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Coaches’ Perceptions on the Sustainability of Select Nonrevenue, Olympic Ncaa Sports as Viewed Through Stakeholder Theory

Dean M. Ekeren

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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

COACHES’ PERCEPTIONS ON THE SUSTAINABILITY OF SELECT NONREVENUE, OLYMPIC NCAA SPORTS AS VIEWED THROUGH STAKEHOLDER THEORY

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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This Dissertation by: Dean M. Ekeren

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has been approved as meeting the requirement for the Degree of Doctor of Philosophy in College of Health and Human Sciences in School of Sport and Exercise Science, Program of Sport Administration

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ABSTRACT


In recent years, increasing revenues to the top NCAA athletic programs has accelerated an athletic “arms race” among universities, where coach salaries escalate, new facilities are built, existing facilities undergo massive renovations, and amenities and services are added for athletes, all to attract top recruits and new donors. Although sponsors and broadcast deals provide huge sources of revenue to these institutions, the majority of athletic departments rely on subsidies from the university to meet the increasing demands required to remain competitively relevant. Many stakeholder groups of intercollegiate athletics are becoming increasingly concerned that the financial pressures associated with sustaining the “marquee” athletic programs will threaten the existence of the nonrevenue, Olympic sports in the NCAA program.

This study utilized a survey sent to all men’s NCAA gymnastics, swimming and wrestling coaches in the fall of 2016 to examine their perceptions on the sustainability and value of their sport, given the increasing impact of commercialism in intercollegiate athletics. A total of 192 responses were received from a population of 687, resulting in a 28% response rate. To analyze coaches’ perceptions, an exploratory factor analysis was conducted on the data, and three factors were extracted accounting for 31.15% of the total
variance. Results suggested that coaches at the NCAA Division I level are concerned about the future of their sport within the NCAA program, although they were less inclined to believe their own program was in jeopardy. These coaches also felt that increased collaboration between the NCAA and the USOC was necessary to sustain these programs and ensure continued Olympic and international success. All respondents indicated that nonrevenue Olympic sports provided value to their institutions.

Although institutional isomorphism exists among similar universities, it appears from the data that coaches’ perceptions vary based on their specific situations, and therefore coaches of nonrevenue, Olympic NCAA sports must understand and manage the unique needs of their stakeholder groups in order to ensure the sustainability of their programs.
DEDICATION

This project is dedicated to the two most intelligent, beautiful, and influential people in my life. My mother, a professional educator, who always thought I could achieve more and first encouraged me to pursue my doctorate many years ago... although she did not see this day, she continues to be with me throughout my journey. And to my wife, who has made me a much better person than I ever could have been without her... she, along with our children, have sacrificed far greater than I in pursuit of this degree… it doesn’t mean anything without them.
# TABLE OF CONTENTS

## CHAPTER

<table>
<thead>
<tr>
<th>I. INTRODUCTION</th>
<th>………………………………………………</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of the Problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Questions and Hypotheses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limitations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delimitations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition of Terms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. REVIEW OF LITERATURE</th>
<th>…………………………………….</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercialism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athletic Arms Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At Risk Sports in Intercollegiate Athletics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Collegiate Athletics Association (NCAA) Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder Theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurement of Stakeholder Perceptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. METHODOLOGY</th>
<th>………………………………………………</th>
<th>64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restatement of the Research Questions and Hypotheses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilot Study</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. RESULTS</th>
<th>………………………………………………</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey Response Rates and Demographics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey Item Responses for Sections 1 and 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploratory Factor Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysis of Variance (ANOVA) on Latent Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey Item Responses for Section 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Descriptive Data and Analysis of Variance (ANOVA) on Program Values
Additional Data Analysis
Summary

V. DISCUSSION ................................................................. 111

Purpose and Research Questions
Review of Findings
Conclusions
Recommendations

REFERENCES ........................................................................... 118

APPENDICES ............................................................................. 140

A. PILOT STUDY CONSENT LETTER AND SURVEY 140
B. PILOT STUDY SURVEY 142
C. CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH 152
D. RESPONSES TO OPEN-ENDED SURVEY ITEMS 154
E. SURVEY INSTRUMENT 162
F. INTRODUCTORY LETTER AND FOLLOW-UP 175
G. INSTITUTIONAL REVIEW BOARD APPROVAL 178
LIST OF TABLES

Table

2.1 Maximum National Collegiate Athletic Association (NCAA) D-I Scholarships Allowed by Sport (2013) 31

3.1 Cumulative National Collegiate Athletic Association (NCAA) Division I, II, and III Administrators’ Responses to Olympic Program Values as Compiled by Cooper and Weight 70

3.2 Coaches’ Responses to Pilot Study Survey Items 75

3.3 Pilot Study Factors and Items Identified from Exploratory Factor Analysis (Promax Rotation) 76

3.4 Correlation among Pilot Study Factors 77

3.5 Pilot Study Reliability Measures 77

3.6 Pilot Study Coaches’ Additional Thoughts on the Future of Olympic Sports within the National Collegiate Athletic Association (NCAA) 78

4.1 Demographics of Survey Respondents 83

4.2 Coaches’ Perceptions on the Sustainability of Select Nonrevenue, National Collegiate Athletic Association (NCAA) Olympic Sports 85

4.3 Coaches’ Perceptions on the Influence of National Collegiate Athletic Association (NCAA) participation on United States Olympic and International Success 86

4.4 Three-Factor Principal Axis Factoring Matrix with Varimax Rotation and Kaiser Normalization 90

4.5 Component Means for Each Identified Factor 91

4.6 Reliability Measures on Each Factor 92
4.7 Perceptions on the Future (POF) Factor Item Means by National Collegiate Athletic Association (NCAA) Division

4.8 Tukey’s Post Hoc Tests for the Perceptions on the Future (POF) Factor

4.9 Perceptions on Success (POS) Factor Item Means by National Collegiate Athletic Association (NCAA) Division

4.10 Tukey’s Post Hoc Tests for Perceptions on the Success (POS) Factor

4.11 Perceptions on Interdependence (POI) Factor Item Means by NCAA Division

4.12 Tukey’s Post Hoc Tests for the Perceptions on Interdependence (POI) Factor

4.13 Cumulative National Collegiate Athletic Association (NCAA) Division I, II, and III Responses to Olympic Program Values

4.14 National Collegiate Athletic Association (NCAA) Divisional Responses on Olympic Program Values

4.15 Division I Coaches’ Perceptions on Select Survey Items

4.16 Gymnastics, Swimming, and Wrestling Coaches’ Perceptions on Select Survey Items
CHAPTER I
INTRODUCTION

In August of 2014, the Board of Directors of the National Collegiate Athletic Association (NCAA) Division I schools voted to allow greater autonomy to the five wealthiest athletic conferences: the Atlantic Coast, Big Ten, Big 12, Pacific 12, and Southeastern Conferences, collectively referred to as the “Power Five”. These conferences lobbied for the ability to offer athletes increased incentives such as enhanced meal plans, cash stipends, long-term insurance coverages, and scholarships that guarantee full undergraduate and possibly graduate education (Smith, 2014). Forde (2015) commented that the priority for these incentives was meant to improve recruiting enticements primarily for football and men’s basketball programs, or the so-called “revenue-generating” sports. Duffy (2014) explained that future participants in these programs will be somewhere between “student-athletes” and “employees” of the university they represent. With this newfound autonomy the future of college sports may be going through a reformation that could have unintended consequences for many institutions and student-athletes (Tracy, 2014).

There has been much evidence to suggest that increased revenues create an athletic “arms race” among universities, where coach salaries escalate, new facilities are built, existing facilities undergo massive renovations, and other amenities are added for athletes, all to attract top recruits and new donors (Frank, 2004; Hoffer, Humphreys, Lacombe, & Ruseki, 2014). Sanderson and Siegfried (2015) claimed that revenues of the
highest profile teams force an increase in expenses for all teams, “requiring universities with already unprofitable intercollegiate athletics programs to increase their subsidies” (p. 122) to remain competitive and relevant.

Although a few athletic programs generate a financial surplus and transfer funds back to the university, the much more common scenario is that funds are transferred from the university general fund to subsidize its intercollegiate athletic programs (Exner, 2015; Snyder, 2015). In 2013 over $1 billion in student fees was transferred from student tuition and fees to corresponding athletic departments (Berkowitz, Upton, & Brady, 2013). In 2014, the average NCAA Division I Football Bowl Subdivision (FBS) athletic department had an annual budget of $60 million per year, but still received subsidies of about $1,000 per university student each year (Sanderson & Siegfried, 2015). Van Rheenen et al. (2011) discussed how Division I schools continue to disproportionately spend money on football and men’s basketball in a never-ending attempt to make and keep their programs relevant. They quoted a University of California, Berkeley rugby student-athlete as saying:

Football is an over-bloated, cancerous sham all across the NCAA and it’s hurting other students and athletes… Cal football is the elephant in the room. They make the most money, they spend the most money. Just because they create revenue does not entitle them a carte blanche to blithely waste and destroy material and cultural wealth. (p. 160)

This self-perpetuating spending model may be difficult to maintain, as students and faculty increasingly call for accountability (Cheslock & Knight, 2015).

There are additional concerns with this newfound, Power Five autonomy. Tracy (2014) claimed the future of college sports may go through a reformation that could have unintended consequences for many institutions and student-athletes. As NCAA President
Mark Emmert (2014) stated, “The costs required to pay for these benefits, from food to cost-of-attendance stipends and the like, could lead some athletic departments to cut non-revenue sports”. U.S. Olympic committee CEO Scott Blackmun, was also worried about future of U.S. Olympic success if these sports are eliminated from the NCAA program (Auerbach, 2014). Many FBS schools will be forced to decide whether to focus on one or two high-profile sports, or prioritize expenses in an attempt to maintain as many sport programs as possible (Auerbach, 2014). There is also a concern that additional funding of NCAA Division I men’s basketball and FBS football programs will require equivalent increases in women’s programs in order to remain compliant with Title IX of the education amendments of 1972 (Boyle, 2016). Title IX is a federal law that mandates “substantial equity” between men’s and women’s sports at any institution that receives federal funds such as student financial aid. Faced with this concern, it is conceivable that many schools may find it easier to eliminate some men’s programs for the sake of Title IX compliance. Boyle (2016) noted this concern, and found that “case law has supported the removal of men’s sports, and that men’s swimming and wrestling are among the highest rate of teams to be cut” (p. 33). Smith and Fischer (2016) agreed when they discussed the gradual decline of sports such as gymnastics, swimming and wrestling.

Since the earliest days of intercollegiate athletics there has been concern regarding the impact commercialism has on the values of higher education (Benford, 2007), and although concern continues to exist for the future of Olympic sports (Blackman, 2015; Duffy, 2014; Emmert, 2014; Forde, 2015), there has been little data to support an argument for changes that might ensure the sustainability of Olympic sports within the NCAA program. This paper examined the subsequent financial and
organizational effects of this commercialization on the various constituents of college athletics, and how stakeholder theory can be applied in the development of reform efforts. As commercial interests continue to dominate the culture of many university programs and the threat of program elimination becomes increasingly evident, understanding how stakeholder theory can help with reform efforts becomes important.

**Statement of the Problem**

Recent legislative changes within the NCAA have allowed greater autonomy for the wealthiest athletic programs to increase spending on athletes, thereby intensifying the athletic arms race. Many stakeholders have expressed concern over the increasing commercialism in college sports and the future of nonrevenue, Olympic sports in the NCAA program (Blackman, 2015; Duffy, 2014; Emmert, 2014; Forde, 2015). Still, there appears to be a dearth of research that might support an argument for changes to help ensure a sustainable presence for these sports within the NCAA program.

The purpose of this study was to examine the perceptions of select nonrevenue, NCAA Olympic coaches, as fundamental stakeholders within university athletics, on the sustainability of their sport within the NCAA given the increasing impact of commercialism in intercollegiate athletics. Second, coaches’ perceptions on the influence that NCAA participation has on U.S. Olympic and international success was analyzed to better understand the vested interest of the United States Olympic Committee as a stakeholder in NCAA sports. Finally, coaches’ perceptions of the cultural and societal values that select NCAA Olympic sports provide were analyzed and compared with administrator’s perceptions of those values as compiled by Cooper and Weight’s “NCAA Program Value Scale” (Cooper & Weight, 2011). For the purposes of this study,
“nonrevenue, Olympic sports” was defined as any Olympic sport within the NCAA program except football and men’s basketball. Perception scores on a six-point Likert scale were compared between sports and between NCAA divisions.

R. Edward Freeman’s Stakeholder Theory was relevant to this discussion, as it asks the fundamental questions of “what is the purpose of the organization” (i.e. school/athletic program), and “what responsibility does the organization have to stakeholders” (Freeman, 1984). Scholars have long argued that the primary mission of higher education revolves around teaching, research, and service (Perkins, 1966), and the role of universities is based on knowledge acquisition and dissemination with students serving as the primary stakeholders of the community, yet the mainstream media appears to put much greater emphasis on college athletic issues than scholarly achievements. This duality of interest creates distorted priorities and power struggles among higher education stakeholder groups when trying to affect change. Although true stakeholder theorists feel that all constituents groups should be involved in the decision-making process (Collins, 1994; Hummels, 1998; Jones & Wicks, 1999), the reality in intercollegiate athletics shows the groups who possess power, legitimacy, and urgency as described by Lewis (2007) are often better suited to bring about change.

This research examined NCAA men’s swimming, gymnastics, and wrestling coaches’ perceptions as primary stakeholders of these programs, and documented their perceptions on the sustainability of these nonrevenue, Olympic sports in the NCAA, and identified program values that best coincide with those of their administrators. These coaches need to understand the program attributes their administrators’ value from Olympic sports, and take an entrepreneurial role in managing the expectations of these
important stakeholders to have the best chance of securing sustainability for their programs. The knowledge gained from the coaches will help ensure that this fundamental stakeholder group can collectively emphasize the appropriate values their sport brings to their department and their university.

**Research Questions and Hypotheses**

The following research questions and hypotheses will serve to guide the completion of this study:

- **Q 1** Do select, nonrevenue, NCAA Olympic coaches believe the future of their programs to be in jeopardy within the NCAA program?
- **H 1.1** Coaches of nonrevenue, NCAA Olympic sports perceive the future of their programs to be in jeopardy within the NCAA program.
- **H 1.2** Coaches of nonrevenue, NCAA Olympic sports at the Division I level view the future of their sport to be in greater jeopardy than coaches in Divisions II and III.
- **Q 2** Do nonrevenue, NCAA Olympic coaches believe their program provides value to U.S. Olympic and international competitive success?
- **H 2.1** Coaches of nonrevenue, NCAA Olympic sports believe their programs provide value to U.S. Olympic and international competitive success.
- **H 2.2** There are variations in the perceptions of nonrevenue, NCAA Olympic coaches as to the value their program provides to Olympic and international competitive success when focusing on the divisional affiliation (Division I, Division II, Division III) of the athletic department being examined.
- **Q 3** What program values do nonrevenue, NCAA Olympic coaches believe to be the most important to their administrators?
- **H 3.1** Coaches of nonrevenue, NCAA Olympic sports share the same values as their administrators.
- **H 3.2** There are variations in the nonrevenue, NCAA Olympic program values that coaches believe are most important to their administrators when focusing on the divisional affiliation (Division I, Division II, Division III) of the athletic department being examined.
Purpose of the Study

The purpose of this study was threefold: 1) to collect data on select coaches’ perceptions of the sustainability of their sport within their institution and within the NCAA program and to develop an instrument to quantify those perceptions; 2) to collect data on select coaches’ perceptions of the value of their program in contributing to U.S. Olympic and international competitive success; and 3) to collect data on select coaches’ perceptions of the values their program brings to their university and compare those perceptions with those of athletic administrators as compiled by Cooper and Weight (2011). In obtaining this knowledge, coaches may be able to emphasize values their program contributes to their department, their university, and society in general, and better align their goals with those of their administrators.

Delimitations

This study involved measuring the perceptions of NCAA nonrevenue, Olympic coaches toward the sustainability of their sport and other nonrevenue, Olympic sports within the NCAA program. Delimitations relate to the generalizability of the research findings, and for this study included a unique sample group of internal stakeholders with a vested interest in the sustainability of their specific sport, among a much larger population of stakeholders each with unique concerns and interests. Respondents in this study were head coaches of NCAA (Divisions I, II, and III) gymnastics (population [n] = 15, 0, 1), swimming (population [n] = 135, 74, 247), and wrestling (population [n] = 73, 60, 93) programs, and results only reflected the perceptions of the individuals who chose to respond to the survey. Although the data provides an overview of coaches’ perceptions, it can be expected that results differ among schools with varying
characteristics, and thus findings cannot be inferred on schools or sports not represented by these specific programs. As NCAA rules and university funding issues are dynamic, the data can only be valid at the time of collection.

**Limitations**

Limitations refer to concerns related to the research design (Locke, Spirduso, & Silverman, 1987), and are numerous with any study involving survey data collection. As this was solely an online survey, some people may have not responded due to the fact they are unfamiliar and/or untrusting of electronic data collection. It can be assumed that a significant percentage of non-respondents may have had a critical influence on the sample and the generalization of the findings. The timing of the survey may have also played a role in nonresponse bias, as certain coaches may have had less available time to respond based on specific competitive seasons. Finally, given the nature of survey methodology, there are concerns inherent with self-reporting data collection, as complete trust is given to respondents to complete the survey accurately and honestly. Although some respondents may not feel any urgency to the topic, the researcher assumes that participants responded accurately and in accordance with their true beliefs, feelings, and experiences.

**Definition of Terms**

*Athletic Arms Race*: The phenomena created by increasing revenues among university athletic programs, where coach salaries escalate, new facilities are built, existing facilities undergo massive renovations, and other amenities are added for athletes, all to attract top recruits and new donors (Hoffer et al., 2014).
Coaches: Employees of an athletic department who are empowered with balancing the athletic expectations of their specific programs with the academic rigors of their student-athletes (Harrison, 2004). For this study, coaches’ insights into the commercial aspects of college sports is of particular interest.

Commercialization: An athletic department’s relationships with commercial entities as a means of increasing revenues to subsidize the activities of the athletic department (Zimbalist, 1999).

Division I: An athletic division within the NCAA whereby member institutions must meet minimum requirements in sport sponsorship, athletic scholarships, participant numbers, and competitions, as well as scheduling criteria for each sport. For the purposes of this study, it can be distinguished from NCAA Divisions II and III as having revenue-generation as a primary objective of its athletic programs (Harrison, 2004).

Football Bowl Subdivision (FBS): Those NCAA Division I football programs that compete for the National Championship through the post-season College Football Playoff.

National Governing Body (NGB): An NGB is an organization that governs a specific sport in the country in which it exists, within the regulations of the USOC (Wonders, 2003).

National Governing Bodies (NGBs): Two or more national governing bodies.

NCAA: The National Collegiate Athletic Association, a non-profit organization through which the nation’s colleges and universities speak and act on athletic matters at the national level, with the purpose of maintaining intercollegiate athletics as an integral
part of the educational program, and promoting athlete as an integral part of the student body (NCAA, 2003).

"Nonrevenue, Olympic Sports": For the purposes of this study, "nonrevenue, Olympic sports" is defined as any Olympic sport within the NCAA program except football and men's basketball.

“Power Five”: The Atlantic Coast, Big Ten, Big 12, Pacific 12, and Southeastern Athletic Conferences (New, 2014).

*Stake:* Something of value, some form of capital, human, physical or financial, that is at risk, either voluntarily or involuntarily (Clarkson, 1995).

*Stakeholder:* Those persons or groups or interests that have a stake, or something to gain or lose as a result of its activities (Clarkson, 1995)

*Student-Athletes:* Individuals who participate in a variety of sports within the university and who comprise the fundamental unit of the athletic department (Harrison, 2004).

*United States Olympic Committee (USOC):* Established by Congress through the Amateur Sports Act of 1978, is the sole authority within the United States for supervision and development of sports contested in the Olympic and Pan American Games (Wonders, 2003).
CHAPTER II
REVIEW OF LITERATURE

The National Collegiate Athletic Association (NCAA) had its origins in 1906 as a result of President Roosevelt’s request for reformation of college football rules after players sustained numerous injuries in the preceding years. The combined efforts of college leaders and the federal government led to the formation of the Intercollegiate Athletic Association (IAA), the precursor of the NCAA. Prior to the formation of the IAA, college football struggled with many of the same issues it sees today, although its role and the original role of the NCAA was limited to the development and enforcement of rules. By the 1920’s, athletics was becoming increasingly integral to higher education, and the NCAA became more involved in the governance of college sports (Smith, 2000).

In recent years, increasing revenues to the top NCAA member athletic programs, along with escalating coaches’ salaries and facility upgrades have caused many student-athletes to question NCAA limitations on their own financial benefits (Sanderson & Siegfried, 2015). Most of these concerns have been raised by athletes from the 126 Football Bowl Subdivision (FBS) of the NCAA Division I schools. The FBS is comprised of many of the largest schools in the country, whose football programs are eligible to play in lucrative, end-of-season bowl games that are used to determine the season’s national champion.

