.016	0.018
Men's Cross Country	Odds Ratio	-	0.148	787.96	0.001
	Sig.	-	0.564	.030*	0.122
Women's Gymnastics	Odds Ratio	-	0.003	-	-
	Sig.	-	1	-	-

Note. Administrators rated the likeliness to eliminate sports on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). The factors associated with the elimination of sports are rated on a 5-point Likert ranging from 1 (not important) to 5 (very important). Only the three sports listed above were able to achieve convergence \*p < .05 level. \*\*p < .01.

*Table 7. Bivariate Correlations Between Potential Women's Sports to Add and the Factors of Addition*

	State & Regional Competition	Participation & Scholarship Numbers	Popularity in Community & Region	High School Participation Rates	Interest on Campus	Budget Constraints
Rugby	.162	-.042	.042	-.206	-.113	-.101
Softball	.380*	.029	.411*	.139	.281	-.06
Rowing/Crew	-.033	-.136	.046	-.048	-.232	-.151
Swimming	.288	-.042	.287	.126	.073	-.394*
Bowling	.102	-.039	.142	.02	-.06	-.045
Skiing	-.016	.043	.178	-.191	.017	.012
Lacrosse	.24	-.089	.259	.113	.077	-.19
Triathlon	.243	.13	.215	.092	.075	-.038
Sand Volleyball	.343*	.075	.313*	.278	.099	-.153
Handball	-.061	-.008	-.025	-.158	-.246	-.107

Note. Administrators rated the likeliness to add women's sports on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). The factors associated with the addition of women's sports are rated on a 5-point Likert ranging from 1 (not important) to 5 (very important). \* $p < .05$  level. \*\* $p < .01$ .

*Table 8. Bivariate Correlations Between Potential Women's Sports to Eliminate and the Factors of Elimination*

	Danger of Injury to Student-Athletes	Inclusion of Program in Primary Conference	Recruiting Challenges	Budgeting Challenges	Title IX Compliance Issues	Amount of Programs Competing	Facilities Challenges	Programs s Not Protected in Conference
Men's Track & Field	-0.27	-.380*	-0.108	.327*	.405*	-0.168	-0.145	-0.097
Men's Soccer	-0.407	-0.332	0.157	0.438	.589*	-0.027	0.003	0.037
Women's Golf	-0.031	0.148	-0.108	0.344	0.169	0.148	0.233	0.108
Men's Cross Country	-0.291	-.347*	-0.147	0.287	.358*	-0.187	-0.299	-0.008
Women's Gymnastics	.667*	-0.449	-0.557	0.08	-0.289	0.488	0.459	-0.447
Women's Tennis	-0.042	-0.315	0.103	0.248	.392*	0.05	0.03	-0.032
Men's Golf	-0.084	0.062	-0.024	0.284	0.231	-0.022	-0.015	-0.065
Men's Tennis	0.322	-0.035	0.221	0.056	0.087	0.11	0.089	0.019
Women's Cross Country	0.135	-0.06	0.014	0.196	0.054	0.132	0.204	-0.156
Women's Track & Field	0.119	-0.068	0.025	0.196	0.051	0.135	0.198	-0.165
Men's Gymnastics	0.69	-0.551	-0.6	0.104	-0.28	0.482	0.401	-0.513

Note. Administrators rated the likeliness to eliminate sports on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). The factors associated with the elimination of sports are rated on a 5-point Likert ranging from 1 (not important) to 5 (very important). \*p < .05 level. \*\*p < .01.

Table 9. ANOVA results comparing NCAA administrators on the likeliness of adding various women's sports

Variables	SWA (n = 20)		AD (n = 15)		Pres (n = 12)		F	p
	M	SD	M	SD	M	SD		
Rugby	1.47	1.02	1.93	1.1	1.75	0.866	0.89	0.418
Softball	2.31	1.6	3.14	2.04	1.89	1.76	1.019	0.375
Rowing	1.71	1.2	2	1.29	1.42	0.668	0.873	3426
Swimming	2.29	1.33	2.5	1.35	1.56	1.13	1.411	0.26
Bowling	1.95	1.36	3.36	1.39	2.17	1.27	4.827	.013*
Skiing	1.21	0.713	1.47	0.833	1.33	0.888	0.43	0.653
Lacrosse	2.76	1.35	2.21	1.19	1.67	0.778	3.169	0.053
Triathlon	1.95	1.03	1.71	0.825	1.5	0.798	0.909	0.411
Sand								
Volleyball	2.63	1.54	2.8	1.32	1.73	1.27	2.074	0.138
Handball	1.05	0.229	1.47	0.64	1.33	0.651	2.884	0.067

Note: SWA = Senior Woman Administrator; AD = Athletic Director; Pres = University President; M = mean, SD = standard deviation. Likeliness is rated on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). \*p < .05 level. \*\*p < .01.