In August of 2014, the Board of Directors of the National Collegiate Athletic Association (NCAA) Division I schools voted to allow greater autonomy to the five
wealthiest athletic conferences: the Atlantic Coast, Big Ten, Big 12, Pacific 12, and Southeastern Conferences, collectively referred to as the “Power Five” (New, 2014). These conferences lobbied for the ability to offer athletes increased incentives such as enhanced meal plans, cash stipends, long-term insurance coverage, and scholarships that guarantee full undergraduate and possibly graduate education (Smith, 2014). Forde (2015) pointed out that the priority for these incentives was meant to improve recruiting enticements primarily for football and men’s basketball programs, or the so-called “revenue-generating” sports. Duffy (2014) explained that future participants in these programs will be somewhere between “student-athletes” and “employees” of the university they represent. NCAA President Mark Emmert supported the decision, stating:

I am immensely proud of the work done by the membership. The new governance model represents a compromise on all sides that will better serve our members and, most importantly, our student-athletes. These changes will help all our schools better support the young people who come to college to play sports while earning a degree. (NCAA, 2014)

With this newfound autonomy the future of college sports may be going through a reformation that could have unintended consequences for many institutions and student-athletes (Tracy, 2014).

Included in the new legislation was a governance structure that provides a “weighted” voting procedure that skews in favor of the Power 5 conferences within the Division I FBS schools, and ensures that the 65 schools from these conferences will maintain control over decisions impacting themselves as well as the 300 other Division I institutions (New, 2014)

There has long been a spending disparity between schools in the Power Five conferences and other institutions in the Football Bowl Series (FBS) schools. According
to the Knight Commission on Intercollegiate Athletics, Mid-American Conference spent $50,000 per athlete during 2013, while the South Eastern Conference (SEC) spent approximately $180,000 per athlete (Knight Commission on Intercollegiate Athletics, 2014). Much of this disparity in income and expenses originated from unprecedented broadcast expansion within the Power Five conferences, and resulted in massive television rights fees. The first year of the four-team football playoff system, along with four affiliated bowl games garnered $650 million from ESPN alone (Sanderson & Siegfried, 2015). Forde (2015) argued that the new NCAA initiatives would result in major financial windfalls for many athletes in the revenue-producing, or “glamour sports”, and estimated that an additional $2 million to $3 million per year would be required for schools to cover costs associate with the new athlete incentives.

Even with the massive income generated by NCAA Division I football programs, only 20 of the 126 FBS athletic departments operated at a financial surplus in 2013 (Fulks, 2014). Among these schools were Ohio State, Alabama, Michigan and The University of Texas (UT) (Casagrande, 2015; Exner, 2015; Kirk, 2014; Snyder, 2015). In 2013, UT ended the year with a $20 million operating surplus, however such excess does not necessarily translate into funds being returned to the university. As former UT Head Football Coach Mack Brown said, “I think when we make it, we have a right to spend it. That’s the way America is” (Cheslock & Knight, 2015).

The much more common scenario, however, is that funds are transferred from the university general fund to support intercollegiate athletic programs. In 2014, the average FBS athletic department had an annual budget of $60 million per year, and received subsidies of about $1,000 per student from its respective university (Sanderson &
USA Today reported that in 2013, over $1 billion in student fees were transferred from student tuition and fees to corresponding athletic departments (Berkowitz et al., 2013).

University presidents have been able to justify this subsidization of athletics because of the belief that high-profile athletic programs increase enrollment numbers. They point to North Carolina State University, which witnessed a 40% increase in university applications after the men’s basketball team won the national championships in 1983. Similar success was seen at Boston College in the year following their 1984 victory over Miami on national television (Sanderson & Siegfried, 2015). A study by Pope and Pope (2009) confirmed that athletic success indeed generates additional interest in the university, however they found that true gains were modest. And yet another study concluded that there is no evidence at all that intercollegiate athletics increases enrollments (Getz & Siegfried, 2012).

Another argument often cited in attempts to build or maintain a successful athletic program is increased donations to the university (Gaski & Etzel, 1984; Sigelman & Carter, 1979; Stinson & Howard, 2004). Humphreys and Mondello (2007) looked at donations to schools with NCAA Division I basketball and football programs over the course of twenty years (1976-96) and tracked donations following successful athletic seasons. They found that although donations did parallel athletic success, virtually all of the donations were restricted to the athletic programs, while academic units within the school typically did not benefit.

There has been much evidence to suggest that increased revenues create an athletic “arms race” among universities, where coach salaries escalate, new facilities are
built, existing facilities undergo massive renovations, and other amenities are added for athletes, all to attract top recruits and new donors (Frank, 2004; Hoffer et al., 2014). Sanderson and Siegfried (2015) claimed that revenues of the highest profile teams force an increase in expenses for all teams, “requiring universities with already unprofitable intercollegiate athletics programs to increase their subsidies” to remain competitive and relevant.

As NCAA President Mark Emmert (2014) pointed out, “The costs required to pay for these benefits, from food to cost-of-attendance stipends and the like, could lead some athletic departments to cut non-revenue sports.” Many FBS schools will be forced to decide whether to focus on one or two high-profile sports, or prioritize expenses in an attempt to maintain as many sport programs as possible (Auerbach, 2014). There is also a concern that additional funding of NCAA division I men’s basketball and FBS football programs will require equivalent increases in women’s programs in order to remain compliant with Title IX of the education amendments of 1972 (Boyle, 2016). Title IX is a federal law that mandates “substantial equity” between men’s and women’s sports at any institution that receives federal funds such as student financial aid. Faced with this concern, it is conceivable that many schools may find it easier to eliminate some men’s programs for the sake of Title IX compliancy. Boyle (2016) noted this concern, and found that “case law has supported the removal of men’s sports, and that men’s swimming and wrestling are among the highest rate of teams to be cut” (p. 33).

Since the earliest days of intercollegiate athletics there has been concern regarding the impact commercialism has had on the values of higher education (Benford, 2007). This paper will examine the subsequent financial and organizational effects of
this commercialization on the various constituents of college athletics, and how stakeholder theory may be applied in the development of reform efforts. As commercial interests continue to dominate the culture of many university programs and the threat of program elimination becomes increasingly evident, understanding how stakeholder theory can help with reform efforts becomes important.

**Commercialism**

Commercialism is defined as the practices, methods, aims, and spirit of commerce or business; an attitude that emphasizes tangible profit or success; and an excessive emphasis on profit (Zimbalist, 1999, pp. 165-167). Benford (2007) contends that evidence of increasing commercialism in college sports includes advertising throughout college venues, institutional images, licensing deals with apparel companies and producers of various trinkets, predatory behavior of sports agents, media sensationalism, celebrity status of athletes and coaches, and the pressure to schedule events to fill schedules sports networks. According to a report released in 2009 by the Congressional Budget Office, some of the largest college sports programs derive 60 to 80 percent of their revenue from commercial sources (Wolverton, 2009).

Commercialism dates back to the earliest days of intercollegiate competition (Benford, 2007). By 1883, the first reform efforts were being organized by the Athletic Committee at Harvard University where resolutions were drafted to limit college sports to amateurs and to contain commercialism. After distributing the proposal to 21 eastern institutions, these reforms, like most attempts since that time, failed to gain widespread approval (Craughron, 2001). To address the issues of commercialism in college sports, and its impact on the integrity of education, Harvard began reform efforts, with numerous
commissions established by faculty associations, administrators, official intercollegiate
sports organizations, and private foundations (Benford, 2007). One early report was
issued by the Carnegie Foundation in 1929, and indicates how little the influences of
commercialism have changed since the earliest days of intercollegiate athletics:

College football is not a student’s game as it once was. It is a highly organized
commercial enterprise. The athletes who take part in it have come up through
years of training; they are commanded by professional coaches; little if any
initiative of ordinary play is left to the player. The great matches are highly
profitable enterprises. (Savage, 1929)

Commercialization within college sport appears to increasing over time, and may have
crossed a subjective line of appropriateness within institutions of higher education.

Athletic programs continue to increase revenues as they have recently lengthened football
schedules and increased the post-season men’s basketball tournament field from 65 to 68
to generate additional revenue through commercial broadcasts (Schneider, 2010). The
influence of commercialism in college sports can be exemplified by the payouts from the
first year of the four-team football playoff system in 2015 along with four affiliated bowl
games, which together garnered $650 million from ESPN alone (Sanderson & Siegfried,
2015). Smith (2014) argued that college sports has become “big business”, and points to
the NCAA’s 14-year, $11 billion contract with CBS for the NCAA Men’s Basketball
Tournament, and ESPN’s $470 million per year agreement for the new college football
playoffs. The “Big Five” conferences (ACC, Big Ten, Big 12, Pac-12, and SEC)
collected a combined $311 in 2014 for performances in bowl games and the NCAA
Tournament. These same conferences collected an additional combined $1.1 billion from
their respective television network partners (Smith, 2014).
In addition to the massive broadcast payouts, apparel companies have also contributed to the list of influential stakeholder groups within college athletics. In many cases, multi-million dollar apparel contracts provide the primary source of compensation for coaches in exchange for exclusivity in outfitting of athletes.

Sack (2009) examined the debate over the impact of commercialism in college sports that began in the latter part of the nineteenth century, and points to a number of scholars who have studied reform initiatives since that time (e.g. Benford, 2007; Craughron, 2001; Gerdy, 2006). He claimed that even the earliest reformers viewed commercialism in college sports as a threat to academic integrity and values, although most were supportive of maintaining athletics as an integral part of academic life. He detailed three contrasting conceptual models to explain how individuals view the role of commercialism in college sport, and the increasing role that stakeholders such as athletes themselves are playing in reform efforts.

- Intellectual Elitists believe that commercialized athletics has a negative effect on higher education, in that it allows television ratings to take priority over academic values. These individuals feel that commercialistic endeavors result in recruiting of athletes with low academic credentials and proliferation of a culture that allows cheating and coursework with little academic substance. Further, they argue that allowing coaches rather than professors control over financial aid, allows them to set the academic priorities for their athletes.

- Academic Capitalists take an approach that emphasizes the importance of “the bottom line”. Former NCAA Miles Brand endorsed this model, as he felt that commercialism was a positive influence, as long as athletic activities were
aligned with the values, mission, and goals of higher education. Individuals who support this concept believe athletic scholarships are awards that help athletes further their education, contributing to campus diversity and enhanced opportunities for minorities and women. According to Brand (2006) “college athletics promote ‘real-life’ lessons in leadership, hard work, self-discipline, teamwork, self-sacrifice, and striving for excellence”.

- Athlete Rights proponents argue that collegiate sport as commercial entertainment is part of the higher education institution, and athletic scholarships should be viewed as employment contracts that include payment for players. These people believe the NCAA supports free enterprise for everyone involved in college athletics except the athletes.

Sack goes on to claim that commercialism in college sports will continue to face scrutiny as administrators are held accountable for increasing expenses and declining academic values (Sack, 2009).

The conceptual models developed by Sack provide an indication of the difficulties faced by potential reformers of commercialism in college athletics and how various stakeholders view the effects of commercialism differently. Consequently, the reasons for the failure to reign-in commercialism are numerous. Gerdy (2006) blamed the runaway culture of commercialism on the specific failures of repeated reform efforts, while Sperber (1990) and Zimbalist (1999) pointed to the increasing economic needs of the athletic departments, and Duderstadt (2003) and Craughron (2001) placed the blame on the failures of university administrators. Benford (2007) pointed out that the sheer number of organizational stakeholders involved in college athletics makes reform very
complicated. He found no fewer than 22 reform reports published by at least nine different organizations since the original Harvard attempt. He stated, “Sports reformers have found it difficult to overcome, let alone constrain, the deleterious influences of the free market on academe’s ivy walls” (Benford, 2007).

Numerous individuals have argued that the temptations of revenue generation can cause unethical practices such as illegally paying recruits, illegally helping athletes pass tests, and maintaining athlete eligibility through inferior academic curricula (Benford, 2007; Kessler, 2004; Zimbalist, 1999). Further, Malec (2007) pointed out that increased commercialism in college athletics has created a divide between athletics and the academic components of their institutions in a variety of ways including but not limited to: coaches’ salaries, unregulated sponsorships contracts, competition for corporate dollars, market exposure vocabulary, centering the college experience on sports, and not enforcing graduation guidelines for athletes. This imbalance in funding certainly creates conflict within the university community. James Duderstadt, the former president of the University of Michigan, pointed out the irony that coaches are the only members of the university allowed to profit off the name and reputation of the institution (Duderstadt, 2003, p. 157). Friday and Hesburgh made a similar comment in the 1993 Knight Commission Report, when they stated how “Coaches are selling something they don’t own, the university’s name and image” (Friday & Hesburgh, 1993, p. 6). In addition to coaches profiting from their positions within the university, professional sport associations also exploit intercollegiate programs to their financial benefit. Zimbalist (1999) explained how the National Football League (NFL) and National Basketball
Association (NBA) use college programs essentially as their minor league, development programs, but contribute nothing in return (p. 197).

Yet another aspect of commercialism has become evident, as college athletics has become increasingly entrenched in the entertainment industry. As technology continues to improve sport delivery, new markets are exposed and commercial value increases. Duderstadt (2003) claimed this enhanced exposure came at a substantial cost to the academic integrity of the university. He also spoke of the difficulties university presidents face in balancing the public’s demand for high quality college sport programs with the equally difficult need to maintain traditional university academic ideals. As former NCAA President Miles Brand pointed out in his 2009 State of the Association address, commercialism can subvert the academic mission and values of institutions (Brand, 2009). Despite this statement, Brand used the same opportunity to advocate for increased commercialism in college sports, as he claimed commercialism actually benefited the university through increased application rates and improved university moral. He used Aristotle’s doctrine of the Golden Mean to explain how “college sport dominated by commercialism would operate under the influences of the commercial entities funding it; whereas college sport void of commercialism would be free to operate in a manner of its choosing but only if from a financial standpoint it could afford to operate” (Brand, 2009). Schneider (2010) concurred when he stated, “the NCAA needs to be careful to guard against extreme commercialism if it wishes to protect the integrity of its product”. Conversely, he pointed to the “whiskey analogy” to explain how a complete ban or “prohibition” on the commercialization of college sports would create an outcry from the community and potentially damage the entire enterprise.
As Noble (2004) commented, many of the issues with commercialism in intercollegiate athletics are focused on the NCAA Division I level, while programs within Division III are not typically held to the same athletic expectations and student-athletes are more representative of the student body (Richards & Aries, 1999). But Draper (1996) described how many of the problems typically associated with big-time athletic programs such as commercialism and selective admissions are now surfacing within Division III programs.

**Athletic Arms Race**

There is evidence to show that increased expenditures on sports creates an “arms race” among universities, whereby as revenues increase among the elite programs, coach salaries escalate and upgrades are made to facilities in order to attract top recruits and donors (Frank, 2004; Hoffer, et al., 2014). As revenues for many of these athletic departments continue to increase, their expenditures have expanded at an even faster rate, resulting in a corresponding demand for increased subsidies (Fulks, 2014). Lower profile programs are forced to increase their athletic department expenses in order to remain competitive. Sanderson and Siegfried (2015) claim that revenues of the highest profile teams force an increase in expenses for all teams, “requiring universities with already unprofitable intercollegiate athletics programs to increase their subsidies.”

The money being spent by athletic departments at major universities is staggering. In the power conferences, money from lucrative TV deals has unleashed a new era of massive spending. In 2013, eight of the 10 football coaches at Pac-12 public schools made more than $2.1 million, while two years earlier, only three were at $2 million or more (Brady, Schnaars, & Berkowitz, 2013). This influx of revenues has created a
construction boom throughout intercollegiate athletics as programs upgraded and create new facilities in an attempt to win the arms race in athletic recruiting and fund-raising. Many football stadiums have been refurbished, adding capacity, luxury suites and other premium amenities at a cost often exceeding $100 million. Basketball arenas have been built or renovated, as state-of-the-art practice, strength training, and tutoring facilities have proliferated (Perko, 2009). In 2013, UCLA announced a campaign to raise funds to build a new $50 million football training facility (Sports Business Daily, 2013). Football coach Jim Mora said that he “never felt like UCLA’s facilities were 'poor,' having worked in much worse conditions as an NFL assistant coach,” but he acknowledged that college football “is a different animal entirely… A new facility will certainly help make my job easier. It's huge in recruiting. If you don't have facilities, it's hard to attract top talent” (Kartje, 2013). Utah entered the Pac-12 Conference in 2011 and celebrated by moving forward with a new $30 million football facility (Bennett, 2012). Additional upgrades are taking place at schools like the University of Kentucky, which opened a $30 million basketball practice facility in 2007. Georgia opened a $31 million practice and weightlifting facility soon after for men’s and women’s basketball and gymnastics. Texas Tech University spent $4 million four years ago for a student-athlete center, and Texas A&M University topped that with a $27 million academic center and a $22 million basketball practice gym (Perko, 2009). A majority of the Football Bowl Subdivision (FBS) schools have increased their total athletic department budgets by double-digit percentages from fiscal years 2010 to 2012. Of the 52 schools surveyed by SportsBusiness Journal in 2011, 30 had increased their spending by 10 percent or more in the previous three years, and seventeen had increased spending by 15 percent or more.
In 2012, the average budget for NCAA Division I FBS programs was over $56 million; with a 10.8% increase over 2011 alone (Fulks, 2013). The schools that showed the greatest revenue growth from 2006-2011 were Texas (53.7 percent), Ohio State (25.9), Alabama (84), and Louisville (69.7) (Sporting News Staff Report, 2012).

Although some Olympic sport programs and athletes have benefited greatly due to the “arms race”, these budgets are typically rising more slowly than those of the revenue sports. The facts remain that most of the massive revenues are spent on coaching salaries, scholarships and facility improvements for football and men’s basketball (Grasgreen, 2013). In 2012 Mack Brown, the head football coach at the University of Texas made a $5.2 million base salary, not counting bonuses and endorsement deals. During the same time, the University’s Women’s Rowing head coach, who started the program in 1998 and had the Longhorns nationally-ranked four of the previous nine years, made $94,687 (Halliburton, 2012). Brown wasn’t even the highest-paid university football coach; that title went to Nick Saban of the University of Alabama, who made $5,545,852 in 2013. The University of Arkansas's Bret Bielema also made over $5 million, along with another 14 coaches who were compensated more than $3 million each (Grasgreen, 2013).

Although coaches’ salaries for football and men’s basketball continue to increase at astronomical rates, there is indication that salaries for the nonrevenue sports are also beginning to escalate. A Minneapolis Star Tribune report of head coaching salaries revealed that in nonrevenue sports, average salaries increased almost 43 percent between the 2003 and 2011. Of 22 head coaches at the University of Minnesota, 20 had base salaries of at least $75,000 and total compensation packages of at least $100,000, plus
perks that most often included a car and athletic tickets (Bracken, 2012). So, although coaches of the nonrevenue sports may make a decent salary compared to average U.S. workers, the gap between them and their football colleagues continues to increase at obscene rates.

Mark Emmert, President of the NCAA summed up the importance of football and men’s basketball on the minor sports with this;

As a President, I say to my women’s golf fans, ‘The most important thing you can do is buy football tickets.’ If you love rowing, buy football tickets. If you love cross country, buy football tickets. We couldn’t do any of those other sports if we weren’t successful in football. In the NCAA, we can’t support anything else we love unless we’re successful in Division I men’s basketball. Whether you like that or not, it’s just a fact. But we have to make the case for what we do with those resources. (Emmert, 2013)

Cheslcok and Knight (2015) also looked at the impact of increased revenues at universities with the most prominent athletic programs. Specifically, they studied athletic spending through a three-step framework including; 1) diverging revenues (a small portion of programs that generate increasingly higher revenues); 2) cascading expenditures (increased revenues cause increased expenditures, causing other schools to increase expenditures to remain competitive), and; 3) ensuing subsidies (increased expenditures result in increased institutional subsidies). They concluded that this self-perpetuating spending model would be difficult to sustain as student and academic aspects of the school increase the call for accountability. Although the authors point out that NCAA Division I athletic programs are very diverse in their abilities to raise revenues, it is reasonable to conclude that many, if not most, Division I athletic programs will need to examine means of reducing overall costs as expenses for football programs continue to increase. As the University of Utah Athletic Director Chris Hill said,
“Everybody’s going to look at this and say, ‘How can we get an advantage?’ With the freedom of autonomy will come choices. ‘Are you going to serve lobster or chicken? Do you want the gold-plated door knob?’ Schools will have to make decisions” (Smith, 2014).