Table 10. ANOVA results comparing NCAA administrators on the likeliness of eliminating various sports

Variables	SWA (n = 20)		AD (n = 15)		Pres (n = 12)		F	p
	M	SD	M	SD	M	SD		
Men's Track & Field	1.07	0.475	1.61	1.12	2.18	1.54	3.203	0.053
Men's Soccer	1.33	1.12	1.25	1.26	1.71	1.25	0.271	0.766
Women's Golf	1.1	0.316	1.73	1.19	1.25	0.622	1.788	0.185
Men's Cross Country	1.14	0.535	1.67	0.779	2.3	1.57	3.975	.028*
Women's Gymnastics	1.42	1.13	0.5	0.707	1	0	0.796	0.481
Women's Tennis	1	0.378	1.5	1.18	1.67	1.37	1.579	0.221
Men's Golf	1.27	0.594	2.3	1.25	1.42	0.996	3.956	.029*
Men's Tennis	1.67	1.07	1.82	1.17	1.4	1.46	1.165	0.326
Women's Cross Country	1.13	0.342	1.31	0.48	1.36	0.674	0.888	0.42
Women's Track & Field	1.13	0.342	1.31	0.48	1.33	0.651	0.776	0.467
Men's Gymnastics	2	1.73	0.5	0.707	1	0	0.893	0.458

Note: SWA = Senior Woman Administrator; AD = Athletic Director; Pres = University President; M = mean, SD = standard deviation. Likeliness is rated on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). \*p < .05 level. \*\*p < .01.

Table 11. ANOVA results comparing administrators in various revenue classifications on their likeliness of adding various women's sports

Variables	HR (n = 8)		AAR(n = 18)		BAR (n = 15)		LR (n=6)		F	p
	M	SD	M	SD	M	SD	M	SD		
Rugby	2.28	1.11	1.33	0.84	1.67	1.11	2.17	0.75	2.17	0.11
Softball	2.67	1.52	2.00	1.63	2.40	1.89	3.67	2.31	0.74	0.54
Rowing	1.75	0.96	1.50	1.02	1.87	1.25	1.83	1.17	0.28	0.84
Swimming	2.25	0.96	2.17	1.53	2.15	1.41	2.00	0.82	0.02	1.00
Bowling	2.88	1.13	1.67	1.24	2.53	1.36	4.20	1.30	5.79	.002**
Skiing	1.57	0.79	1.22	0.73	1.47	0.99	1.00	0.00	0.82	0.49
Lacrosse	3.00	1.00	2.25	1.34	1.93	1.27	2.33	0.82	1.22	0.31
Triathlon	2.29	0.76	1.67	0.91	1.60	0.91	1.80	1.10	1.00	0.40
Sand Volleyball	3.17	1.47	2.06	1.51	2.67	1.40	2.50	1.22	1.06	0.38
Handball	1.71	0.76	1.06	0.24	1.27	0.59	1.33	0.52	2.93	.044*

Note: HR = High Revenue; AAR = Above Average Revenue; BAR = Below Average Revenue; LR = Low Revenue; M = mean, SD = standard deviation. Likeliness is rated on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). \*p < .05 level. \*\*p < .01.