Forde (2015) commented that the focus of athletic department spending is increasingly meant to sustain only the two “glamour” athletic programs of football and men's basketball. He claimed the new NCAA initiatives would result in major financial windfalls for many athletes in the so-called “revenue-producing” sports, and pointed to estimates that an additional $2 million to $3 million per year will be required for schools to cover these costs. The decision faced by FBS schools would be whether to remain competitive in the one or two high-profile sports by increasing benefits to those athletes, or to prioritize revenues in an attempt to maintain as many sport programs as possible (Auerbach, 2014). As the NCAA President Mark Emmert said “The costs required to pay for these benefits, from food to cost-of-attendance stipends and the like, could lead some athletic departments to cut non-revenue sports” (Emmert, 2014). This threat has drawn concern for the future of Olympic sports, and specifically the pipeline for future U.S. Olympic success. In a letter to constituents, United States Olympic Committee CEO Scott Blackman said;

College athletics are absolutely critical to Team USA’s success, but they also have a profound impact on the lives of generations of participants. And that is just one of the many reasons why we remain fully committed to working with the NCAA, NGBs, conferences and athletics directors to build partnerships that not only support Olympic and Paralympic sport programs, but the successful development of all student-athletes. (2015)
Blackman’s comments revolved around the threat that NCAA actions will eventually eliminate Olympic sports, claiming 65 percent of America's London Olympics team was comprised of athletes who trained in college, even though since the early 1980s college men's gymnastics programs have been cut by 75 percent, wrestling has been cut by half, and about 50 schools have dropped their men's swimming programs (Forde, 2015).

**Title IX**

A specific concern related to the increased funding of NCAA Division I men’s basketball and FBS football programs is that it may require equivalent increases in women’s programs in order to remain compliant with Title IX of the education amendments of 1972 (Boyle, 2016). Title IX is a federal law that mandates “substantial equity” between men’s and women’s sports at any institution that receives federal funds such as student financial aid, and states that "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."

In order to comply with the athletic requirements of Title IX, educational institutions must meet the requirements of three areas: participation, athletic financial assistance, and treatment.

- **Participation** - Institutions must ensure participation in athletics is proportional to student enrollment, or show continual advancement toward equal opportunities, or effectively accommodate interests and abilities of the underrepresented gender.
- Athletic Financial Assistance - Scholarships must be allocated in proportion to the number of female and male students participating in intercollegiate athletics.

- Treatment - Institutions must show the athletic programs provide similar services as it applies to such things as facilities, equipment, scheduling, academic and support services, and coaching and recruiting (Women's Sport Foundation, 2011).

Implementation of Title IX remains an ongoing process, seemingly defined though constant court decisions. In order to assist university compliance with the law’s three-pronged criteria, the NCAA mandates scholarship limits on all sports, with questionably high limits placed on some women’s sports. With the massive amounts of money being spent on NCAA athletic facilities in the so called “arms race”, many minor women’s sports have benefited as universities seek to offset the extravagant spending on scholarships, services, and amenities for football and men’s basketball, in order for the institution to remain in compliance with Title IX. This certainly raises the question as to whether the NCAA and its member institutions are truly attempting to accommodate athlete interests and abilities, or if they are merely using women’s sports as a partial equalizer in their attempt to justify massive spending on football and men’s basketball.

The U.S. Commission on Civil Rights released a report in 2010 recommending less stringent compliance standards for Title IX and hinted that compliance leads to a reduction in men’s sports. However, John Cheslock, a professor and senior research associate at Pennsylvania State University, disagrees with the commission’s stance and authored a study in 2008 for the Women’s Sports Foundation which found that between
the 1992-93 and 2000-01 academic years, when Title IX was more strictly enforced, women’s participation increased by 4.5 percent and men’s participation increased by .3 percent annually in response to Title IX (Rietmulder, 2010).

Prior to Title IX becoming law, there were virtually no college scholarships for female athletes. Since Title IX, there has been significant growth in the number of female participants in collegiate sports, as well as scholarship opportunities. This growth has allowed more opportunities for women to compete at elite levels in competitions such as the Olympics, World Championships and professional leagues (Title IX Info, 2013). Today, the NCAA actually allows more total scholarships per institution to women than men at the Division I level (see Table 2.1). Because Division I FBS schools can offer up to 85 full scholarships for football, the NCAA needed to establish high scholarship limits for women’s sports that were conducive to high participation. Hence, women in sports such as Equestrian, Field Hockey, Gymnastics, Rowing, Squash, Team Handball, and Volleyball have significantly more scholarship opportunities than their male counterparts. If it is determined that Title IX requirements are applicable in the new scenario, the increased funding for women’s programs could cost athletic programs millions of additional dollars. Faced with this concern, it is conceivable that many schools may find it easier to eliminate some men’s programs for the sake of Title IX compliance. Boyle (2016) noted this concern, and found that “case law has supported the removal of men’s sports, and that men’s swimming and wrestling are among the highest rate of teams to be cut” (p. 33). She also explained that schools could choose to ignore the new NCAA rules of additional funding altogether, thereby avoiding Title IX issues, but claimed this was unlikely given the competitive nature of Division I sports.
The Knight Foundation Commission, an independent body whose mission is to advocate for policies and practices that will ensure intercollegiate athletic programs operate within the educational mission of their institutions, claims the undeniable reason for women’s athletics programs in NCAA institutions is due to the law forbidding colleges from discrimination on the basis of gender. They explain that virtually no women’s teams make money, and universities in the NCAA Division I FBS operate at an annual median deficit of just under $5 million on women’s sports. When budget cuts become necessary, athletics directors must make decisions as to cut costs evenly across all sports, or choose to eliminate a sport altogether. The Olympic sports, such as track and field, swimming, or rowing are easy targets, but because most universities are already not in compliance with Title IX’s requirements, they risk expensive legal battles if they cut women’s sports, leaving cuts to men’s sports as the only options (Knight Commission on Intercollegiate Athletics, 2013).
Table 2.1


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<th>Women</th>
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*Denotes Olympic Sport
Scholarship data compiled from NCAA & NAIA Athletic Scholarship Limits, (http://www.speeddevelopment.net/NCAA_College_Scholarship_Rules_and_Limits_-_CollegeAthletes.com.pdf)
At Risk Sports in Intercollegiate Athletics

There has been much discussion about the elimination of nonrevenue, Olympic sports from NCAA program over the past several years (Belson, 2009; Blackman, 2015; Brand, 2009; Frauenheim & Skoda, 2008). Although institutions often blame gender equity issues and the need to conform to Title IX for the cuts (Knight Commission on Intercollegiate Athletics, 2013), many scholars have argued the real reason to be the massive spending on football and men’s basketball programs (Marburger & Hogshead-Maker, 2003; Zimbalist, 2003). Athletic Directors feel increasing pressure to escalate spending on these “marquee” sports in order for their programs to remain relevant, and quite often they look to men’s nonrevenue, Olympic sports to make up budget shortfalls (Belson, 2009; Ridpath, Yiamouyiannis, Lawrence, & Galles, 2008).

The CEO of the United States Olympic Committee, Scott Blackman expressed concern over the ongoing threat of elimination of Olympic sports from the NCAA program (Blackman, 2015). Schumann (2013) reported that over 35 college swimming programs from all three NCAA divisions have been eliminated over the past two decades, causing hundreds of student-athletes’ careers to come to an abrupt halt. Belson (2009) also reported that Olympic sports such as gymnastics and swimming were disappearing from many college programs, and that could weaken U.S. success at international competitions. According to the NCAA (2008), the programs that suffered the greatest number of eliminations from 1981 to 2007 were wrestling (1687 student-athletes), men’s gymnastics (1043 student-athletes), men’s fencing (788 student-athletes), and men’s rowing (598 student-athletes).
Marburger and Hogshead-Maker (2003) claimed the elimination of men’s nonrevenue teams within Division I have been due to the athletic arms race. Zimbalist (2003) concurred when he stated that the cuts were primarily due to “excess spending” and “waste” within the athletic departments. Similarly, in 2010 the University of California, Berkeley announced the elimination of five varsity nonrevenue sports, and in providing his rationale for the cuts, U.C. Chancellor Birgeneau claimed:

Through a variety of circumstances, the costs of delivering our Intercollegiate Athletics program have been rising dramatically, requiring growing financial support from the campus budget that now exceeds $12 million annually. This is not sustainable for our campus in a time of drastic State budget cuts to the university that are affecting all of our faculty, staff and students. (Birgeneau, 2010)

Impact of Intercollegiate Athletics on the Olympic Movement

Historically, the United States has had tremendous success in Olympic and other international competitions. Since the inception of the modern Olympics, the U.S. has won more than double the total number of medals (2,802) than next highest Soviet Union (1,204), with Great Britain having the third highest at 873. Since 2000, the U.S. has led in total medals and gold medals at each Summer Olympic Games except 2008 when host country China had the most (International Olympic Committee, 2016). According to the USOC (2016), of the 554 total U.S. athletes at the 2016 Summer Olympics in Rio de Janeiro, 436 individuals from 144 different schools were NCAA athletes. Among these represented schools, 18 were members of Division II, and 5 were members of Division III. In addition to the U.S. Olympians, the NCAA identified 433 international student-athletes representing their countries in Rio.
Cooper and Weight (2011) examined the value of “nonrevenue” Olympic sport programs within NCAA intercollegiate athletic departments as perceived by athletic directors. The purpose of their study was to gain an understanding of the elements of these programs that are most highly valued by administrators within each of the three NCAA divisions, in order to assist stakeholders in the development of strategic measures to counter program discontinuation. The authors believed this information could be used by coaches in assuming a CEO-style role in order to emphasize critical elements within their programs that administrators would view as important aspects worthy of retention within their departments. They also claimed that at the time of publication, NCAA Olympic sport program values had not been previously studied.

Institutional Theory

Cooper and Weight chose an institutional theory framework to guide their research, which states that organizations often imitate one another in an effort to seek approval or legitimacy from their peers (DiMaggio & Powell, 1983; DiMaggio & Powell, 1991; Scott, 2001; Scott & Meyer, 1994). Kikulis (2000) explained that institutional theory is a dominant theory in the organization theory literature, and has also become a major theory in the sport management literature. Meyer and Rowan (1977), and Washington and Patterson (2011) each discussed that by imitating peers, organizations attempt to gain legitimacy and protect themselves from the demands of their environment. Institutional theory’s fundamental concept is that organizations look to the environment to understand appropriate actions, and it attempts to describe why organizations do things that defy traditional rational explanations (Greenwood, Oliver,
Suddaby, & Sahlin-Andersson, 2008). Organizations that share similar environments will typically adopt similar courses of action, thus making them more similar over time. This phenomena is often observed when a specific practice becomes supported by a dominant institution, and the resulting practice then becomes standard among similar institutions (Washington & Patterson, 2011). DiMaggio and Powell (1983) expanded on this when they claimed that three environmental pressures lead organizations to become increasingly similar: coercive, mimetic, and normative pressures.

Chelladurai (2005) described athletic departments through an institutional theory framework and how they tend to mimic the values, services, organizational structures, and funding practices of similar institutions. This theory seems appropriate to Cooper and Weights study as it explicitly describes the current state of the athletic arms race, where institutions within conferences and divisions seek to “one up” their competition in facilities, personnel, and other aspects of their programs. Cooper and Weight discussed how organizations maintain similarities to one another due to the shared value of the decision makers, and how this “normative isomorphism” is critical to the foundation of this particular study because of the dualism involved in balancing the academic experience with the often opposing commercialistic needs of the athletic department. The authors established research questions to analyze what program values are most important to administrators, and how these values differ between the three NCAA Divisions.

**Methods**

For this non-experimental research, Cooper and Weight developed the NCAA Program Value Scale, and distributed the survey to all NCAA Division I, II, and III
athletic departments. The scale was patterned after those used in studies of organizational value systems (Amos & Weatherington, 2008; De Clercq, Fontaine, & Anseel, 2008), although NCAA program values had not been previously examined. In developing their scale, the researchers cited previous work that found that the elimination of nonrevenue Olympic sports were most influenced by: 1) lack of student interest, 2) high costs, 3) lack of recruitable prospects, and 4) lack of spectator appeal (Williamson, 1983). Similarly, in a 1995 study, Gray and Pelzer reported the following factors as influencing athletic director’s decisions to eliminate nonrevenue programs: 1) conference alignment, 2) shifting resources, 3) inconvenient travel, 4) cost, 5) lack of spectators, and 6) lack of student interest (Gray & Pelzer, 1995).

Validity of the survey was achieved through the use of a panel of experts to validate the final instrument, which consisted of 11 specific Olympic program value elements and a 6-point Likert type response scale (1 = Strongly Disagree; 6 = Strongly Agree). The survey also included 3 open-ended response questions for respondents to further identify program values. The survey was distributed to head Athletic Directors at all 1,055 NCAA institutions, and a 41.2% response rate was recorded.

The research used a one-sample T-Test (μ ≥ 4) to examine each of the program values included in the research. There were eight program values that were significantly higher than 4, (agreement) at the p = .001 level: conduct (competition) [t(429) = 61.22, p < .001], academic achievement [t(431) = 53.40, p < .001], conduct (social) [t(433) = 54.22, p < .001], personal relationships [t(432) = 26.05, p < .001], community involvement [t(434) = 24.29, p < .001], athletic success [t(434) = 23.44, p < .001], fundraising [t(428) = 6.70, p < .001], and enrollment [t(430) = 4.18, p < .001].
The researchers used an analysis of variance (ANOVA) to determine whether there were statistically significant differences in NCAA (Division I, II, and III) administrator’s responses to nonrevenue, Olympic program values, and found that divisional affiliation had a significant influence on the following program value elements: athletics \( [F (2,432) = 7.61, p < .01] \), enrollment \( [F (2,431) = 25.26, p < .01] \), fan support \( [F (2,434) = 13.89, p < .01] \), fundraising \( [F (2,429) = 7.13, p < .01] \), and revenue production \( [F (2,431) = 12.51, p < .01] \). Open-ended responses supported these findings.

The data collected by Cooper and Weight indicated that Division I administrators prioritize winning and finances over education and character-building, and the authors concluded that institutional isomorphism existed, but with the divided purpose of promulgating the arms race in the revenue sports, while craving the core values that nonrevenue, Olympic sports offer.

**Stakeholder Theory**

Numerous reform initiatives have been introduced in an effort to improve intercollegiate athletics (Benford, 2007; Gerdy, 2006; Knight Commission on Intercollegiate Athletics, 2013), although most have been little more than minimal attempts (Gerdy, 2006). Slack and Parent (2006) stated their belief that sport organizations must be prepared to adapt to changes in strategy, size, environment, and technology if they are to survive. Stakeholder theory, a prominent theory in business management, can be used to investigate stakeholder responses to change. Stakeholder theory takes into account morals and values of the organization, and attempts to address who and/or what really matters to the organization.
According to R. Edward Freeman's (1984) seminal text on stakeholder theory, *Strategic Management: A Stakeholder Approach*, “an organization's general success is directly linked to the needs, goals, and motivations of the parties with whom the organization interacts” (p. 53). Freeman believed that when an organization develops policies and contemplates decisions, it must take into account the interests of all individuals impacted by the organization. His theory is articulated through two core questions. The first is “what is the purpose of the corporation?”, and the second question is “what responsibility does management have to stakeholders?” (Freeman, 1984). As opposed to agency theory, where directors of a company are viewed as agents of the owners obligated to work toward maximizing profits, stakeholder theory emphasizes social responsibility, where business is expected to benefit society while society is expected to provide a climate in which business can prosper (Mullins, 2005). True stakeholder theorists feel that no group of constituents should assume dominance over another, and that all are entitled to express their interests (Collins, 1994; Hummels, 1998; Jones & Wicks, 1999). The stakeholder theory provides a potential framework to understand managerial decision-making by considering the interests of “any group or individual who can affect or is affected by the achievement of an organization’s purpose” (Freeman, 1984, p. 53). Stakeholder theory can also be used to investigate constituent reactions to potential changes, thereby providing the various groups with a say in the allocation of resources and other operational aspects of the organization (Lewis, 2007). DiMaggio and Powell (1983) suggested that stakeholder theory is similar to institutional theory, in that an organization has the potential to be successful when it is able to satisfy both the divergent and conflicting interests of its constituents. It should be noted that, as
this theory is relatively new to the management field, it has not been fully developed and some have criticized its vagueness and ambiguity (Mainardes, Alves, & Raposo, 2011).

Identification of an organization’s stakeholders is at the core of the stakeholder theory (Friedman, Parent, & Mason, 2004). Four qualifications for stakeholders can be found in the literature and can be summed up as:

- stakeholders must be connected to the organization (Starik, 1994);
- stakeholders represents definable interests (Starik, 1994);
- stakeholders exists in an organization's environment simply by their interest (Donaldson & Preston, 1995), and;
- stakeholders may be composed by groups of different configurations (Starik, 1994).

In addition to these stakeholder qualifications, the researchers have discussed several attributes which may help in identifying specific stakeholders including influence, investment, legitimacy, management preference, moral interest, power, probability of (or potential for) impact, property rights, proximity, dependence, stake, strategic utility, urgency, and voice. Individuals or groups that possess multiple attributes can dramatically affect organizations (Friedman et al., 2004). To have a stake in an organization can be defined as having an opportunity for a profitable return, or the potential to suffer harm (Clarkson, 1995; Etzioni, 1998; Mitchell, Agle, & Wood, 1997).

A key to stakeholder theory lies in identifying which stakeholders possess power, legitimacy, and urgency, so management can prioritize which groups have the ability to help bring about desired outcomes (Lewis, 2007; Mitchell et al., 1997). According to Mitchell et al, all three factors must be considered simultaneously in that “power gains
authority through legitimacy, and it gains exercise through urgency” (Mitchell et al., 1997, p. 869). They define “definitive” stakeholders as those who possess all three attributes and therefore receive the greatest attention. The “dominant” stakeholders are those who possess power, while “dependent” stakeholders are typically deemed legitimate and urgent, and the “dangerous” stakeholders possess power and have claims that are urgent though not legitimate. Finally, the “dormant” stakeholders possess power but are viewed as neither urgent nor legitimate, and “discretionary” stakeholders are legitimacy but lack power and urgency, and “demanding” stakeholders have urgency but no power or legitimacy (see Figure 1).
Figure 1. Stakeholder Typology. One, Two, or Three Attributes Present. Adapted from Mitchell, Agle, & Wood (1997).

**Stakeholder Theory Applied to Intercollegiate Athletics**

Although originally developed and applied for the corporate business environment, stakeholder theory can be applied to the sports context. Sport managers are under ever-increasing scrutiny, and leaders must be better informed of developments in the political, social and economic environment, and aware of stakeholder involvement (Michie & Oughton, 2005). Utilizing stakeholder theory, sport managers can move from decision based on internal approaches in which stakeholders are seen as dependent bodies
that are managed for the organization's benefit, to an external approach based on relationships corporate concepts (Nguyen & Menzies, 2010). Regardless, this theory has been used extensively in studies of intercollegiate athletics (Freeman, 1994). In classifying stakeholders based on these attributes and identifying their underlying needs and expectations, sport managers can more efficiently allocate resources for change (Friedman, et al., 2004). How individual stakeholder groups adapt to these changes can impact the future success of the organization (Morrow & Idle, 2008).

Others have argued that there were three different types of stakeholders in college sports based on specific interests. The three groups include those with an equity interest in the organization such as shareholders, those interested in the finances of the organization such as employees, athletes, or customers, and those who simply have a strong interest in the organization such as sponsors, government agencies, and alumni (Wolfe & Putler, 2002).

Still others have claimed that athletic department stakeholders are motivated based on their desire to identify with the organization (Rowley & Moldoveanu, 2003). They explain that a group may be motivated simply to identity with the organization, and may even forgo rational action to support a lost cause, because of their affiliation. These individuals often become “linked together in a sense of common identity, shared fate, and general commitment to defend the group” (Fireman & Gamson, 1979, p. 21). It is reasonable to look at many athletic program stakeholders from this perspective.

Peachy and Bruening (2011) looked at the environmental forces driving stakeholder responses to organizational change. They found that forces for change came from competitive pressures, economic conditions, coercive pressures from alumni and
donors, and clamor for change from parents and fans. They determined that certain themes influenced stakeholder responses including organizational history and tradition, institutional support and politics, and concerns for legitimacy, and their findings reinforced the three types of constituent groups as described by Wolfe and Putler. They concluded that sport managers should consider five aspects of change management when dealing with stakeholders. In brief, they claim sport managers should:

- carefully discern the nature of proposed changes, and how stakeholders may respond;
- strive to align adequate resources, and make sure stakeholders understand the rationale;
- recognize the boundaries of history, tradition, and dominant logics;
- emphasize the value of these traditions, but encourage open mindedness and receptivity, and;
- consider bringing in an outside change agent (Peachy & Bruening, 2011).

Friedman et al, (2004) also examined the complexities of the divergent and often conflicting interests of organizational stakeholders. They cited intercollegiate athletics as an example of a complex system that needs to satisfy the requirements of the NCAA, the US Federal Government, coaches, non-student athletes, university teachers and administrators, alumni, fans, the local community and athletic department boosters. Additionally, they claimed the priorities of two or more constituent groups are often in direct conflict, such as how Federal Government’s requirements for gender equity may be incompatible with the desires of football coaches for more resources.
Curtis and Zurcher (1973) referred to college sports as a complex, “multi-organizational field” that included stakeholders from within athletic departments, administrative units, governing boards, and booster clubs, as well as athletic conferences, the NCAA, sports media organizations, sports medicine, sports merchandising companies, professional associations, and other sports reform movement organizations. Similar to previous citations, they also found that some entities share specific interests, while other maintain a contentious relationship.

To further complicate stakeholder theory, Benford (2007) found that college sports have at least 25 distinctive reform movements including academic integrity, athletes’ rights, anti-athlete violence, gender equity, racial and ethnic diversity/rights, steroid use/abuse prevention, youth sports reform, antigambling, sport ethics, and Olympic reform movements. Each of these entities contributes to the complexities of collegiate sport reform (Benford, 2007).

A specific example involving identification of athletic department stakeholders can be found in Hutchinson and Bennett’s research on university branding (Hutchinson & Bennett, 2012). They studied stakeholders’ behavioral congruency toward the athletic department’s core values of a large BCS university. They identified four significant internal stakeholder groups who claimed a stake in the department including current students, faculty/staff members, athletic department personnel, and athletic department boosters, along with two significant external stakeholders comprised of alumni and community members. In this study, they found a lack of congruency between the athletic department and the core values of the institutions, as indicated by the selected stakeholders.
Putler and Wolfe (1999) used stakeholder theory to determine how various aspects of program performance influence individual’s perceptions of intercollegiate athletic programs. They found that ethics and winning, and education and revenue, tended to be competing athletic program priorities. They also determined that individuals tend to cluster into four groups based on athletic program revenue, winning, education, or ethics.

Trail and Chelladurai (2002) utilized stakeholder theory to examine faculty and students, and how they differed in the importance they attached to the athletics programs. Although they found that certain subgroups differed in their specific priorities, all were congruent in placing importance on academics over athletic performance priorities.

Wolfe and Putler (2002) looked further into athletic program priorities when they analyzed the “homogeneity assumption”, or the belief that all stakeholders tend to have similar priorities. They identified alumni, faculty, athletic department staff, and students as the salient stakeholders and examined the athletic program priorities of these stakeholders. Consistent with previously cited studies, they found significant heterogeneity among these groups.

Wolfe, et al (2002) considered the proceeding studies and how each contributed to the understanding of athletic program effectiveness. They concluded that stakeholder groups had differing opinions of the importance of specific values within athletic programs. They revealed six themes that were key to determining perceptions of success of intercollegiate athletic programs: performance on the field, education, ethics, external profile, institutional enthusiasm, and resource management.
Stakeholder Groups within Intercollegiate Athletics

As previously discussed, stakeholders are persons or groups that have or claim “ownership, rights, or interests” in an organization and its activities (Clarkson, 1995, p. 106). These groups may come from a variety of special interests including economics (Fulks, 1996), politics (Padilla & Baumer, 1994), and societal impact (Sperber, 1990; Telander, 1989). Stakeholder groups associated with college athletics may also be motivated by their desire to identify with the organization as described by Rowley & Moldoveanu (2003). To implement change within an athletic department, attention must be given to those stakeholder groups which possess the power, legitimacy, and urgency of claim, regardless of their motivations as described by Mitchell et al (1997). It is important to note that the significance of each stakeholder group may vary among specific athletic departments according to each department’s core objectives.

The literature indicates numerous stakeholder groups in intercollegiate athletics (Benford, 2007; Friedman et al., 2004; Michie & Oughton, 2005; Wolfe et al., 2002). Stakeholders can be classified as primary or secondary, active or passive, and internal or external. Some athletic department stakeholder groups noted in the literature include: athletes, university administrators, coaches, faculty, staff, students, NCAA, USOC and NGBs, alumni, sponsors, spectators, TV and media, donors, the local business community, charities, civic and political leaders, and basically any other population with an interest in the operations of the program. Although college athletes are often viewed as privileged relative to other undergraduate students, as a stakeholder group they rarely have a voice in the decision-making process in college sports. When confronted with the reality that his sport was being eliminated, one student athlete noted, “It would be good to
feel like our thoughts are actually considered… throughout this whole (restructuring) process I felt helpless, fighting a system that will refuse to acknowledge the noble efforts of a team trying to save their sport” (Van Rheenen, Minjares, McNeil, & Atwood, 2011). Applying these stakeholder groups to the typology presented by Mitchell, et al (1997) a typical stakeholder typology for an athletic department may be characterized by Figure 2. It should be noted that each athletic department is unique and stakeholder prioritization may vary among universities.

Figure 2. Typical Stakeholder Typology of the Athletic Department. One, Two, or Three Attributes Present. Adapted from Mitchell, Agle, & Wood (1997).
Measurement of Stakeholder Perceptions

Any research involving stakeholder change must take into account the attitudes and perceptions of the stakeholders involved. Allport (1935), a seminal author on the topic, defined an attitude as “a mental or neural state of readiness, organized through experience, exerting a directive or dynamic influence on the individual’s response to all objects and situations to which it is related” (p. 810). Krech and Crutchfield (1948) wrote, “An attitude can be defined as an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of the individual's world” (p. 152). Pickins (2016) further described attitude as a mindset or a tendency to act in a particular way due to an individual’s experience and temperament. He claimed attitudes are comprised of a complex combination of an individual’s characteristics that ultimately influence emotions and behaviors (p. 44).

Perceptions are closely related to attitudes, and involve the processes by which an individual interprets and organizes stimuli to produce a meaningful experience of their surroundings (Lindsay & Norman, 1977). For the purposes of this paper, it is important to differentiate between sensory perception (i.e. depth perception, color perception, etc.), and behavioral perception. Powers (2004) explained that behavioral perceptions involve the construction of a code of ethics to provide an explanation for the existence of goals and purposes. He claimed that behavior is programmed through the evolution of history, memories, education, and experience.

Numerous methods of measuring attitudes and perceptions have been developed, although each have their limitations. Measurement typically focuses on the variations of cognitive, affective, and behavioral components of the individual’s attitudes. The
inherent problem with measuring these components lies in the fact that they don’t always coincide with each other. Understanding the various aspects of attitudes and perceptions can better help manage people’s needs and expectations (Pickins, 2016).

This section will look at the measurement of attitudes and perceptions of stakeholders of intercollegiate athletic programs, with particular attention to sampling and scale development. It will provide an overview of common research procedures used in construct measurement, with specific attention to quantitative techniques, but is not intended to be exhaustive of statistical methods. It should be noted that much of the literature related to the measurement of attitudes and perceptions uses the two terms synonymously.

**Attitudes and Perceptions**

Every day we are bombarded with vast amounts of information intended to alter our attitudes (Noble, 2004). Much research has been done on how attitudes are formed and changed. From this research, four theories have evolved to explain attitude change, each with strengths and weaknesses. They include: balance theory, cognitive dissonance, self-perception theory, and the elaboration likelihood model (Noble, 2004).

Heider’s (1958) explanation of the balance theory states that a person’s beliefs and attitudes are inclined toward a state of balance whereby they tend to assimilate with people who agree with them, help those they admire, and place value on items they favor. Festinger and Carlsmith’s (1959) theory of cognitive dissonance refers to the unpleasant state that exists when an individual has inconsistencies between their attitude and behavior, typically when the individual must choose between two incompatible beliefs when both are equally attractive. The self-perception theory states that people infer their
attitudes from observing their own behavior, much the same as how others view it (Bern, 1973).

The previous three theories discuss attitude change through some form of incentive or sanction (Noble, 2004). Petty and Cacioppo’s (1986) elaboration likelihood model is a cognitive-based approach that focuses on the thoughts processed by an individual during a persuasion attempt.

Measurement of attitudes and perceptions are typically used when attempting to explain individual or group behavior. McLeod (2009) pointed out that attitudes are related to self-image and social acceptance, and because of this can be difficult to measure. The inherent problem with self-reported data such as that collected on an attitude scale is the bias created when respondents alter their true answers in order to make themselves more socially desirable. Social desirability occurs when people provide responses that make themselves appear “well adjusted”, unprejudiced, open minded and democratic, specifically when the topic involves controversial topics or groups. Social desirability will most likely decrease the validity of the evaluation (McLeod, 2009). Pickins (2016), explained that attitudes are comprised of three components: affect (feelings), cognition (thoughts), and behavior (actions), or what he refers to as the “tricomponent” model of attitudes, and although these components are internal to an individual, attitudes can be deduced from observing their resulting behavior. He claimed that attitudes are learned, but can be modified by addressing the individual’s cognitive and emotional components. Moore (2003) concurred, and claimed that attitude transformation takes time, but can be done. He stated that leaders need to understand that attitudes can be formed over lifetimes, so change may not be a quick process. He further
explained that attitudes are influenced in the socialization process by family, religion, culture, and socioeconomic factors, and each may impact the individual’s attitude and related behavior.

Lindsay & Norman (1977) explained that when a person is confronted with a situation they interpret the stimuli into something meaningful based on prior experiences, even though these “perceptions” may be substantially different from reality. Assael (1995) took this further and identified four stages of the perception process: stimulation, registration, organization, and interpretation. He claimed that receptiveness to a stimuli is selective and may be influenced by the individual’s attitudes, causing that person to accept stimuli that meets their needs (perceptual vigilance), or reject stimuli that causes anxiety (perceptual defense).

Researchers measure theories to provide an empirical estimate of constructs such as attitudes and perceptions (Churchill, 1979). Creswell (2007) identifies a construct as “an attribute that cannot be measured on its own because it is too general in scope”, and claims it must be measured by the attributes that explain how it is constructed. Theories are often measured by use of a scale of multiple items that measure the same underlying construct, resulting in a composite score of the respondent’s responses. Churchill warns that steps should be taken to ensure the respondent interprets the scale as intended by the researcher, and so emphasizes the need to be sure the scale is appropriately designed and analyzed. Churchill’s approach requires the researcher to (a) specify the construct(s) that is/are being studied; (b) generate sample items; (c) collect data to initially test items; (d) purify the measure; (e) collect data to assess reliability and validity.
Harrison (2004) examined constructs of perception to examine reform potential in intercollegiate athletics with respect to stakeholder theory. Freeman (1984) suggested that stakeholders include “any person or groups who can affect the achievement of an organization’s objectives or who is affected by the achievement of an organization’s objectives.” Specifically, Harrison looked at perceptions of stakeholders that included student-athletes, faculty members, coaches, administrators, and student-athlete academic support officers, with regard to three aspects of commercialism in intercollegiate athletics: the payment of student-athletes, over-commercialization in intercollegiate athletics, and academic difficulties and improprieties faced by student-athletes. Using a qualitative model, he found a great deal of homogeneity among the stakeholders as to their perspectives on the specific issues. A qualitative study asserts that an individual makes meaning of the surrounding world through personal experiences and opinions (Crotty, 1998). When previous theories have not been investigated qualitatively, the process referred to as grounded theory (Creswell, 2007) can be utilized to build on existing constructs, while addressing a new theory or phenomenon.

**Factor Analysis**

Factor analysis is a commonly used statistical technique to reduce variables to a smaller set of factors, and to identify the structure of the relationship between dependent variables and respondent variables (Costello & Osborne, 2005). In exploratory factor analysis, correlated variables that share weak correlations are grouped together. However, it is a complex procedure with few guidelines and many options. Costello and Osborne (2005) explained that principal component analysis (PCA) with varimax orthogonal rotation and the Kaiser criterion are typically the default methods used with EFA,
however they argued that optimal results are often achieved by using a common factor analysis extraction method such as maximum likelihood, with an oblique rotation such as promax, and scree plots to determine the number of meaningful factors. They further explained that once these techniques have been used to develop an instrument, a confirmatory factor analysis (CFA) should be used to examine if the instrument has the same structure across population subgroups. A CFA is a more advanced technique that is used when the factor structure is known, and is used to test the factor structure to new data, although Suhr (unknown) stated the importance of determining the appropriate analysis a priori, and claimed that it is inappropriate to run both PCA and EFA with the same data. Eigenvalues are calculated in EFA to decide how many factors appear to adequately explain the variables. Promax and verimax rotations can be applied to see which technique results in the closest approximation to a simple structure, that is, the solution which allows all items to load on at least one factor but not loading on more than one factor. Typically, promax rotation is used when factors are correlated, and verimax is used when the factors are believed to be uncorrelated.

**Scale Development**

The process of measuring variable such as attitudes and perceptions can be divided into two basic categories: direct measurements that utilize Likert scales and semantic differentials, and indirect measurement using projective techniques. McLeod (2009) explained that direct evaluation of attitudes typically involves the use of a well-designed survey and the development and validation of a scale to measure constructs.

Kumar (2005) explained that a Likert scale is a type of composite measure that is the most commonly used example of a scale in social research. The Likert scale uses
standardized response categories to determine the respondent’s level of intensity on different items in a questionnaire (p. 174). Kumar emphasized that a Likert scale does not actually measure attitudes, but rather "it does help to place different respondents in relation to each other in terms of the intensity of their attitude towards an issue: it shows the strength of one respondents view in relation to another" (p. 146). There are differing opinions regarding the usage of odd-numbered and even-numbered Likert scales. Dillman (2000) argued for the use of even-numbered scales to force a directional response while others preferred an odd-numbered scale in order to provide respondents with a neutral option. Additionally, Fink (1995) claimed the placement of the neutral option within the survey could make a difference on the likelihood of participants selecting that option. Most measurements used in sport administration studies involve an odd-numbered scale (Trail & Chelladurai, 2002). These researchers believed that using an even-numbered scale might deter respondents from indicating their true feelings.

Havard (2011) studied perceptions utilizing a quantitative approach with the development of a scale to examine fan perceptions of team rivalries. From the compiled data, descriptive characteristics were analyzed to identify data normality, and then an Exploratory Factor Analysis (EFA) was conducted to reduce the number of factors from the survey to related components. After grouping items, he was able to identify factors that helped explain the constructs, and used promax rotation to correlate variables, followed by a varimax rotation to force items onto one factor (Tabachnick & Fidell, 2007). Next, Eigenvalues were calculated to determine the amount of variance within each. Finally, Chronbach’s alphas and inter-item correlations were calculated to test the reliability of the identified factors (Havard, 2011).
Several indirect methods of evaluation have also been used to avoid the issues associated with social desirability. These indirect means typically involve a projective test, whereby an individual is given an ambiguous stimulus and their attitudes are inferred from their resulting interpretations. Although these methods are less likely to be influenced by social desirability, indirect evaluations lack the objectivity a Likert scale can provide (McLeod, 2009).

**Sampling and Sample Size**

Mack, Woodsong, McQueen, Guest, and Namey (2011) described three main methods for sampling and survey. “Purposive sampling” is a common strategy that targets participants that fit the research question. “Theoretical saturation,” or the point at which new data no longer brings additional insight to the research, determines sample sizes in purposive sampling. “Quota sampling” predetermines the number of desired participants. Researchers utilizing quota sampling determine the demographics of participants needed, and then recruit individuals who meet that criterion until the quota is met. The final method is “snowball sampling” which involves utilizing the social networks of existing participants to identify hidden populations that the researcher would not normally reach in other sampling methods.

**Survey Development**

Surveys have long been the preferred means to gather data regarding individual’s attitudes toward their environment (Morrel-Samuel, 2002), however Hopkins (1998) identified four concerns that must be addressed when it comes to developing a survey for measuring attitudes or perceptions:
1. Social desirability, when the respondent desires to present a socially favorable impression, and therefore present results that may not reflect their true feelings or beliefs;

2. Self-deception, when the respondent distorts their answers to preserve their own self-worth;

3. Semantic issues, when the respondent attaches different or unintended meanings to the verbiage of the survey items, and;

4. Criterion inadequacies, due to the inability to fully demonstrate the instrument’s validity.

Hutchinson (2004) claimed that there is no single framework for survey research, however there are several assumptions that can be made, with the overriding assumption being that responses reflect the reality of the respondent to the greatest degree possible, and that they mirror the reality of the world at the time of investigation. She offers five stages of survey development:

1. Preliminary planning with a clearly stated purpose, delineation of a set of research questions, and identification of the target population;

2. Selection of the respondents to include definition of the target sample, how they will be selected, and how many will be needed;

3. Survey construction will is the most important and time-consuming aspect of the study;

4. Survey dissemination in the most appropriate medium to maximize response rates;

5. Survey analysis with a variety of statistical methods (Hutchinson, 2004).
Survey design poses challenges for researchers because the design of the questions can have a great effect on results. Churchill (1979) explained the importance of using an expert panel to evaluate survey items to help ensure the questions properly address the construct being studied, and to attempt to design a survey that is as efficient as possible for the respondents. The International Handbook of Survey Methodology (de Leeuw, Hox, & Dillman, 2008) explained that a common problem associated with survey research comes from the non-response bias associated with the length of the instrument. This problem arises from the potential that responses between respondents could differ from those of non-respondents. To help alleviate the issues of non-response bias, the authors suggest taking measure such as sending response reminders, avoiding rushed deadlines, ensuring confidentiality, and using incentives. Gaiser and Schreiner (2009) also suggested that online surveys could help reduce non-response bias and claim that online research provides the ability to reach a wider sample. Online surveys offer several advantages including ease of distribution and use, minimal cost, automation in data entry, increased response rates, and flexibility of design. Some disadvantages of online data collection include the absence of an interviewer, inability to reach challenging populations, and the potential for survey fraud. Sato (2009) described how different question designs could yield completely different results, even when the questions contained the same content. Bradburn (2004) reported that the format of the questionnaire could heavily influence the quality of the data (p. 283). He encouraged giving consideration to things such as the typeface, clarity of instructions, numbering format, all for the sake of user ease.
Morrel-Samuel (2002) stressed a well-designed survey to ensure specific problems areas are included. He suggested the following guidelines:

- **Content**
  - Be sure to ask questions about observable behavior rather than thoughts or motives.
  - Include some items that can be independently verified.
  - Measure only behaviors that have a recognized link to your company’s performance.

- **Format**
  - Keep sections of the survey unlabeled and uninterrupted by page breaks.
  - Design sections to contain a similar number of items, and questions a similar number of words.
  - Place questions about respondent demographics last in employee surveys but first in performance appraisals.

- **Language**
  - Avoid terms that have strong associations.
  - Change the wording in about one-third of questions so that the desired answer is negative.
  - Avoid merging two disconnected topics into one question.

- **Measurement**
  - Create a response scale with numbers at regularly spaced intervals and words only at each end.
• Administration

  o Make workplace surveys individually anonymous and demonstrate that they remain so.

  o In large organizations, make the department the primary unit of analysis for company surveys.

  o Make sure that employees can complete the survey in about 20 minutes.

When conducting social research, obtaining a large sample size is important for many reasons. A large sample size will be more representative of the population, is important to producing significantly different results among variables, and broadens the range of possible data to develop a more reliable picture for analysis (Patel, Doku, & Tennakoon, 2003). The literature indicates that the most replicable results are obtained by using large sample sizes (Costello & Osborne, 2005).

Conclusions

The impact of commercialism in collegiate athletics is well documented. Increased spending by the wealthiest schools has forced other athletic departments to respond similarly in order to remain competitive and relevant, despite operating at an annual deficit (i.e. the athletic “Arms Race”). This spending model may be difficult to maintain, as students and faculty increasingly call for accountability. With the focus on football and men’s basketball, many stakeholders are concerned that funds will be
increasingly secured through elimination of certain “nonrevenue, Olympic NCAA sports.” In 2014, the average NCAA Division I Football Bowl Subdivision (FBS) athletic department had an annual budget of $60 million per year, but still received subsidies of about $1,000 per university student each year. Recent legislative changes within the NCAA have allowed greater autonomy for the wealthiest athletic programs to increase spending on athletes, thereby intensifying the athletic arms race. Many stakeholders have expressed concern over the increasing commercialism associated with football and men’s basketball, and its resulting impact on the nonrevenue, Olympic sports in the NCAA program. Coaches of nonrevenue, NCAA Olympic sports must understand the values their program provides to their athletic departments, and take an entrepreneurial role in managing the expectations of their stakeholders.

Freeman’s stakeholder theory claims, “an organization's general success is directly linked to the needs, goals, and motivations of the parties with whom the organization interacts” (Freeman, 1984, p. 53). As the literature indicates, this can be a significant challenge, since the needs of various stakeholders are often in direct conflict with others (Curtis & Zurcher, 1973; Friedman et al., 2004; Hutchinson & Bennett, 2012; Putler & Wolfe, 1999).