Table 12. ANOVA results comparing administrators in various revenue classifications on their likeliness of eliminating various sports

Variables	HR (n = 8)		AAR(n = 18)		BAR (n = 15)		LR (n=6)		F	p
	M	SD	M	SD	M	SD	M	SD		
Men's Track & Field	1.17	0.41	1.07	0.73	2.08	1.32	2.20	1.64	2.81	0.05
Men's Soccer	1.75	1.50	0.91	0.54	2.25	1.50	3.00	0.00	2.78	0.08
Women's Golf	1.17	0.41	1.09	0.70	1.54	0.82	1.80	1.30	1.19	0.33
Men's Cross Country	1.50	0.55	1.17	0.72	2.00	1.21	2.00	1.55	1.56	0.22
Women's Gymnastics	2.00	1.73	0.86	0.38	1.00	0.00	0.00	0.00	1.84	0.21
Women's Tennis	1.14	0.38	0.88	0.34	1.64	1.03	3.33	2.08	8.38	.000**
Men's Golf	1.14	0.38	1.36	0.75	2.08	1.24	1.75	1.50	1.80	0.17
Men's Tennis	1.83	1.33	1.25	0.62	2.09	1.30	1.25	0.62	2.97	.048*
Women's Cross Country	1.14	0.38	1.23	0.60	1.29	0.47	1.33	0.52	0.19	0.91
Women's Track & Field	1.14	0.38	1.21	0.58	1.29	0.47	1.33	0.52	0.21	0.89
Men's Gymnastics	3.50	2.12	0.83	0.41	1.00	0.00	0.00	0.00	6.13	.036*

Note: HR = High Revenue; AAR = Above Average Revenue; BAR = Below Average Revenue; LR = Low Revenue; M = mean, SD = standard deviation. Likeliness is rated on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). \*p < .05 level. \*\*p < .01.

*Table 13. ANOVA results comparing administrators in various revenue classifications on the importance of various factors in the decision making process to eliminate sports*

Variables	HR (n = 8)		AAR(n = 18)		BAR (n = 15)		LR (n=6)		F	p
	M	SD	M	SD	M	SD	M	SD		
Danger of Injury to Student-Athletes	3.43	0.79	2.93	1.21	2.57	1.28	2.67	1.37	0.86	0.47
Inclusion of Program in Primary Conference	3.14	1.46	3.57	1.34	2.64	1.15	3.17	1.60	1.13	0.35
Recruiting Challenges	3.14	1.35	3.07	1.21	2.84	1.21	3.33	0.82	0.26	0.86
Budgeting Challenges	4.43	0.79	3.33	1.54	3.64	1.39	4.17	0.41	1.41	0.26
Title IX Compliance Issues	3.17	1.17	3.47	1.30	3.93	1.21	4.17	0.41	1.12	0.36
Amount of Programs Competing	4.29	0.76	3.36	1.08	2.86	1.29	3.83	0.41	3.22	.034*
Facilities Challenges	4.14	1.21	3.47	1.41	2.93	1.44	3.67	1.37	1.29	0.29
Programs Not Protected in Conference	2.29	1.25	3.36	1.01	2.43	1.28	3.50	1.22	2.59	0.07

Note: HR = High Revenue; AAR = Above Average Revenue; BAR = Below Average Revenue; LR = Low Revenue; M = mean, SD = standard deviation. Importance is rated on a 5-point Likert scale anchored at 1 (not important) to 5 (very important). \*p < .05 level. \*\*p < .01.

*Table 14. ANOVA results comparing administrators' likeliness of adding various women's sports based upon which Title IX prong their institution is currently in compliance with*

Variables	Prong 1 (n = 24)		Prong 2 (n = 15)		Prong 3 (n = 24)		F	p
	M	SD	M	SD	M	SD		
Rugby	1.55	0.945	2.33	2.31	1.58	0.692	0.891	0.418
Softball	1.64	1.12	4.5	0.707	2.86	1.99	3.332	0.053
Rowing	1.69	0.946	3	2	1.24	0.562	5.14	.011*
Swimming	1.71	0.825	4	1.41	2.27	1.44	3.411	.047*
Bowling	2.15	1.31	3	1.83	2.34	1.46	0.62	0.543
Skiing	1.45	0.999	1.67	1.15	1.11	0.459	1.205	0.311
Lacrosse	2.33	1.19	3.75	1.26	1.83	0.985	5.008	.012*
Triathlon	1.6	0.995	2.33	1.15	1.72	0.752	0.862	0.43
Sand								
Volleyball	2.37	1.57	4	1	2.32	1.25	1.955	0.156
Handball	1.25	0.444	2	1	1.16	0.501	3.497	.040*

Note: Administrators were asked to list which Title IX prong(s) that their institution was currently in compliance with. Likeliness is rated on a 5-point Likert scale anchored at 1 (not likely) to 5 (very likely). \*p < .05 level. \*\*p < .01.

Appendix B: IRB Approval

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To: Matthew Martin, Department of Physical Education, Health and Recreation, 200 PEB

From: Sarah Keller, Chair, Institutional Review Board for Human Subjects Research

Date: May 14, 2013

Subject: Change of Protocol to *Exploring Administrative Attitudes Regarding the Determinants for the Expansion and Elimination of Intercollegiate Programs*  
HS-4142

The Institutional Review Board for Human Subjects Research has reviewed your proposal to change the protocol of HS-4142 by 1) adding a third round cover letter and questionnaire.

The committee has approved these changes. A signed, approved copy of your application is enclosed.

If you wish to continue gathering data for the study after February 12, 2014, the anniversary of your original approval, *you must file a Renewal of Approval application prior to its expiration*, otherwise the project will be closed and you would need to submit a new application for IRB review if you wish to continue the research.

If you have additional questions please contact me at 359-7039; fax 359-2474; email: skeller@ewu.edu. It would be helpful if you would refer to HS-4142 if there were further correspondence as we file everything under this number. Thank you.

cc: R.Galm  
C.Hazelbaker  
J. Kawaguchi  
Graduate Office

Appendix C: Scripted Email to Administrators

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Hello,

My name is Matthew Martin and I am a Sports Administration graduate student at Eastern Washington University. In partial fulfillment of my Master's thesis, I am currently conducting a study exploring some of the factors associated with the decisions to expand or eliminate certain sports in NCAA Division-I athletic departments. Please find time to answer the following questions to the best of your ability. Your answers will be recorded, analyzed, and compared among other administrators. For this questionnaire, all answers will remain confidential. Ultimately, your answers will help identify the most important factors that go into the decisions to add or eliminate sports in intercollegiate athletic departments.

If you have any questions regarding this study, you may contact me at [mattmartinewu@gmail.com](mailto:mattmartinewu@gmail.com), or my Responsible Project Investigator, Dr. Chadron Hazelbaker, at [chazelbaker@ewu.edu](mailto:chazelbaker@ewu.edu). If you have any concerns about your rights as a participant in this research or any complaints you wish to make, you may contact Ruth Galm, Human Protections Administrator at (509) 359-7971 ext. 6567 or at [rgalm@ewu.edu](mailto:rgalm@ewu.edu). Thank you for your time, and I truly appreciate your participation in this study.

Sincerely,

Matthew A. Martin  
PEHR Graduate Student  
Eastern Washington University

## Exploring Administrative Attitudes Regarding the Determinants for the Expansion and Elimination of Intercollegiate Athletic Programs

Hello, my name is Matthew Martin and I am a Sports Administration graduate student at Eastern Washington University. In partial fulfillment of my Master's thesis, I am currently conducting a study exploring some of the factors associated with the decisions to expand or eliminate certain sports in NCAA Division-I athletic departments. Please find time to answer the following questions to the best of your ability. Your answers will be recorded, analyzed, and consolidated with other Senior Woman Administrators' (SWA) answers in order to form a second and eventually a third survey to be sent out to larger samples of SWAs, athletic directors, and school presidents. Ultimately, your answers will help identify the most important factors that go into the decisions to add or eliminate sports in intercollegiate athletic departments.

The method for collection of data will use Google Docs, a free online survey system. For this initial questionnaire, all answers will remain confidential and no demographic information will be recorded. If you have any questions regarding this study, you may contact me at [mattmartinewu@gmail.com](mailto:mattmartinewu@gmail.com), or my Responsible Project Investigator, Dr. Chadron Hazelbaker, at [chazelbaker@ewu.edu](mailto:chazelbaker@ewu.edu). If you have any concerns about your rights as a participant in this research or any complaints you wish to make, you may contact Ruth Galm, Human Protections Administrator at (509) 359-7971 ext. 6567 or at [rgalm@ewu.edu](mailto:rgalm@ewu.edu). Thank you for your time, and I truly appreciate your participation in this study.

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### \* Required

1. Hypothetically, if your athletic program could add a women's program in the next five to ten years, which programs would you most likely choose? \*Please list three to five programs.



2. Referring to Question 1, what are three to five factors that would go into the decision making process for adding those particular programs?\*

3. Hypothetically, if your athletic program could discontinue any sports program in the next five to ten years, which programs would you most likely choose? \*Please list three to five programs.