In utilizing stakeholder theory to examine the impact of commercialism in collegiate athletics and examine potential change, program stakeholders must be identified. Reviewing the associated literature can help identify the broad and somewhat obvious constituencies of athletic departments, but closer examination should include an evaluation of stakeholder motivations as described by Wolfe and Putler (2002) and Rowley and Moldoveanu (2003). Further consideration should include specific attributes
of stakeholders as detailed by Friedman et al., (2004). Although Freeman believed that the interests of all stakeholders must be considered (Freeman, 1984, p. 53), it is important to prioritize and evaluate which groups possess the greatest power and influence (Lewis, 2007; Mitchell et al., 1997), since specific needs between groups are often in opposition (Wolfe & Putler, 2002).

Benford (2007) reminded us to also consider “linkages” between commercialism’s separate but related influences such as exploitation, fraud, violence, and the scapegoating of Title IX in program eliminations. Understanding these interrelationships can assist in initiating changes that appeal to multiple stakeholders with uncommon interests.

Finally, when considering stakeholder needs it is helpful to consider Freeman’s two core questions; “what is the purpose of the corporation”, and “what responsibility does management have to stakeholders” (Freeman, 1984, p. 53). When considering reform of commercialistic influences on intercollegiate athletics, both questions can be perplexing and dependent on the perspective of the stakeholder group deemed to have the greatest power. From an academic stakeholder perspective, the purpose falls to education with responsibility to the student, while athletic stakeholders will certainly prioritize winning with the responsibility toward financial proliferation. Research of perceptions in intercollegiate athletics will require a thorough examination of the internal and external stakeholders in order to determine the most effective means of gathering data and possibly effecting change. Here, the “elaboration likelihood” theory of attitude measurement is likely to be most effective, as it focuses on the thought processes of the individual, and any attempt to alter attitudes of university and athletic administrators will
require persuasion and a cognitive shift toward stakeholder priorities. Ultimately, when it comes to the amount of commercialism that is deemed acceptable, the public holds the power.

It is clear from the literature that the development of a well-designed survey instrument is key to collecting data that can be used to infer stakeholder perceptions (Churchill, 1979; de Leeuw et al., 2008; Morrel-Samuel, 2002). Utilizing the assistance of an expert panel to develop survey questions would be beneficial, although there is a dearth of literature on what individuals might constitute an “expert”. An odd-numbered Likert scale appears to be the preferred response scale for research in sport administration, and online dissemination of the instrument can be used to easily reach the target audience and provide for data entry automation.

Once data is collected, descriptive statistics can be calculated to look for irregularities in the data. After data cleaning to remove outliers and incomplete information, a factor analysis can be conducted to extract the common factors that emerge from the data. Principle component analysis and exploratory factor analysis have both been used in recent research (Dwyer, 2009; Havard, 2011; Hungenburg, 2015; Noble, 2004). The number of factors can be determined by examining eigenvalues greater than 1, along with visual analysis of scree plots. Assuming the data leads to the retention of more than one factor, rotation can be used to interpret the factors. If factors are assumed to be correlated, a promax rotation would be warranted; otherwise a varimax rotation would be used. Finally, alpha coefficients can be calculated to test the internal consistency reliability.
As previously discussed, the purpose of this study was to examine the perceptions of select nonrevenue, NCAA Olympic coaches, as a fundamental stakeholder within university athletics, on the sustainability of their sport within the NCAA given the increasing impact of commercialism in intercollegiate athletics. Secondarily, coaches’ perceptions on the influence that NCAA participation has on U.S. Olympic and international success were analyzed to better understand the vested interest of the United States Olympic Committee as a stakeholder in NCAA sports. Finally, coaches’ perceptions of the cultural and societal values that NCAA Olympic sports provide were analyzed and compared with administrator’s perceptions of those values as compiled by Cooper and Weights “NCAA Program Value Scale” (Cooper & Weight, 2011).
CHAPTER III

METHODOLOGY

The purpose of this study was to examine the perceptions of select nonrevenue, NCAA Olympic coaches, as fundamental stakeholders within university athletics, in relation to the sustainability of their sport within the NCAA given the increasing impact of commercialism in intercollegiate athletics. Secondarily, coaches’ perceptions of the influence that NCAA participation has on U.S. Olympic and international success were analyzed to better understand the vested interest of the United States Olympic Committee as a stakeholder in NCAA sports. Finally, coaches’ perceptions of the cultural and societal values that NCAA Olympic sports provide were analyzed and compared with administrator’s perceptions of those values as compiled by Cooper and Weights “NCAA Program Value Scale” (Cooper & Weight, 2011).

This section describes the methodology and survey tool that was used for the study, the sample parameters and procedures utilized for data collection, and the statistical analysis used in comparing results.

Restatement of the Research Questions and Hypotheses

This study examined the following research questions and hypotheses:

Q 1  Do nonrevenue, NCAA Olympic coaches believe the future of their programs to be in jeopardy within the NCAA program?

H 1.1 Coaches of nonrevenue, NCAA Olympic sports perceive the future of their programs to be in jeopardy within the NCAA program.
H 1.2 Coaches of nonrevenue, NCAA Olympic sports at the Division I level will view the future of their sport to be in greater jeopardy than coaches in Divisions II and III.

Q 2 Do nonrevenue, NCAA Olympic coaches believe their program provides value to U.S. Olympic and international competitive success?

H 2.1 Coaches of nonrevenue, NCAA Olympic sports believe their programs provide value to U.S. Olympic and international competitive success.

H 2.2 There are variations in the perceptions of nonrevenue, NCAA Olympic coaches as to the value their program provides to Olympic and international competitive success when focusing on the divisional affiliation (Division I, Division II, Division III) of the athletic department being examined.

Q 3 What program values do nonrevenue, NCAA Olympic coaches believe to be the most important to their administrators?

H 3.1 Coaches of nonrevenue, NCAA Olympic sports share the same values as their administrators.

H 3.2 There are variations in the nonrevenue, NCAA Olympic program values that coaches believe are most important to their administrators when focusing on the divisional affiliation (Division I, Division II, Division III) of the athletic department being examined.

Sample

This research involved a purposive sampling approach of all NCAA coaches of NCAA (Divisions I, II, and III) coaches of Men’s Swimming (n=135, 70, 233), Gymnastics (n=15, 0, 1) and Wrestling (n=74, 59, 100), for a total sample population of 687. E-mail addresses for all coaches were readily available from school websites.

Design

This research utilized a non-experimental design whereby coaches of nonrevenue, NCAA Olympic men’s sports self-reported by means of an online Qualtrics survey questionnaire (see Appendix A). The study followed the five-step framework developed by Churchill (1979) which included: 1) specifying the construct(s) that is/are being
studied, 2) generating sample items, 3) collecting data to test items, 4) purifying the measures, and 5) collecting data to assess reliability and validity. The questionnaire consisted of 30 scale items, with responses recorded on a six-point, modified Likert Scale ranging from “Strongly Disagree” to “Strongly Agree”, which allowed comparisons between specific sport, NCAA division, and athletic conferences. Baumgartner and Strong claimed that the Likert scale was the most appropriate method of data collection for the measurement of attitudes and perceptions (1994), while the even-numbered scale keeps respondents from selecting a neutral position as described by Patton (2002). The survey was comprised of three sections: questions pertaining to the sustainability of nonrevenue, Olympic sports in the NCAA program (11 items); the value of NCAA programs to the U.S. Olympic movement (8 items), and the program values that Olympic sports bring to the athletic department and university (11 items). Data collected for the first research question was used to evaluate coaches’ perceptions on the future of their sport within the NCAA program. Similarly, data collected for the second research question two was used to evaluate coaches’ perceptions on the value of nonrevenue, NCAA sports to U.S. Olympic and international success. Finally, data collected for research question three was used to compare coaches’ perceptions on the value of nonrevenue, NCAA Olympic sports with the perceptions of athletic department administrators.

A pilot study was conducted in the fall of 2015 to test procedures and evaluate item validity. Results of the pilot study are detailed further in this chapter. In addition to the pilot study, a focus group consisting of swim coaches from outside the target population; sport management professionals; and individuals well versed in statistical
procedures was used to examine the instrument and offer suggestions to improve the survey content. Based on feedback from the focus group, the following changes were made to the original instrument:

- Edited text to reduce confusion
- Eliminated conference affiliation requests for Division II and III and limited Division I options to Autonomy Conferences (ACC, Big Ten, Big XII, Pac 12 and SEC), Non-Autonomy BCS Conferences (American, C-USA, Mid-American, Mountain West, Sun Belt), and FCS or Non-Football Conference
- Placed Section 3 responses in a matrix scale to reduce survey abandonment

**Procedures**

IBM SPSS (version 23) predictive statistical analytics software was used to perform the statistical analysis. The dependent variables in this study represented the perceptions of coaches as recorded on the six-point Likert scale. The independent variables included the respondents’ specific sport affiliation, NCAA division, and athletic conference. Further differentiation included the “Power 5” conferences as compared to other NCAA Division I institutions.

**Exploratory Factor Analysis**

An Exploratory Factor Analysis (EFA) was performed on the data for the first two sections of the instrument to extract useful factors from the survey questions. After cleaning the data to eliminate any anomalies, outliers, and missing or incomplete data, descriptive statistics were analyzed, including a Kaiser-Meyer-Olkin (KMO) test to measure sampling adequacy. KMO values greater than 0.8 indicated that factor analysis was useful for the specific variables (Cerny & Kaiser, 1977; Dziuban & Shirkey, 1974;
Kaiser, 1970), although SPSS defaults to an acceptable level of .06. A Bartlett’s Test was also performed to test for homogeneity of variances across samples (i.e. $H_0$: $\sigma_1^2 = \sigma_2^2 = \ldots = \sigma_k^2$). Testing for homogeneity is important, as analysis of variance tests assume variances are equal across groups (Snedecor & Cochran, 1989).

To decide on the number of useful factors extracted from the data, Kaiser's Test of eigenvalues greater than 1.0 was performed, along with observation of scree plots (Kaiser, 1960). The eigenvalue of a factor represents the amount of variance of the variables accounted for by that factor. The lower the eigenvalue, the less that factor contributes to the explanation of variances in the variables (Norris & LeCavalier, 2009).

Upon determination of the appropriate number of factors, a “promax” oblique factor rotation was performed. Factor rotation is used to determine the best possible solution from an infinite number of orientations that explain the data equally, and the promax procedure assumes factors to be correlated, providing a solution with a better simple structure. If the promax rotation indicates a factor correlation less than 0.2, the factors will be considered orthogonal, and a “varimax” rotation will then be used instead (Fabrigar, Wegener, MacCallum, & Strahan, 1999).

After rotation, factor loadings were sorted by size to suppress values less than 0.4. The “rotated factor matrix” and “pattern matrix” were then examined to identify which items loaded on specific factors to determine what those items have in common, thus allowing factors to be labeled by individual traits.

Cronbach’s alphas ($\alpha$) were calculated to evaluate the internal consistency (reliability) of the survey questions, with $\alpha > .70$ used to confirm the reliability of the identified factors. Finally, a priori Tukey’s analysis (Tukey’s post hoc test) was used to
confirm results and examine the means between subgroups of the samples to avoid Type I errors with the data (Jaccard, Becker, & Wood, 1984).

**Statistical Analysis**

Data from the third section of the survey was compared to administrators’ perceptions of the values that nonrevenue, Olympic sports provide to the department, as compiled by Cooper and Weight (2011). In their study, Cooper and Weight found 11 program elements that administrators valued from their nonrevenue, Olympic sport programs, and concluded that institutional isomorphism exists across all NCAA divisions, as they all value similar elements of their nonrevenue, Olympic sport programs (see Table 3.1). Because of this, it is critical that coaches recognize and promote these same elements within their programs.
Table 3.1

Cumulative National Collegiate Athletic Association (NCAA) Division I, II, and III Administrators’ Responses to Olympic Program Values as Compiled by Cooper and Weight

<table>
<thead>
<tr>
<th>Olympic Program Values</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct (Competition)</td>
<td>*5.77</td>
<td>.601</td>
</tr>
<tr>
<td>Proper behavior exhibited by coaches/student-athletes during competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Achievement</td>
<td>*5.69</td>
<td>.658</td>
</tr>
<tr>
<td>High levels of individual and team success in the classroom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct (Social)</td>
<td>*5.69</td>
<td>.652</td>
</tr>
<tr>
<td>Proper behavior exhibited by coaches/student-athletes outside of competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Relationships</td>
<td>*5.20</td>
<td>.959</td>
</tr>
<tr>
<td>Strong relationships between administrators and members of coaching staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Involvement</td>
<td>*5.09</td>
<td>.940</td>
</tr>
<tr>
<td>Strong team presence in local community service initiatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athletic Success</td>
<td>*5.08</td>
<td>.964</td>
</tr>
<tr>
<td>High levels of individual/team success in sport competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundraising</td>
<td>*4.41</td>
<td>1.275</td>
</tr>
<tr>
<td>Development of external funds to supplement team’s operating budget</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment</td>
<td>*4.30</td>
<td>1.511</td>
</tr>
<tr>
<td>Increase in university enrollment from student-athlete participation on team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan Support</td>
<td>4.00</td>
<td>1.160</td>
</tr>
<tr>
<td>Strong team support by fans in surrounding geographical region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Cost</td>
<td>3.84</td>
<td>1.305</td>
</tr>
<tr>
<td>Low cost to fund the annual operating budget of sport team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of positive revenue streams at team athletic competitions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. The scale ranged from Strongly Disagree (1) to Strongly Agree (6)
*p < .001 (μ ≥ 5)

Pilot Study

A pilot study was conducted in the fall of 2015 with the purpose of examining the perceptions of NCAA Division I Olympic coaches toward the future of their sport within their institution and within the NCAA. Perceptions related to specific sports, gender equity issues, and the impact of increased funding of football and men’s basketball were evaluated. The research questions used for the pilot study included: 1) which sports are
perceived to be in jeopardy of elimination within individual institutions and within the NCAA Division I program, and 2) how future perceptions vary between coaches of NCAA Division I female programs and male programs. This section describes the methodology used for the pilot study and how the data can be used to modify the dissertation research.

**Sampling and Research Design for the Pilot Study**

The sample for the pilot study included all varsity coaches of Olympic sports within the Mountain West Athletic Conference. The Mountain West Conference is an NCAA Division I FBS school, consisting of ten schools across the Western half of the U.S. FBS schools will ultimately be the most impacted by the new NCAA athlete funding rules (New, 2014).

This study was non-experimental in design, and involved a purposive sampling of all NCAA Olympic coaches in the conference to allow for evaluation of perceptions across all sports and between sport genders. The online survey was distributed along with an introductory letter by e-mail in October of 2015. The e-mail contained a brief explanation of the study, the implied consent information, and a link to the Qualtrics survey (Appendices 1 and 2). Since obtaining an acceptable survey response rate was critical to the success of the study, the researcher met with an executive from the United States Olympic Committee (USOC) to seek input and support for the study. The e-mail included a statement explaining that the research was in consultation with the USOC. Since the target population was very familiar with the USOC, it was assumed this statement helped control for non-response bias. One week following the initial e-mail, a follow-up e-mail reminder with the same information was sent to each of the original
recipients. The original target sample consisted of 193 individuals, three of which immediately returned an invalid address, and a total 62 responded for a 32% response rate.

This pilot study followed the five-step framework developed by Churchill (1979) which included: 1) specifying the construct(s) that is/are being studied, 2) generating sample items, 3) collecting data to test items, 4) purifying the measures, and 5) collecting data to assess reliability and validity. Perception data was collected utilizing the Qualtrics survey platform with a four-point Likert response scale, where “1” represented strongly disagree, “2” represented disagree, “3” represented agree, and “4” represented strongly agree.

The first portion of the survey asked respondents for demographic data, such as school and sport affiliation. Twelve items related to their perceptions on the research variables followed this. Survey data from the pilot study was imported from the Qualtrics survey platform to the IBM SPSS (version 23) predictive statistical analytics software. The dependent variables in this study represented the perceptions of coaches toward the future of their sport within their institution and within the NCAA, as recorded on the four-point Likert scale. The independent variables used in this study included the respondent’s specific sport affiliation and the gender of the sport team.

Data Analysis for the Pilot Study

An Exploratory Factor Analysis (EFA) was conducted to determine if identifiable factors could be extracted from the pattern of responses to survey questions. In order to maximize the loadings on each factor and identify unique factors, a promax factor rotation was performed. Eigenvalues of greater than .40 were used to identify items that
loaded on a common factor. Cronbach’s Alphas (α) was calculated to evaluate the internal consistency of the survey questions, with α > .70 used to confirm the internal reliability of the associated subscales. Upon identification of common factors, an analysis of variance (ANOVA) was used to compare the means of associated variables. A p value of .05 was used to determine whether to reject the null hypotheses. In addition to the ANOVA analysis, descriptive statistics were also collected in relation to the research questions. Finally, a Tukey’s post hoc analysis was used to compare means of the two variables.

Although the response rate of 32% (N = 62) is generally considered to be good for an electronic survey (Stewart, 2003), since the data was spread over 36 possible categories (men’s and women’s Olympic sports) the sample size within each category was too small for any meaningful descriptive comparisons. It is worthy of noting that when asked if any sports were thought to be in jeopardy, coaches in the Mountain West Conference indicated swimming and diving (1 response), rifle (2 responses), skiing (2 responses), tennis (4 responses), and track and field (1 response) as Olympic sports of concern. Of the responses, 72% came from coaches of women’s sports, while 28% came from coaches of men’s sports.

The Exploratory Factor Analysis (EFA) indicated strong factor loadings on three factors. These factors were broadly defined as 1) Coaches’ perceptions of the future of their sport (FOS); 2) Coaches’ perceptions of the value of the NCAA to U.S. Olympic success (VAL); and 3) Coaches’ perception of the future of all Olympic sports (FAS) (Table 3.2). Factor inter-correlations proved to be low (Table 3.3), so they could be treated as unique and independent, meaning the total score provide no meaningful
information. Although the factor loadings were strong, the overall reliability was relatively low as indicated by Cronbach’s Alpha levels (α). The analysis indicated a slightly higher reliability after removal of one item. Final α values are displayed in Table 3.4. Despite the low reliability (Table 3.5), an analysis of variance was performed to look for differences by sport gender and found no significant differences. The results mandated a failure to reject each of the null hypotheses.