4. Referring to Question 3, what are three to five factors that would go into the decision making process for discontinuing those particular programs?\*

5. Is your institution currently Title IX compliant? \*

- Yes
- No

6. If you answered "Yes" to Question 5, which Title IX prong(s) is your institution currently in compliance with? \*Please check all that apply

- Prong 1: Intercollegiate level participation opportunities for male and female students are provided in numbers substantially proportionate to their respective enrollments

- Prong 2: A history and continuing practice of program expansion which is demonstrably responsive to the developing interest of the underrepresented sex
- Prong 3: The interests and abilities of the members of the underrepresented sex have been fully and effectively accommodated by the present program
- None of the Above

7. Referring to Question 6, which Title IX prong does your institution feel is the most important?\*

- Prong 1: Intercollegiate level participation opportunities for male and female students are provided in numbers substantially proportionate to their respective enrollments
- Prong 2: A history and continuing practice of program expansion which is demonstrably responsive to the developing interest of the underrepresented sex
- Prong 3: The interests and abilities of the members of the underrepresented sex have been fully and effectively accommodated by the present program

Appendix E: Round II Instrument

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**1. Hypothetically, if your athletic department decided to add any women's program(s) over the next five to ten years, please rate, on a scale from Not Likely to Very Likely, the likeliness of adding each sport based upon the goals of your department.**

	Not Likely	Unlikely	Neutral	Likely	Very Likely
Bowling	1	2	3	4	5
Crew/Rowing	1	2	3	4	5
Handball	1	2	3	4	5
Lacrosse	1	2	3	4	5
Rugby	1	2	3	4	5
Sand Volleyball	1	2	3	4	5
Skiing	1	2	3	4	5
Softball	1	2	3	4	5
Swimming	1	2	3	4	5
Triathlon	1	2	3	4	5

**2. Referring to the programs you would most likely decide to add, please rate, on a scale from Not Important to Very Important, the following factors that would go into the decision making process for adding those programs.**

	Not Important	Little Importance	Neutral	Important	Very Important
Budgetary Consideration	1	2	3	4	5
High School Participation Rates	1	2	3	4	5
Participation/Scholarship Numbers	1	2	3	4	5
Popularity/Interest on Campus	1	2	3	4	5
Popularity of the Sport in the Community & Region	1	2	3	4	5
State & Regional Competition	1	2	3	4	5

**3. Hypothetically, if your athletic department made the decision to discontinue any sports program(s) over the next five to ten years, please rate, on a scale from Not Likely to Very Likely, the likeliness of discontinuing each sport based upon the goals of your department.**

	Not Likely	Unlikely	Neutral	Likely	Very Likely
Men's Cross Country	1	2	3	4	5
Women's Cross Country	1	2	3	4	5
Men's Golf	1	2	3	4	5
Women's Golf	1	2	3	4	5
Men's Gymnastics	1	2	3	4	5
Women's Gymnastics	1	2	3	4	5
Men's Soccer	1	2	3	4	5
Men's Tennis	1	2	3	4	5
Men's Track & Field	1	2	3	4	5
Women's Track & Field	1	2	3	4	5

**4. Referring to the programs you rated as most likely to discontinue, please rate, on a scale from Not Important to Very Important, the following factors that would go into the decision making process for eliminating those programs.**

	Not Important	Little Importance	Neutral	Important	Very Important
Amount of programs competing in the sport	1	2	3	4	5
Budget Constraints	1	2	3	4	5
Danger of Injury to Student-Athletes	1	2	3	4	5
Facility Challenges	1	2	3	4	5
Programs not in your primary conference	1	2	3	4	5
Programs that are not on the protected list of the conference	1	2	3	4	5
Programs that do not impact your Title IX compliance	1	2	3	4	5
Recruiting Challenges	1	2	3	4	5
Weather Challenges	1	2	3	4	5

Appendix F: Round III Instrument

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**1. Hypothetically, if your athletic department decided to add any women's program(s) over the next five to ten years, please rate, on a scale from Not Likely to Very Likely, the likeliness of adding each sport based upon the goals of your department.**