In addition to the survey Likert responses, one open-ended question was included asking for any additional thoughts about the future of NCAA Olympic sports. Responses to this question are provided in Table 3.6. The responses provided some valuable feedback for future survey design, and showed that there is passion for the topic and a need for further study.
Table 3.2

*Coaches’ Responses to Pilot Study Survey Items*

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 My sport is in jeopardy of elimination within my institution</td>
<td>39</td>
<td>49</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>2 My sport is in jeopardy of elimination within the NCAA program</td>
<td>41</td>
<td>45</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>3 Most Olympic Sports are in jeopardy of elimination within the current NCAA structure</td>
<td>8</td>
<td>53</td>
<td>33</td>
<td>6</td>
</tr>
<tr>
<td>4 By supporting Olympic sports, my university contributes to U.S. Olympic success</td>
<td>6</td>
<td>18</td>
<td>56</td>
<td>20</td>
</tr>
<tr>
<td>5 Recent NCAA changes to student-athlete funding will require department resources that will threaten my program</td>
<td>8</td>
<td>27</td>
<td>47</td>
<td>18</td>
</tr>
<tr>
<td>6 By supporting Olympic sports, the NCAA contributes to U.S. Olympic success</td>
<td>0</td>
<td>12</td>
<td>35</td>
<td>53</td>
</tr>
<tr>
<td>7 Providing scholarship opportunities to foreign athletes ultimately benefits U.S athletes' chances in Olympic/International competition</td>
<td>12</td>
<td>47</td>
<td>29</td>
<td>12</td>
</tr>
<tr>
<td>8 The current structure for Olympic sports within the NCAA cannot be sustained</td>
<td>6</td>
<td>41</td>
<td>43</td>
<td>10</td>
</tr>
<tr>
<td>9 The future of my sport within my university depends on our team's success at the NCAA level</td>
<td>28</td>
<td>46</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>10 The future of my sport within my university can be influenced by our team's success at the Olympic/International level</td>
<td>16</td>
<td>35</td>
<td>45</td>
<td>4</td>
</tr>
<tr>
<td>11 Recent NCAA changes to student-athlete funding will benefit my program</td>
<td>22</td>
<td>29</td>
<td>43</td>
<td>6</td>
</tr>
<tr>
<td>12 Revenue generating sports should be treated differently by the NCAA than non-revenue generating sports</td>
<td>20</td>
<td>43</td>
<td>29</td>
<td>8</td>
</tr>
</tbody>
</table>
Table 3.3

Pilot Study Factors and Items Identified from Exploratory Factor Analysis (Promax Rotation)

<table>
<thead>
<tr>
<th>Factors and Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1. Coaches’ perception of the future of their sport (FOS)</strong></td>
<td></td>
</tr>
<tr>
<td>My sport is in jeopardy of elimination within my institution</td>
<td>.866</td>
</tr>
<tr>
<td>Recent NCAA changes to student-athlete funding will require department resources</td>
<td>.758</td>
</tr>
<tr>
<td>that will threat...</td>
<td></td>
</tr>
<tr>
<td>The future of my sport within my university depends on our team's success at the</td>
<td>.696</td>
</tr>
<tr>
<td>NCAA level</td>
<td></td>
</tr>
<tr>
<td>My sport is in jeopardy of elimination within the NCAA program</td>
<td>.541</td>
</tr>
<tr>
<td>The future of my sport within my university can be influenced by our team's</td>
<td>.484</td>
</tr>
<tr>
<td>success at the Olympic...</td>
<td></td>
</tr>
<tr>
<td>**Factor 2. Coaches’ perceptions of the value of the NCAA to U.S. Olympic success</td>
<td></td>
</tr>
<tr>
<td>(VAL)</td>
<td></td>
</tr>
<tr>
<td>By supporting Olympic sports, the NCAA contributes to U.S. Olympic success</td>
<td>.869</td>
</tr>
<tr>
<td>By supporting Olympic sports, my university contributes to U.S. Olympic success</td>
<td>.841</td>
</tr>
<tr>
<td>Providing scholarship opportunities to foreign athletes ultimately benefits U.S</td>
<td>.640</td>
</tr>
<tr>
<td>athletes' chances...</td>
<td></td>
</tr>
<tr>
<td><strong>Factor 3. Coaches’ perception of the future of all Olympic Sports (FAS)</strong></td>
<td></td>
</tr>
<tr>
<td>Revenue generating sports should be treated differently by the NCAA than</td>
<td>.829</td>
</tr>
<tr>
<td>non-revenue generating s...</td>
<td></td>
</tr>
<tr>
<td>The current structure for Olympic sports within the NCAA cannot be sustained</td>
<td>.629</td>
</tr>
<tr>
<td>Most Olympic Sports are in jeopardy of elimination within the current NCAA</td>
<td>.611</td>
</tr>
<tr>
<td>structure</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.4

*Correlation among Pilot Study Factors*

<table>
<thead>
<tr>
<th>Factor</th>
<th>FOS</th>
<th>VAL</th>
<th>FAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaches’ Perception of the Future of their Sport (FOS)</td>
<td>1.000</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Coaches’ Perceptions of the Value of the NCAA to U.S. Olympic Success (VAL)</td>
<td>.097**</td>
<td>1.000</td>
<td>--</td>
</tr>
<tr>
<td>Coaches’ Perception of the Future of all Olympic Sports (FAS)</td>
<td>.311**</td>
<td>.071**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Note. Correlation is significant at .001 (2-tailed)**

Table 3.5

*Pilot Study Reliability Measures*

<table>
<thead>
<tr>
<th>Factor</th>
<th>N of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaches’ Perception of the Future of their Sport (FOS)</td>
<td>5</td>
<td>.726</td>
</tr>
<tr>
<td>Coaches’ Perceptions of the Value of the NCAA to U.S. Olympic Success (VAL)</td>
<td>3</td>
<td>.691</td>
</tr>
<tr>
<td>Coaches’ Perception of the Future of all Olympic Sports (FAS)</td>
<td>3</td>
<td>.160</td>
</tr>
</tbody>
</table>
Table 3.6

*Pilot Study Coaches’ Additional Thoughts on the Future of Olympic Sports within the National Collegiate Athletic Association (NCAA)*

1. Most departments are not revenue sustaining therefore they take tax dollars and are subject to title IV. The additional athlete funding will eventually be absorbed. The sports in the most danger are men’s Olympic sports. Women’s Olympic sports should not be harmed.
2. You should be allowed to check every sport that applies to you. I’m responsible for all men and women cross country and track and field.
3. The Cost of Attendance funding benefits each individual in the Olympic sports programs. It is up to each institution to determine the priorities for funding and creating sources to cover each or all sports.
4. Why is the NCAA allowed to generate and keeps it’s close to a billion dollars of profits? Why is that money not put back into intercollegiate sports and helping the Olympic movement? The governing body of the NCAA should be a non-profit organization and have the interests and development of intercollegiate and amateur sports as its main function.
5. They can be at Schools with more money, but smaller mid major schools already cannot keep up. Access to the NCAA Championships is being minimized in all sports by the Big 5 Conferences. The amounts of At Large bids have decreased significantly. The cost of attendance measure will further restrict schools with less. The NCAA has lost track of its purpose and that they are to serve all institutions and all student athletes. Perhaps splitting into another Division would help? Do not like the idea of that, but it might balance things out a bit again.
6. The future depends on funding and if they can make their sport relevant and figure out to be cost efficient because they don't generate revenue.
7. this topic needs and warrants more than a few multiple choice questions
8. if programs cannot sustain minor/Olympic sports those sports will get dropped. it is a funding model that cannot sustain itself and those sports will suffer. I used to be a men's volleyball coach and I feel that sport is really in jeopardy and men’s Olympic volleyball has had much success with gold medals and a silver. If it goes away, that would be a real shame, but money will not flow into that sport, especially from the p5 teams.
9. Olympic sports are crucial for college athletics, however we are in jeopardy of putting all the emphasis and money on FBS Football teams and schools. Without legitimate revenue sharing, greed continues and to me there seems to be a divide coming between FBS and FCS, creating two different entities is in my opinion not the answer but it's unfortunate that certain schools and conferences are able to get the majority of the money. Everyone is losing in this one
10. I believe most sports that excel have both men’s and women’s teams. I think it would be an awesome statistic to show to athletic directors. That majority of teams who make NCAA's have men’s and women’s programs of the same sport
11. The questions do not really allow some schools that are not power 5 schools to answer accurately. Changes in athlete funding has both helped and hurt my sport as a non-power five university.
Discussion of the Pilot Study Findings

Although factors displayed strong loadings, the subscale reliability measures were relatively weak. To remedy this outcome, additional items will be added to the survey and a larger sample size will be sought. Although the pilot study did not indicate strong reliability in the survey tool or any significant differences between means of specific sports, it did serve its primary purpose of allowing the researcher to explore the validity of the survey and practice data analysis with SPSS. By observing the open-ended responses, it was confirmed that coaches have a passion for the subject matter, and that there exists a need for further study.
CHAPTER IV

RESULTS

This study examined the perceptions of select nonrevenue, NCAA Olympic coaches, as fundamental stakeholders within university athletics, on the sustainability and value of their sport within the NCAA given the increasing impact of commercialism in intercollegiate athletics. The first objective was to analyze coaches’ perceptions of the sustainability of their sport within the NCAA program. Additionally, coaches’ perceptions of the influence that NCAA participation has on U.S. Olympic and international success were analyzed to better understand the extent of interest of the United States Olympic Committee as a stakeholder in NCAA sports. The first two research questions and hypotheses were:

Q 1  Do nonrevenue, NCAA Olympic coaches believe the future of their programs to be in jeopardy within the NCAA program?

H 1.1  Coaches of nonrevenue, NCAA Olympic sports perceive the future of their programs to be in jeopardy within the NCAA program.

H 1.2  Coaches of nonrevenue, NCAA Olympic sports at the Division I level will view the future of their sport to be in greater jeopardy than coaches in Divisions II and III.

Q 2  Do nonrevenue, NCAA Olympic coaches believe their program provides value to U.S. Olympic and international competitive success?

H 2.1  Coaches of nonrevenue, NCAA Olympic sports believe their programs provide value to U.S. Olympic and international competitive success.

H 2.2  There are variations in the perceptions of nonrevenue, NCAA Olympic coaches as to the value their program provides to Olympic and international competitive success when focusing on the divisional
affiliation (Division I, Division II, Division III) of the athletic department being examined.

To address these first two research questions and hypotheses, descriptive statistics were collected and observed on the data from the first two sections of the survey instrument, and an exploratory factor analysis was performed to identify latent constructs. After rotation the results indicated three parsimonious factors that were defined as: “perceptions on the future of Olympic sports in the NCAA” (POF), “perceptions on the value of NCAA Olympic sports to U.S. Olympic success” (POS), and “perceptions on the interdependence of the NCAA and USOC” (POI). An analysis of variance (ANOVA) was then performed to compare scores of the variables across three NCAA divisions.

Lastly, coaches’ perceptions of the cultural and societal values that NCAA Olympic sports provide were compared with administrators’ perceptions of the same values as compiled by Cooper and Weights “NCAA Program Value Scale” (Cooper & Weight, 2011). The final research question and hypotheses addressed this section and included:

**Q 3** What program values do nonrevenue, NCAA Olympic coaches believe to be the most important to their administrators?

**H 3.1** Coaches of nonrevenue, NCAA Olympic sports share the same values as their administrators.

**H 3.2** There are variations in the nonrevenue, NCAA Olympic program values that coaches believe are most important to their administrators when focusing on the divisional affiliation (Division I, Division II, Division III) of the athletic department being examined.

This chapter details the findings and the analysis of the data collected from the survey instrument.
**Survey Response Rates and Demographics**

A 33 item survey was developed and e-mailed to all NCAA (Divisions I, II, and III) coaches of men’s swimming (n = 438, 70, 233), gymnastics (n = 15, 0, 1), and wrestling (n = 74, 59, 100) teams for a total sample size of 687 during the fall of 2016. A total of 192 responses were recorded for all three sports, resulting in an overall response rate of 27.95%. Specific sport response rates were 29.45% for swimming (129/438), 56.25% for gymnastics (9/16), and 23.18% (54/233) for wrestling. Specific NCAA Division responses were 32.60% for Division 1 (73/224), 20.93% for Division 2 (27/129), and 27.26% for Division 3 (91/334). Of the respondents, 7.82% (15/192) had less than 5 years’ experience, 22.92% (44/192) had 5-10 years’ experience, and 69.27% (133/192 had more than 10 years’ experience. Of the NCAA Division 1 respondents, 27 coaches represented the Autonomy Conferences (ACC, Big Ten, Big XII, Pac 12 and SEC), 19 represented the Non-Autonomy BCS Conferences (American, C-USA, Mid-American, Mountain West, Sun Belt), and 27 represented the FCS or Non-Football Conferences (see Table 4.1).

Specific steps were taken to enhance the survey response rate. Consultation were provided by a senior staff member of the United States Olympic Committee (USOC), as well as staff from the College Swimming Coaches Association (CSCA), and permission was granted to state in the introductory e-mail that the research was in collaboration with each of these entities. This endorsement was valuable because each of these organizations is well known and respected by the target audience. In addition to the statement of collaboration with the USOC and CSCA, the introductory e-mail to the population included a brief explanation of the importance of the research to the coaches,
Table 4.1

Demographics of Survey Respondents

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Measure</th>
<th>Gymnastics</th>
<th>Swimming</th>
<th>Wrestling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td>Less than 5 years</td>
<td>0</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>2</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>More than 10 years</td>
<td>7</td>
<td>91</td>
<td>35</td>
</tr>
<tr>
<td>NCAA Athletic Division</td>
<td>I</td>
<td>8</td>
<td>51</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>0</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>1</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>Division I Athletic Conference</td>
<td>Autonomy Conferences</td>
<td>4</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Non Autonomy Conferences</td>
<td>3</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FCS or Non-Football Conference</td>
<td>1</td>
<td>22</td>
<td>4</td>
</tr>
</tbody>
</table>

as well as an assertion that the survey was brief and should require no more than five minutes of their time (see Appendix C). Discussions with the focus group and open-ended responses from the pilot study both emphasized the need to keep the instrument brief to enhance response rates. The e-mail was distributed mid-morning on a Tuesday. This timing was deliberate to minimize the potential for coaches to be focused on weekend competitions, and to fall after morning practices when coaches were most likely to have office hours. A follow-up letter was sent one week later to request additional responses. In order to instill a sense of urgency among non-respondents, the follow-up letter reiterated the importance and brevity of the survey, and indicated a good response
rate to date. It also included a statement that no further correspondence to the coaches could be expected. Both the introductory and follow-up letters included the IRB consent information and link to the survey.

**Survey Item Responses for Sections 1 and 2**

Survey response means and standard deviations for coaches’ perceptions on the sustainability of nonrevenue, Olympic sports in the NCAA program (section 1 of the survey) are displayed in Table 4.2, and for perceptions on the value of NCAA programs to the U.S. Olympic movement (part 2 of the survey) in Table 4.3. Items 2.6 and 2.7 in section 2 were reverse-coded (1 = Strongly Agree and 6 = Strongly Disagree) due to negative wording of the items.
Table 4.2

*Coaches’ Perceptions on the Sustainability of Select Nonrevenue, National Collegiate Athletic Association (NCAA) Olympic Sports*

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Nonrevenue, Olympic Sports are viewed as a priority within my department</td>
<td>3.93</td>
<td>1.555</td>
</tr>
<tr>
<td>1.2 The future of nonrevenue, Olympic sport teams within my college/university depends on that team’s success at the NCAA level</td>
<td>2.97</td>
<td>1.567</td>
</tr>
<tr>
<td>1.3 Nonrevenue, Olympic sports add value to our college/university</td>
<td>5.83</td>
<td>0.601</td>
</tr>
<tr>
<td>1.4 Increasing funding for football creates hardships for many of our nonrevenue, Olympic sports</td>
<td>4.49</td>
<td>1.519</td>
</tr>
<tr>
<td>1.5 Nonrevenue, Olympic sports must be treated differently from football and men’s basketball by the NCAA if they are to be sustainable.</td>
<td>4.61</td>
<td>1.407</td>
</tr>
<tr>
<td>1.6 Recent NCAA changes that allow greater financial autonomy to the largest athletic programs will threaten the sustainability of many nonrevenue, Olympic sports</td>
<td>4.84</td>
<td>1.168</td>
</tr>
<tr>
<td>1.7 The future of my sport is in jeopardy of elimination within my institution if athletic department spending continues to increase</td>
<td>3.14</td>
<td>1.599</td>
</tr>
<tr>
<td>1.8 The future of my program is threatened due to gender equity issues within my department</td>
<td>2.59</td>
<td>1.542</td>
</tr>
<tr>
<td>1.9 Nonrevenue, Olympic sports require resources needed for other programs in my department</td>
<td>3.25</td>
<td>1.572</td>
</tr>
<tr>
<td>1.10 Recent NCAA changes that allow for increased student-athlete funding will benefit all sports in my department</td>
<td>2.61</td>
<td>1.534</td>
</tr>
<tr>
<td>1.11 The current structure for nonrevenue, Olympic sports within the NCAA cannot be sustained</td>
<td>3.92</td>
<td>1.311</td>
</tr>
<tr>
<td>1.12 I feel my administrators value my input as it relates to the overall priorities of my department</td>
<td>4.07</td>
<td>1.633</td>
</tr>
</tbody>
</table>

Note. The scale ranged from Strongly Disagree (1) to Strongly Agree (6).
Table 4.3

Coaches’ Perceptions on the Influence of the National Collegiate Athletic Association (NCAA) Participation on United States Olympic and International Success

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 The NCAA greatly contributes to the success of the United States in Olympic/International competition by supporting nonrevenue, Olympic sports</td>
<td>4.96</td>
<td>1.468</td>
</tr>
<tr>
<td>2.2 My college/university greatly contributes to the success of the United States in Olympic/International competition by supporting nonrevenue, Olympic sports</td>
<td>3.56</td>
<td>1.750</td>
</tr>
<tr>
<td>2.3 Providing scholarship opportunities to foreign athletes ultimately benefits U.S athletes' chances in Olympic/International competition</td>
<td>3.23</td>
<td>1.529</td>
</tr>
<tr>
<td>2.4 The sustainability of nonrevenue, Olympic sport teams within my college/university can be influenced by U.S. success at the Olympic/International level</td>
<td>3.50</td>
<td>1.616</td>
</tr>
<tr>
<td>2.5 U.S. Olympic/International success greatly depends on NCAA support</td>
<td>4.81</td>
<td>1.325</td>
</tr>
<tr>
<td>2.6 (reverse-coded) Only the top performing NCAA Division I programs contribute to U.S. Olympic/International success</td>
<td>3.60</td>
<td>1.542</td>
</tr>
<tr>
<td>2.7 (reverse-coded) NCAA Division II and III programs have little influence on U.S. Olympic/International success</td>
<td>3.35</td>
<td>1.466</td>
</tr>
<tr>
<td>2.8 Most nonrevenue, Olympic sports are in jeopardy of elimination within the current NCAA structure</td>
<td>3.83</td>
<td>1.282</td>
</tr>
<tr>
<td>2.9 Olympic National Governing Bodies (NGBs) can influence the sustainability of nonrevenue, Olympic sports within the NCAA program</td>
<td>4.32</td>
<td>1.188</td>
</tr>
<tr>
<td>2.10 The NCAA and USOC need each other to succeed</td>
<td>4.76</td>
<td>1.300</td>
</tr>
</tbody>
</table>

Note. The scale ranged from Strongly Disagree (1) to Strongly Agree (6).

Exploratory Factor Analysis

In order to address research questions 1 and 2, an exploratory factor analysis was conducted to identify latent constructs in the questionnaire. The survey data was imported from the Qualtrics platform to IBM SPSS (version 23) and examined for outliers. Miscellaneous information collected by the Qualtrics platform was purged for data clarity, as was the data from ten respondents that failed to continue beyond the
demographic section of the survey. An additional ten respondents did not complete section 3 (i.e. after item 22), however this data was retained since it provided useful information for the first two sections of the instrument. Some respondents indicated in the open-ended statements at the end of each section that they felt neutral on specific items and failed to respond to those items.

A Kaiser-Meyer-Olkin (KMO) Test was conducted to confirm the suitability of the data performing for Factor Analysis. The KMO test is an index of the proportion of variance explained by the factor analysis and assessed sampling adequacy for each variable in the model as well as for the complete model. A low proportion indicates suitability for factor analysis (Cerny & Kaiser, 1977). Kaiser (1974) concluded that KMO values less than 0.6 indicate the sampling is not adequate. SPSS analysis revealed a KMO of .72 for the survey data. In addition to the KMO, a Bartlett’s Test of Sphericity was also performed to test the null hypothesis that the correlation matrix was an identity matrix (i.e. all of the diagonal elements are 1 and all off diagonal elements are 0). This test indicated a significance level of < .001. Both the KMO and Batlett’s tests indicated that the data was acceptable for utilization of an Exploratory Factor Analysis (EFO).

Initial Principal Component Analysis (PCA) indicated two items with negative factor loadings (items 2.6 and 2.7) and these were reverse coded to allow for positive loadings.

A scree plot of the eigenvalues against the factor numbers displayed a flattening of the plot (elbow) after the first three factors. Only the first three factors explained a meaningful amount of variance. Further analysis indicated the three factors accounted for 31.15% of the total variance. These three factors were extracted using Principal Axis Factoring (PAF) while suppressing values less than 0.4. Promax rotation indicated factor
correlations less than 0.2, so the extraction was repeated using varimax rotation. Factor loadings are displayed in Table 4.4. Because an orthogonal rotation (varimax) had been conducted, the correlations between the factors are set to 0, so factor inter-correlations were not included.

After analysis of the factor compositions, the first factor was labeled as “perceptions on the future of Olympic sports in the NCAA” (POF). An example of items composing this factor included, “Most nonrevenue, Olympic sports are in jeopardy of elimination within the current NCAA structure” (response mean = 3.83). These items typically resulted in responses below the midpoint of the scale (i.e. < 4 on the response scale). Two items related to recent changes in funding at the largest institutions resulted in responses of agreement (i.e. > 3 on the response scale). This indicates that although coaches across all three NCAA divisions are generally not concerned about the sustainability of nonrevenue, Olympic sports in the NCAA program, there is concern where it pertains to increased spending on marquee sport programs.

The second factor was labeled “perceptions on the value of NCAA Olympic sports to U.S. Olympic success” (POS). An example of items comprising this factor include, “My college/university greatly contributes to the success of the United States in Olympic/International competition by supporting nonrevenue, Olympic sports” (response mean = 3.56). Items 2.6 and 2.7 were reverse coded due to negative wording. Items comprising this factor all resulted in responses of general disagreement (i.e. < 4 on the response scale) indicating that coaches across all three NCAA divisions do not view their programs as having a significant impact on U.S. Olympic success.
The third factor was labeled “perceptions on the interdependence of the NCAA and USOC” (POI). An example of items comprising this factor include, “International success greatly depends on NCAA support” (response mean = 4.81). Items pertaining to the interdependency of the NCAA and the USOC generally resulted in responses of agreement (i.e. > 3 on the response scale).

Means for each factor component are listed in Table 4.5. Finally, Cronbach’s Alpha levels (α) were calculated to determine the reliability of each. Reliability results are shown in Table 4.6.
Table 4.4

Three-Factor Principal Axis Factoring Matrix with Varimax Rotation* and Kaiser Normalization

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most nonrevenue, Olympic sports are in jeopardy of elimination within the current NCAA structure</td>
<td>.724</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The future of my sport is in jeopardy of elimination within my institution if athletic department spending continues to increase</td>
<td>.712</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recent NCAA changes that allow greater financial autonomy to the largest athletic programs will threaten the sustainability of many nonrevenue, Olympic sports</td>
<td>.643</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing funding for football creates hardships for many of our nonrevenue, Olympic sports</td>
<td>.604</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The current structure for nonrevenue, Olympic sports within the NCAA cannot be sustained</td>
<td>.531</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The future of my program is threatened due to gender equity issues within my department</td>
<td>.470</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonrevenue, Olympic sports require resources needed for other programs in my department</td>
<td>.419</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My college/university greatly contributes to the success of the United States in Olympic/International competition by supporting nonrevenue, Olympic sports</td>
<td></td>
<td>.706</td>
<td></td>
</tr>
<tr>
<td>NCAA Division II and III programs have little influence on U.S. Olympic/International success (recoded)</td>
<td></td>
<td>.521</td>
<td></td>
</tr>
<tr>
<td>Only the top performing NCAA Division I programs contribute to U.S. Olympic/International success (recoded)</td>
<td></td>
<td>.512</td>
<td></td>
</tr>
<tr>
<td>Providing scholarship opportunities to foreign athletes ultimately benefits U.S athletes' chances in Olympic/International competition</td>
<td></td>
<td>.404</td>
<td></td>
</tr>
<tr>
<td>The NCAA and USOC need each other to succeed</td>
<td>.690</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Olympic/International success greatly depends on NCAA support</td>
<td>.615</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olympic National Governing Bodies (NGBs) can influence the sustainability of nonrevenue, Olympic sports within the NCAA program</td>
<td></td>
<td>.470</td>
<td></td>
</tr>
<tr>
<td>The sustainability of nonrevenue, Olympic sport teams within my college/university can be influenced by U.S. success at the Olympic/International level</td>
<td></td>
<td></td>
<td>.411</td>
</tr>
</tbody>
</table>

*Rotation converged in 7 iterations
Table 4.5

Component Means for Each Identified Factor

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perceptions of the Future</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most nonrevenue, Olympic sports are in jeopardy of elimination within the</td>
<td>174</td>
<td>3.83</td>
</tr>
<tr>
<td>current NCAA structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The future of my sport is in jeopardy of elimination within my institution</td>
<td>180</td>
<td>3.14</td>
</tr>
<tr>
<td>if athletic department spending continues to increase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recent NCAA changes that allow greater financial autonomy to the largest</td>
<td>178</td>
<td>4.84</td>
</tr>
<tr>
<td>athletic programs will threaten the sustainability of many nonrevenue,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olympic sports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing funding for football creates hardships for many of our nonrevenue,</td>
<td>177</td>
<td>4.49</td>
</tr>
<tr>
<td>Olympic sports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The current structure for nonrevenue, Olympic sports within the NCAA cannot</td>
<td>180</td>
<td>3.92</td>
</tr>
<tr>
<td>be sustained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The future of my program is threatened due to gender equity issues</td>
<td>180</td>
<td>2.59</td>
</tr>
<tr>
<td>within my department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonrevenue, Olympic sports require resources needed for other programs in</td>
<td>178</td>
<td>3.25</td>
</tr>
<tr>
<td>my department</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceptions of Success</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My college/university greatly contributes to the success of the United</td>
<td>173</td>
<td>3.56</td>
</tr>
<tr>
<td>States in Olympic/International competition by supporting nonrevenue,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olympic sports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCAA Division II and III programs have little influence on U.S. Olympic/</td>
<td>174</td>
<td>3.65</td>
</tr>
<tr>
<td>International success (recoded)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only the top performing NCAA Division I programs contribute to U.S. Olympic/</td>
<td>174</td>
<td>3.39</td>
</tr>
<tr>
<td>International success (recoded)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing scholarship opportunities to foreign athletes ultimately benefits</td>
<td>173</td>
<td>3.23</td>
</tr>
<tr>
<td>U.S athletes’ chances in Olympic/International competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceptions of Interaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The NCAA and USOC need each other to succeed</td>
<td>175</td>
<td>4.76</td>
</tr>
<tr>
<td>U.S. Olympic/International success greatly depends on NCAA support</td>
<td>175</td>
<td>4.81</td>
</tr>
<tr>
<td>Olympic National Governing Bodies (NGBs) can influence the sustainability</td>
<td>172</td>
<td>4.32</td>
</tr>
<tr>
<td>of nonrevenue, Olympic sports within the NCAA program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The sustainability of nonrevenue, Olympic sport teams within my college/</td>
<td>173</td>
<td>3.50</td>
</tr>
<tr>
<td>university can be influenced by U.S. success at the Olympic/International</td>
<td></td>
<td></td>
</tr>
<tr>
<td>level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.6

*Reliability Measures on Each Factor*

<table>
<thead>
<tr>
<th>Factor</th>
<th>N of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of the Future (POF)</td>
<td>7</td>
<td>.777</td>
</tr>
<tr>
<td>Perceptions on Olympic Success (POS)</td>
<td>4</td>
<td>.730</td>
</tr>
<tr>
<td>Perceptions on NCAA/USOC Interdependence (POI)</td>
<td>4</td>
<td>.641</td>
</tr>
</tbody>
</table>

*Analysis of Variance (ANOVA) on Latent Factors*

An analysis of variance (ANOVA) was performed on each of the three factors for each NCAA Division (I, II, and III). The NCAA Division served as the dependent variable and the specific factor was the dependent variable. A test of homogeneity was performed on each factor to determine if constant variance across groups existed, and each factor was determined to have constant variance across groups. A Tukey’s Post Hoc Test was also performed to identify significant differences between groups at a 0.5 confidence level.

*Perceptions on the Future (POF) of Olympic Sports in the National Collegiate Athletic Association*

Means were calculated by NCAA division for each item comprising the POF factor. Results are displayed in Table 4.7. In all cases, the mean for each item was greater (i.e. more “in agreement” on the response scale) for NCAA Division I and II coaches, than for Division III coaches, indicating that coaches in Division I and II are more concerned about the future of nonrevenue, Olympic sports in the NCAA program when compared to Division III coaches.
Table 4.7

*Perceptions on the Future (POF) Factor Item Means by National Collegiate Athletic Association (NCAA) Division*

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Division</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most nonrevenue, Olympic sports are in jeopardy of elimination within the current NCAA structure</td>
<td>I</td>
<td>66</td>
<td>4.08</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>4.11</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>81</td>
<td>3.54</td>
</tr>
<tr>
<td>The future of my sport is in jeopardy of elimination within my institution if athletic department spending continues to increase</td>
<td>I</td>
<td>70</td>
<td>3.73</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>3.37</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>83</td>
<td>2.57</td>
</tr>
<tr>
<td>Recent NCAA changes that allow greater financial autonomy to the largest athletic programs will threaten the sustainability of many nonrevenue, Olympic sports</td>
<td>I</td>
<td>70</td>
<td>4.94</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>26</td>
<td>5.35</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>82</td>
<td>4.60</td>
</tr>
<tr>
<td>Increasing funding for football creates hardships for many of our nonrevenue, Olympic sports</td>
<td>I</td>
<td>71</td>
<td>4.46</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>26</td>
<td>5.08</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>80</td>
<td>4.33</td>
</tr>
<tr>
<td>The current structure for nonrevenue, Olympic sports within the NCAA cannot be sustained</td>
<td>I</td>
<td>70</td>
<td>4.13</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>3.93</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>83</td>
<td>3.73</td>
</tr>
<tr>
<td>The current structure for nonrevenue, Olympic sports within the NCAA cannot be sustained</td>
<td>I</td>
<td>70</td>
<td>4.13</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>3.93</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>83</td>
<td>3.73</td>
</tr>
<tr>
<td>The future of my program is threatened due to gender equity issues within my department</td>
<td>I</td>
<td>70</td>
<td>2.80</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>2.93</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>83</td>
<td>2.30</td>
</tr>
<tr>
<td>Nonrevenue, Olympic sports require resources needed for other programs in my department</td>
<td>I</td>
<td>68</td>
<td>3.35</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>3.41</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>83</td>
<td>3.11</td>
</tr>
</tbody>
</table>

The one-way ANOVA on the POF factor produced a statistically significance result of $F(2,164) = 5.71, p = .004$, indicating a significant difference between groups. The Tukey’s Post Hoc Test displayed specific significant differences ($p < .05$) between NCAA Divisions I and III, and between Division II and III, again indicating that NCAA Division III coaches are not as concerned about the sustainability of their programs, as compared to coaches in Divisions I and II. Results are displayed in Table 4.8.
Table 4.8

*Tukey’s Post Hoc Tests for the Perceptions on the Future (POF) Factor*

<table>
<thead>
<tr>
<th>Primary Division</th>
<th>Comparative Division</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCAA Division I</td>
<td>NCAA Division II</td>
<td>.831</td>
</tr>
<tr>
<td></td>
<td>NCAA Division III</td>
<td>.014*</td>
</tr>
<tr>
<td>NCAA Division II</td>
<td>NCAA Division I</td>
<td>.831</td>
</tr>
<tr>
<td></td>
<td>NCAA Division III</td>
<td>.022*</td>
</tr>
<tr>
<td>NCAA Division III</td>
<td>NCAA Division I</td>
<td>.014*</td>
</tr>
<tr>
<td></td>
<td>NCAA Division II</td>
<td>.022*</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level.

**Perceptions on the Value of National Collegiate Athletic Association (NCAA) Olympic Sports to United States Olympic Success (POS)**

Means were calculated by NCAA division for each item comprising the POS factor. Results are displayed in Table 4.9. Item means for this factor were greater (i.e. more “agreeable” on the response scale) for NCAA Division I and II coaches than for Division III coaches, indicating that coaches in Division III are less likely to feel their programs contribute to U.S. Olympic and international success when compared to coaches in Divisions I and II.
Table 4.9

Perceptions on Success (POS) Factor Item Means by National Collegiate Athletic Association (NCAA) Division

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>NCAA Division</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>My college/university greatly contributes to the success of the United States in Olympic/International competition by supporting nonrevenue, Olympic sports</td>
<td>I</td>
<td>66</td>
<td>4.53</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>3.48</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>80</td>
<td>2.79</td>
</tr>
<tr>
<td>NCAA Division II and III programs have little influence on U.S. Olympic/International success (recoded)</td>
<td>I</td>
<td>66</td>
<td>3.80</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>3.19</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>81</td>
<td>3.04</td>
</tr>
<tr>
<td>Only the top performing NCAA Division I programs contribute to U.S. Olympic/International success (recoded)</td>
<td>I</td>
<td>66</td>
<td>4.29</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>3.78</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>81</td>
<td>3.00</td>
</tr>
<tr>
<td>Providing scholarship opportunities to foreign athletes ultimately benefits U.S. athletes' chances in Olympic/International competition</td>
<td>I</td>
<td>66</td>
<td>3.56</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>26</td>
<td>3.15</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>81</td>
<td>2.98</td>
</tr>
</tbody>
</table>

The oneway ANOVA on the POS factor produced a statistically significance result of F (2,169) = 19.03, p = .000, indicating a significant difference between groups. The Tukey’s Post Hoc Test indicated specific significant differences (p < .05) between NCAA Divisions I and II, and between Division I and III, indicating that nonrevenue, Olympic NCAA coaches in Divisions II and III are less likely to feel their programs contribute to U.S. Olympic and international success as compared to coaches in Divisions I. Results are displayed in Table 4.10.
Table 4.10

Tukey’s Post Hoc Tests for Perceptions on the Success (POS) Factor

<table>
<thead>
<tr>
<th>Primary Division</th>
<th>Comparative Division</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCAA Division I</td>
<td>NCAA Division II</td>
<td>.036*</td>
</tr>
<tr>
<td>NCAA Division I</td>
<td>NCAA Division III</td>
<td>.000*</td>
</tr>
<tr>
<td>NCAA Division II</td>
<td>NCAA Division I</td>
<td>.036*</td>
</tr>
<tr>
<td>NCAA Division II</td>
<td>NCAA Division III</td>
<td>.118</td>
</tr>
<tr>
<td>NCAA Division III</td>
<td>NCAA Division I</td>
<td>.000*</td>
</tr>
<tr>
<td>NCAA Division III</td>
<td>NCAA Division II</td>
<td>.118</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level.

Perceptions on the Interdependence (POI) of the National Collegiate Athletic Association (NCAA) and United States Olympic Committee (USOC)

Means were calculated by NCAA division for each item comprising the POI factor. Results are displayed in Table 4.11. Item means for this factor were greater (i.e. more “in agreement” on the response scale) for NCAA Division I coaches than for Division III coaches, indicating that coaches in Division I are more likely to feel the need for collaboration between the NCAA and USOC as compared to coaches in Divisions II and III.
Table 4.11

*Perceptions on Interdependence (POI) Factor Item Means by NCAA Division*

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>NCAA Division</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>The NCAA and USOC need each other to succeed</td>
<td>I</td>
<td>66</td>
<td>4.89</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>4.70</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>82</td>
<td>4.67</td>
</tr>
<tr>
<td>U.S. Olympic/International success greatly depends on NCAA support</td>
<td>I</td>
<td>66</td>
<td>4.91</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>4.59</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>82</td>
<td>4.79</td>
</tr>
<tr>
<td>Olympic National Governing Bodies (NGBs) can influence the sustainability</td>
<td>I</td>
<td>66</td>
<td>4.52</td>
</tr>
<tr>
<td>of nonrevenue, Olympic sports within the NCAA program</td>
<td>II</td>
<td>26</td>
<td>4.04</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>80</td>
<td>4.25</td>
</tr>
<tr>
<td>The sustainability of nonrevenue, Olympic sport teams within my college/</td>
<td>I</td>
<td>66</td>
<td>3.80</td>
</tr>
<tr>
<td>university can be influenced by U.S. success at the Olympic/International</td>
<td>II</td>
<td>27</td>
<td>3.67</td>
</tr>
<tr>
<td>level</td>
<td>III</td>
<td>80</td>
<td>3.20</td>
</tr>
</tbody>
</table>

The oneway ANOVA on the POI factor failed to produce statistically significant results [$F(2,168) = 2.183$, $p = .116$]. The Tukey’s Post Hoc Test confirmed a lack of significant differences between NCAA Divisions, indicating that there is no significant differences between coaches of the different NCAA Divisions on their feelings toward the need for collaboration between the NCAA and the USOC. The item means for this factor indicate that all coaches believe this collaboration is necessary. Results of the Tukey’s Post Hoc Test are displayed in Table 4.12.
Table 4.12
Tukey’s Post Hoc Tests for the Perceptions on Interdependence (POI) Factor

<table>
<thead>
<tr>
<th>Primary Division</th>
<th>Comparative Division</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCAA Division I</td>
<td>NCAA Division II</td>
<td>.407</td>
</tr>
<tr>
<td></td>
<td>NCAA Division III</td>
<td>.110</td>
</tr>
<tr>
<td>NCAA Division II</td>
<td>NCAA Division I</td>
<td>.407</td>
</tr>
<tr>
<td></td>
<td>NCAA Division III</td>
<td>.983</td>
</tr>
<tr>
<td>NCAA Division III</td>
<td>NCAA Division I</td>
<td>.110</td>
</tr>
<tr>
<td></td>
<td>NCAA Division II</td>
<td>.983</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level.

Survey Item Responses for Section 3

The final section of the survey examined coaches’ perceptions of the cultural and societal values that NCAA Olympic sports provide, and this data was compared with administrator’s perceptions of those values as compiled by Cooper and Weight “NCAA Program Value Scale” (Cooper & Weight, 2011). This data is displayed in Table 4.13, and was used to answer the final research question and hypotheses.

To answer research question 1 and hypothesis H3.1, descriptive statistics for the data were generated and a one-sample T-Test (μ ≥ 4) was conducted for each item to determine significance of the sample mean relative to the scale. Results of this analysis are displayed in Table 20, along with the administrator results collected by Cooper and Weight. As illustrated below, there were nine program values that were significantly higher than 4, “agreement,” at the p = .001 level: athletic success $t(167) = 4.43$, p < .001, academic achievement $t(168) = 16.40$, p < .001, community involvement $t(168) = 12.08,$
p < .001, conduct (competition) t(168) = 25.97, p < .001, conduct (social) t(167) = 21.78,
p < .001, enrollment t(168) = 2.67, p < .001, fundraising t(168) = 5.29, p < .001, personal
relationships t(168) = 4.41, p < .001, and program sponsorship t(169) = 3.93, p < .001.
These results were similar to administrator’s perceptions as compiled by Cooper and
Weight with the exception of program sponsorship cost which was determined to be
significant for coaches, but not for administrators.
Table 4.13

*Cumulative National Collegiate Athletic Association (NCAA) Division I, II, and III Responses to Olympic Program Values*

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Administrators</th>
<th>Coaches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>3.1 Athletic Success: High levels of individual/team success in sport competition</td>
<td>5.08</td>
<td>.964</td>
</tr>
<tr>
<td>3.2 Academic Achievement: High levels of individual and team success in the classroom</td>
<td>5.69</td>
<td>.658</td>
</tr>
<tr>
<td>3.3 Community Involvement: Strong team presence in local community service initiatives</td>
<td>5.09</td>
<td>.940</td>
</tr>
<tr>
<td>3.4 Conduct (Competition): Proper behavior exhibited by coaches and student-athletes during competition</td>
<td>5.77</td>
<td>.601</td>
</tr>
<tr>
<td>3.5 Conduct (Social): Proper behavior exhibited by coaches and student-athletes outside of competition</td>
<td>5.69</td>
<td>.652</td>
</tr>
<tr>
<td>3.6 Enrollment: Increase in university enrollment from student-athlete participation on sport team</td>
<td>4.30</td>
<td>1.511</td>
</tr>
<tr>
<td>3.7 Fan Support: Strong team support by fans in surrounding geographical region</td>
<td>4.00</td>
<td>1.160</td>
</tr>
<tr>
<td>3.8 Fundraising: Development of external funds to supplement team's operating budget</td>
<td>4.41</td>
<td>1.275</td>
</tr>
<tr>
<td>3.9 Personal Relationships: Strong relationships between administrators and members of coaching staff</td>
<td>5.20</td>
<td>.959</td>
</tr>
<tr>
<td>3.10 Program Sponsorship Cost: Low cost to fund the annual operating budget of sport team</td>
<td>3.84</td>
<td>1.305</td>
</tr>
<tr>
<td>3.11 Revenue Production (Event): Development of positive revenue streams (e.g., ticket sales) at team athletic competitions</td>
<td>3.84</td>
<td>1.305</td>
</tr>
</tbody>
</table>

Note. The scale ranged from Strongly Disagree (1) to Strongly Agree (6). *p < .001 (μ ≥ 4
Descriptive Data and Analysis of Variance (ANOVA) on Program Values

To answer hypothesis H3.2, descriptive statistics were calculated for each program value item by NCAA division. Results are displayed in Table 4.14. An analysis of variance (ANOVA) was performed on each of the program values to determine perception differences between each NCAA Division (I, II, and III). The NCAA Division served as the dependent variable and the program value was the dependent variable. A test of homogeneity was performed on each factor to determine if constant variance across groups existed, and each factor was determined to have constant variance across groups. A Tukey’s Post Hoc Test was also performed to identify significant differences between groups at a 0.5 confidence level.