	Not Likely	Unlikely	Neutral	Likely	Very Likely
Bowling	1	2	3	4	5
Crew/Rowing	1	2	3	4	5
Handball	1	2	3	4	5
Lacrosse	1	2	3	4	5
Rugby	1	2	3	4	5
Sand Volleyball	1	2	3	4	5
Skiing	1	2	3	4	5
Softball	1	2	3	4	5
Swimming	1	2	3	4	5
Triathlon	1	2	3	4	5

**2. Referring to the programs you would most likely decide to add, please rate, on a scale from Not Important to Very Important, the following factors that would go into the decision making process for adding those programs.**

	Not Important	Little Importance	Neutral	Important	Very Important
Budgetary Consideration	1	2	3	4	5
High School Participation Rates	1	2	3	4	5
Participation/Scholarship Numbers	1	2	3	4	5
Popularity/Interest on Campus	1	2	3	4	5
Popularity of the Sport in the Community & Region	1	2	3	4	5
State & Regional Competition	1	2	3	4	5

**3. Hypothetically, if your athletic department made the decision to discontinue any sports program(s) over the next five to ten years, please rate, on a scale from Not Likely to Very Likely, the likeliness of discontinuing each sport based upon the goals of your department.**

	Not Likely	Unlikely	Neutral	Likely	Very Likely
Men's Cross Country	1	2	3	4	5
Women's Cross Country	1	2	3	4	5
Men's Golf	1	2	3	4	5
Women's Golf	1	2	3	4	5
Men's Gymnastics	1	2	3	4	5
Women's Gymnastics	1	2	3	4	5
Men's Soccer	1	2	3	4	5
Men's Tennis	1	2	3	4	5
Men's Track & Field	1	2	3	4	5
Women's Track & Field	1	2	3	4	5

**4. Referring to the programs you rated as most likely to discontinue, please rate, on a scale from Not Important to Very Important, the following factors that would go into the decision making process for eliminating those programs.**

	Not Important	Little Importance	Neutral	Important	Very Important
Amount of programs competing in the sport	1	2	3	4	5
Budget Constraints	1	2	3	4	5
Danger of Injury to Student-Athletes	1	2	3	4	5
Facility Challenges	1	2	3	4	5
Programs not in your primary conference	1	2	3	4	5
Programs that are not on the protected list of the conference	1	2	3	4	5
Programs that do not impact your Title IX compliance	1	2	3	4	5
Recruiting Challenges	1	2	3	4	5

**5. Is your institution currently in compliance with Title IX?**

Yes

No

I Don't Know

**6. Referring to Question 5, which Title IX prong(s) is your institution currently in compliance with?**

Prong 1: Intercollegiate level participation opportunities for male and female students are provided in numbers substantially proportionate to their respective enrollments

Prong 2: A history and continuing practice of program expansion which is demonstrably responsive to the developing interest of the underrepresented sex

Prong 3: The interests and abilities of the members of the underrepresented sex have been fully and effectively accommodated by the present program

Not in compliance with any of the Title IX prongs

**7. Referring to Question 6, which Title IX prong do you feel is most important?**

Prong 1: Intercollegiate level participation opportunities for male and female students are provided in numbers substantially proportionate to their respective enrollments

Prong 2: A history and continuing practice of program expansion which is demonstrably responsive to the developing interest of the underrepresented sex

Prong 3: The interests and abilities of the members of the underrepresented sex have been fully and effectively accommodated by the present program

## Vita

## Author:

Matthew A. Martin

## Birthplace:

Bellingham, WA

## Undergraduate Schools Attended:

*Eastern Washington University, Cheney, WA*  
Bachelor of Arts, Business Administration – Finance, 2011  
Bachelor of Arts, Communication Studies, 2011

## Honors and Awards:

Graduate Assistantship, Physical Education, Health & Recreation Department  
Eastern Washington University, 2011-2013

FCS Athletic Director's Association Academic All-Star Team Selection, 2010-2011

Eastern Washington University Scholar-Athlete of the Year, 2010-2011

Big Sky Conference Scholar-Athlete Award, 2010-2011

Graduated Magna Cum Laude, Eastern Washington University: 2011

## Professional Experience:

External Operations Assistant – Athletic Department, Eastern Washington University,  
Cheney, WA: 2012-2013

EWU Football Assistant Coach – Eastern Washington University, Cheney, WA: 2011

Business Operations Assistant – Athletic Department, Eastern Washington University,  
Cheney, WA: 2010-2012