The one-way ANOVA suggested that community involvement \( F(2,166) = 4.50, p = .012 \), and enrollment \( F(2, 166) = 23.26, p = .000 \) were the only program values that significantly differed between NCAA divisions. The Tukey’s Post Hoc Test indicated specific significant differences (\( p < .05 \)) between NCAA Divisions I and III (\( \text{sig.} = .009 \)) concerning the value of community involvement, and between Division I and both divisions II (\( \text{sig.} = .000 \)) and III (\( \text{sig.} = .000 \)) concerning enrollment. No significant difference was found between Divisions II and III for the program value of enrollment.
Table 4.14

National Collegiate Athletic Association (NCAA) Divisional Responses on Olympic Program Values

<table>
<thead>
<tr>
<th>Program Value</th>
<th>NCAA Division</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Athletic Success</td>
<td>I</td>
<td>65</td>
<td>4.62</td>
<td>1.343</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>4.00</td>
<td>1.494</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>76</td>
<td>4.50</td>
<td>1.301</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 Academic Achievement</td>
<td>I</td>
<td>65</td>
<td>5.42</td>
<td>0.808</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>5.26</td>
<td>1.163</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>77</td>
<td>5.12</td>
<td>1.063</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Community Involvement</td>
<td>I</td>
<td>65</td>
<td>5.54</td>
<td>0.772</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>5.56</td>
<td>0.751</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>77</td>
<td>5.51</td>
<td>0.772</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 Conduct (Competition)</td>
<td>I</td>
<td>64</td>
<td>5.58</td>
<td>0.922</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>5.52</td>
<td>0.893</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>77</td>
<td>5.39</td>
<td>0.845</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 Conduct (Social)</td>
<td>I</td>
<td>65</td>
<td>3.32</td>
<td>1.778</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>5.26</td>
<td>1.509</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>77</td>
<td>4.94</td>
<td>1.436</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6 Enrollment</td>
<td>I</td>
<td>65</td>
<td>3.95</td>
<td>1.268</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>3.78</td>
<td>1.311</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>77</td>
<td>3.65</td>
<td>1.201</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.7 Fan Support</td>
<td>I</td>
<td>65</td>
<td>4.54</td>
<td>1.426</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>4.89</td>
<td>1.013</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>77</td>
<td>4.45</td>
<td>1.419</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.8 Fundraising</td>
<td>I</td>
<td>65</td>
<td>4.52</td>
<td>1.133</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>4.22</td>
<td>1.528</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>77</td>
<td>4.39</td>
<td>1.183</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.9 Personal Relationships</td>
<td>I</td>
<td>64</td>
<td>4.17</td>
<td>1.304</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>26</td>
<td>4.54</td>
<td>1.421</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>76</td>
<td>4.50</td>
<td>1.114</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.10 Program Sponsorship Cost</td>
<td>I</td>
<td>63</td>
<td>3.06</td>
<td>1.458</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>27</td>
<td>2.96</td>
<td>1.224</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>76</td>
<td>2.72</td>
<td>1.429</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level. (1 = Strongly Disagree and 6 = Strongly Agree)
Additional Data Analysis

In addition to data analytics performed to address the specific research questions, further analyses were conducted to observe perceptual differences on select survey items. Four survey items were selected based on their direct measure of coaches’ perceptions.

**Perceptual Differences within Division I on Select Survey Items**

Perceptual difference on the four select survey items were compared for coaches within NCAA Division I institutions, specifically between the autonomous conferences, i.e. the “Power Five” (ACC, Big 10, Big XII, Pac 12, and SEC), and the remaining non-autonomous Division I conferences (American, C-USA, Mid-American, Mountain West, Sun Belt) and the FCS (often referred to as the mid-majors) and non-football institutions. A comparison of means of these items is listed in Table 4.15.

**Table 4.15**

*Division I Coaches’ Perceptions on Select Survey Items*

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Conference Type</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Nonrevenue, Olympic Sports are viewed as a priority within my department</td>
<td>Autonomy</td>
<td>27</td>
<td>4.19</td>
</tr>
<tr>
<td></td>
<td>Non-Autonomy</td>
<td>19</td>
<td>3.32</td>
</tr>
<tr>
<td></td>
<td>FCS/Non-Football</td>
<td>25</td>
<td>3.88</td>
</tr>
<tr>
<td>1.3 Nonrevenue, Olympic sports add value to our college/university</td>
<td>Autonomy</td>
<td>27</td>
<td>5.67</td>
</tr>
<tr>
<td></td>
<td>Non-Autonomy</td>
<td>19</td>
<td>5.95</td>
</tr>
<tr>
<td></td>
<td>FCS/Non-Football</td>
<td>25</td>
<td>5.84</td>
</tr>
<tr>
<td>1.7 The future of my sport is in jeopardy of elimination within my institution if athletic department spending continues to increase</td>
<td>Autonomy</td>
<td>27</td>
<td>3.37</td>
</tr>
<tr>
<td></td>
<td>Non-Autonomy</td>
<td>19</td>
<td>4.32</td>
</tr>
<tr>
<td></td>
<td>FCS/Non-Football</td>
<td>24</td>
<td>3.67</td>
</tr>
<tr>
<td>1.12 I feel my administrators value my input as it relates to the overall priorities of my department</td>
<td>Autonomy</td>
<td>27</td>
<td>4.56</td>
</tr>
<tr>
<td></td>
<td>Non-Autonomy</td>
<td>19</td>
<td>3.37</td>
</tr>
<tr>
<td></td>
<td>FCS/Non-Football</td>
<td>24</td>
<td>4.00</td>
</tr>
</tbody>
</table>
The observed data indicated that coaches across Division I viewed Olympic sports as providing value to their institution. Coaches from the Power Five conferences felt their programs were viewed as valuable and felt their administrators valued their input, and had the least amount of concern for the future of their programs. Alternately, coaches from the non-autonomous conferences were the most concerned about the future of their programs, and felt their programs were less valued within their athletic department, and their input was less valued by their administrators. An analysis of variance showed no significant differences within Division I conferences on these survey items.

**Perceived Differences among Sports on Select Survey Items**

An additional analysis was conducted to observe perceived differences on select survey items between the three sports that comprised the study (i.e. gymnastics, swimming, and wrestling) regardless of NCAA Division. A comparison of means of these items is listed in Table 4.16.
Table 4.16

Gymnastics, Swimming, and Wrestling Coaches’ Perceptions on Select Survey Items*

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Select Sport</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Nonrevenue, Olympic Sports are viewed as a priority within my department</td>
<td>Gymnastics</td>
<td>9</td>
<td>4.56</td>
</tr>
<tr>
<td></td>
<td>Swimming</td>
<td>119</td>
<td>3.79</td>
</tr>
<tr>
<td></td>
<td>Wrestling</td>
<td>53</td>
<td>4.15</td>
</tr>
<tr>
<td>1.3 Nonrevenue, Olympic sports add value to our college/university</td>
<td>Gymnastics</td>
<td>9</td>
<td>5.89</td>
</tr>
<tr>
<td></td>
<td>Swimming</td>
<td>119</td>
<td>5.87</td>
</tr>
<tr>
<td></td>
<td>Wrestling</td>
<td>53</td>
<td>5.75</td>
</tr>
<tr>
<td>1.7 The future of my sport is in jeopardy of elimination within my institution if athletic department spending continues to increase</td>
<td>Gymnastics</td>
<td>9</td>
<td>4.22</td>
</tr>
<tr>
<td></td>
<td>Swimming</td>
<td>118</td>
<td>3.07</td>
</tr>
<tr>
<td></td>
<td>Wrestling</td>
<td>53</td>
<td>3.11</td>
</tr>
<tr>
<td>1.12 I feel my administrators value my input as it relates to the overall priorities of my department</td>
<td>Gymnastics</td>
<td>9</td>
<td>4.56</td>
</tr>
<tr>
<td></td>
<td>Swimming</td>
<td>119</td>
<td>3.97</td>
</tr>
<tr>
<td></td>
<td>Wrestling</td>
<td>53</td>
<td>4.21</td>
</tr>
</tbody>
</table>

* Coaches were from all NCAA Divisions, and included Men’s Gymnastics, Swimming, and Wrestling Programs. (1 = Strongly Disagree and 6 = Strongly Agree)

The data showed that swimming and wrestling coaches’ overall (i.e. across all divisions) perceptions indicated a lack of concern for the future of their programs (i.e. below the midpoint on the survey scale). As might be expected, with only 16 institutions currently participating in the NCAA, gymnastics coaches had the most concern for the future of their programs, even though these coaches felt their administrators valued their programs and input more than their counterparts in swimming and wrestling. Swimming coaches’ responses indicated the lowest values of the three men’s sports as pertaining to their perceptions of the value of their programs and input. An analysis of variance showed no significant differences between sports on these survey items.
Open-Ended Survey Responses

In addition to the survey scale responses, each section included one open-ended opportunity for respondents to elaborate. These items included, 1) Please feel free to add any additional thoughts on the future of nonrevenue, Olympic sports within the NCAA program (37 responses), 2) Please feel free to add any additional thoughts on the value of NCAA programs to Olympic/International success (12 responses), and 3) Please feel free to elaborate here on your general thoughts regarding how you feel valued as an Olympic sport by administrators within your athletic department (10 responses). These responses indicated a high-level of passion for the subject matter, as well as varied interpretations of the compounding issues.

Section 1 responses included numerous comments concerning the impact of football and men’s basketball on the future of nonrevenue, Olympic sports. Title IX was also mentioned multiple times in conjunction with the need to remove football from the equity equation. Below is an indicative response to Section 1.

“Title 9 is killing our sport because of Football. Football needs to be pulled out of the mix or we will lose Olympic sports and hurt the college athletic experience” [sic]. (anonymous survey respondent 1)

“The massive financial drain of FCS football is of major concern to Olympic sports of schools that participate at this level. The opportunity for collegiate competition in Olympic sports is critical to Olympic sports’ success. It is also critical to providing coaches for many of the Olympic sport systems like gymnastics. The system will implode without coaches who have a college education.” (anonymous survey respondent 2)

Multiple open-ended responses from Section 2 also included concerns with funding for football, but several indicated the plea for the NCAA and USOC to work collaboratively to sustain nonrevenue, Olympic sports. A typical response to this section is below.
“Vital to Olympic Sports that we work together and understand the dynamic on both sides!” (anonymous survey respondent 3)

Open-ended responses in Section 3 overwhelmingly indicated coaches perceived their administrators to view nonrevenue, Olympic sports as providing little value to the department, aside from occasional comments that coaches felt their programs helped offset some negative attributes of football and men’s basketball. Below is an indicative response to Section 3.

“Feel little to no value by administration by their actions, failure to address areas of concern regarding enough funding, staffing and facility needs by swimming as compared to other sports. Continue to be at the bottom of the totem pole.....success has lead to little or no improvement...” [sic] (anonymous survey respondent 4)

It’s worth noting that surveys in general tend to obtain a higher response rate from individuals who have extreme feelings to the subject matter, and it’s reasonable to expect that respondents who take the time to complete open-ended items are likely to heighten this phenomena, as these individuals may harbor a negative attitude and greater sense of urgency on the topic. Very few respondents to the open-ended items indicated positive or neutral attitudes toward the subject matter.

**Summary**

This study examined coaches’ perceptions of select nonrevenue, Olympic sports in the NCAA program. This chapter presented the data collected through surveys of all NCAA Head Coaches of men’s gymnastics, swimming, and wrestling. Descriptive statistics were generated, along with the findings of an exploratory factor analysis. Finally, responses to each of the research questions and their related hypotheses are detailed below, along with additional findings of the research.
Responses to Research Questions

The first research question and related hypotheses concerned coaches’ perceptions on the sustainability of Olympic sports within the NCAA program. These were addressed by observation of the overall and divisional means of section 1 of the survey responses, along with an analysis of variance of the “perceptions on the future of Olympic Sports in the NCAA” (POF) factor. The data analysis indicated that overall coaches’ perceptions were positive toward the sustainability of their sport within the NCAA program, although divisional differences exist whereby coaches at the larger institutions (Division I schools) were more concerned about the sustainability of their sport than were their colleagues at smaller institutions (Divisions II and III).

The second research question and related hypotheses concerned coaches’ perceptions on the value their program provides to the U.S. Olympic movement. These were addressed by observation of the overall and divisional means of section 2 of the survey responses, along with an analysis of variance of the “perceptions on the value of NCAA Olympic sports to U.S. Olympic Success” (POS) factor. Analysis indicated that, although many coaches feel their programs provide value to the U.S. Olympic and international efforts, coaches at NCAA Division I institutions felt their programs contributed more to international success, than those from Division III schools. This was expected, since the vast majority of Olympic athletes come from Division I schools.

The final research question and related hypotheses concerned coaches’ perceptions on the values their program provides to their department and institution. The data collected were compared to the same information collected on athletic department administrators by Cooper and Weight (2011). Item means were observed to be very
similar between coaches and administrators with the exception of program costs, which were perceived to be more important by coaches than administrators. An analysis of variance between NCAA divisions indicated that coaches’ perceptions for two items were significantly different between divisions. Significant differences were observed between NCAA Divisions I and III concerning the value of community involvement (i.e. Division I coaches placed more emphasis on community involvement than Division III coaches), and between Division I and both divisions II and III concerning the value of increased enrollment because of the program (i.e. the smaller schools placed more emphasis on the value of increased enrollment).

Additional Findings

The exploratory factor analysis identified a third latent construct from the survey data. This factor, labeled as “perceptions on the interdependence of the NCAA and USOC” (POI), was composed of survey items concerning the need for the NCAA and USOC work together to their mutual benefit. To examine this factor, overall means were observed and specific item means were calculated for each NCAA division. The observed means indicated that coaches in Division I are more likely to feel the need for collaboration between the NCAA and USOC as compared to coaches in Divisions II and III, however a one-way analysis of variance found no significant differences between the divisions, providing evidence that coaches at all levels believe this collaboration is in the best interest of all parties.

As expected, coaches across all sports and divisions nonrevenue, NCAA Olympic sport programs as providing value to their institution. Somewhat more surprising, was that coaches from the “Power Five” conferences appeared to have little concern for the
future of their programs, differing from coaches from the non-autonomous conferences, who felt their administrators placed little value on their programs or input. Of the three sports surveyed, only men’s gymnastics coaches expressed concern for the future of their programs.
CHAPTER V
DISCUSSION

The mainstream media is replete with ongoing sagas of the impact of commercialism in big-time college athletics (Craughron, 2001; Duderstadt, 2003; Duffy, 2014; Forde, 2015; Gerdy, 2006; Smith, 2014; Zimbalist, 2003), and the resulting issues and speculation this influx of funds is having on the nonrevenue, Olympic sports within NCAA institutions (Blackman, 2015; Emmert, 2014; Frank, 2004; Grasgreen, 2013; Hoffer et al., 2014; Sanderson & Siegfried, 2015; Tracy, 2014). Increased revenue and spending by the wealthiest schools has forced other athletic departments to respond similarly in order to remain competitive and relevant (i.e. the athletic “Arms Race”) (Frank, 2004; Fulks, 2014; Hoffer et al., 2014; Sanderson & Siegfried, 2015). Even with the massive revenues generated from broadcast rights and other sources, athletic department expenditures continue to expand at an even faster rate, resulting in a corresponding demand for increased subsidies (Fulks, 2014). This model for college athletics cannot be sustained.

Stakeholder theory is a prominent theory in business management that attempts to address who and/or what really matters to the organization. The key to stakeholder theory as applied to the present study lies in identifying which stakeholder groups possess the power, legitimacy, and urgency, to allow decision-makers to prioritize which groups have the ability to help bring about desired outcomes (Lewis, 2007; Mitchell et al., 1997). The inherent problem with stakeholder theory comes when various stakeholder groups
have conflicting interests (Harrison, 2004). This is certainly the case in intercollegiate athletics, where numerous groups have stakes in the institution, the athletic department, and each specific sport. In the case of this study, relevant stakeholders concerning the sustainability of nonrevenue Olympic sports included coaches, athletic and university administrators, the USOC, and the NCAA. Of particular interest, the researcher hoped to gain a better understanding of the perceptions, perceptual differences, and resulting interactions between these groups in an effort to better understand why certain programs are perceived to be in jeopardy of elimination. The desired outcome of stakeholder interaction would be decision-making that ensures the sustainability of nonrevenue Olympics sports within individual institutions and within the NCAA program.

Many people argue that today’s collegiate athletic directors operate under the profit-motivated, “agency theory” structure where football and men’s basketball are the sole priorities within the institution (Frauenheim & Skoda, 2008; Mullins, 2005). This would indicate that administrators view those groups that provide the greatest income or potential income as the primary stakeholders of concern. However there is reason to believe that nonrevenue, Olympic sports also provide a benefit to the athletic department and the school (Friedman et al., 2004; Hutchinson & Bennett, 2012; Putler & Wolfe, 1999). Cooper and Weight (2011) studied the benefits of these sports through an institutional framework, and concluded that institutional isomorphism (ex. the “arms race effect”) exists between similar institutions, but with the divided purpose of promulgating the arms race in the revenue sports, while craving the core values that nonrevenue, Olympic sports offer. Simply put, the nonrevenue Olympic sport programs offer benefits
to the department and the institution that may “offset” certain negative aspects of football, men’s basketball, and gender equity issues.

The present study analyzed the perceptions of nonrevenue Olympic sport coaches, as primary stakeholders within the athletic department, on the sustainability of their sport as it related to the impact of increasing commercialism in college athletics. The research also provided a comparative study of the values these sports provide to the institution as viewed by these coaches and their administrators. Results of this study may help coaches understand the values their program provides to their athletic departments, and allow them to take an entrepreneurial role in managing the expectations of their internal and external stakeholders.

**Purpose and Research Questions**

The purpose of this study was threefold: 1) to collect data on select coaches’ perceptions of the sustainability of their sport within their institution and within the NCAA program and to develop an instrument to quantify those perceptions; 2) to collect data on select coaches’ perceptions of the value of their program in contributing to U.S. Olympic and international competitive success; and 3) to collect data on select coaches’ perceptions of the values their program brings to their university and compare those perceptions with those of athletic administrators as compiled by Cooper and Weight (2011).

The following research questions guided the design of the study:

Q 1  Do select, nonrevenue, NCAA Olympic coaches believe the future of their programs to be in jeopardy within the NCAA program?

Q 2  Do nonrevenue, NCAA Olympic coaches believe their program provides value to U.S. Olympic and international competitive success?
Q 3 What program values do nonrevenue, NCAA Olympic coaches believe to be the most important to their administrators?

**Review of the Findings**

Data from the survey responses were analyzed and descriptive statistics were observed. An exploratory factor analysis was performed on responses from the first two sections of the survey to reduce the number of factors and to identify latent constructs from the survey items. Finally, open-ended responses were reviewed to confirm support of the scale data.

The first research question directly addressed coaches’ perceptions toward the sustainability of their program within their institution. Responses collected from the survey indicated that NCAA Division III coaches are not as concerned about the sustainability of their programs as compared to coaches in Divisions I and II. This would appear to be plausible, since division III institutions and athletic programs are not typically as impacted by the effects of commercialism on sport. With the escalating costs associated with athletic arms race and the increasing autonomy granted to division I schools, it is reasonable for coaches of nonrevenue Olympic sports at these institutions to be concerned that their program may be sacrificed to benefit the school’s marquee programs. Interestingly, despite much concern about the role of Title IX compliance as a threat to men’s nonrevenue, Olympic sports (Boyle, 2016; Knight Commission on Intercollegiate Athletics, 2013), the survey respondents did not view gender equity as an ongoing threat according to direct responses to the item, “the future of my program is threatened due to gender equity issues within my department”, which resulted in an overall response mean of 2.59, and divisional responses of 2.80, 2.93, and 2.30, respectively.
The second research question addressed the relationship between NCAA participation and Olympic/international success, providing an indication of coaches’ perceptions toward the USOC as a stakeholder in the sustainability of nonrevenue Olympic sports in the NCAA program. Observed and calculated statistics indicated that nonrevenue, Olympic NCAA coaches in Divisions II and III are less likely to feel their programs contribute to U.S. Olympic and international success as compared to coaches in Divisions I. Again, this conclusion seems plausible since the vast majority of U.S. Olympic athletes have experience in division I athletic programs.

The intent of the final research question was to provide for a direct comparison of coaches’ perceptions on program values, to administrator’s perceptions of the values provided by their nonrevenue Olympic sport programs. Data for administrators’ perceptions was collected through previous research. The data indicated that coaches’ and administrators’ perceptions matched quite well. Program cost was the only item that coaches perceived to be more important as compared to administrators’ perceptions.

**Conclusions**

Although institutional isomorphism exists among similar universities, it appears from the data that coaches’ perceptions vary based on their specific situations, and therefore coaches of nonrevenue, Olympic NCAA sports should consider and manage the unique needs of their stakeholder groups in order to ensure the sustainability of their programs.

It’s obvious from the data, narrative responses, and current literature, that there is a common belief among stakeholders of Olympic sports that collaborative efforts between the NCAA and USOC should take place to ensure the sustainability of these
sports within the NCAA program and the continuation of success at the Olympic and international levels. The NCAA can benefit from these efforts by taking advantage of the cultural and societal values that Olympic sports provide to its member institutions. Even at the division II and III levels, many of the marquee sport programs throughout the country generate criticism for real or perceived deviation from the traditional academic mission of higher education. Hardly a week goes by without a high-profile collegiate athlete, coach, or program being exposed for financial or moral deviance. To the contrary, individuals involved in nonrevenue NCAA Olympic sports are typically perceived to bring higher academic, societal, and cultural values to the institution, as the present study substantiates.

The USOC would obviously benefit from any efforts to sustain Olympic sports in the NCAA program, as nearly 80% of the 2016 U.S. Summer Olympians either currently or previously competed in the NCAA (United States Olympic Committee, 2016). Additionally, the International Olympic Committee (IOC) and several individual National Olympic Federations (NFs) may also be concerned with the future of NCAA programs, since an additional 488 NCAA athletes represented countries other than the U.S. in Rio de Janeiro. These organizations should not be overlooked as stakeholders of nonrevenue NCAA Olympic sports, as they certainly hold varying degrees of power, urgency, and legitimacy as defined by Mitchell, et al. (1997).

**Recommendations**

As the impact of commercialism increases and the threat to the future of nonrevenue, Olympic NCAA sports persists, it is important to continuously evaluate coaches’ and administrators’ perceptions on the program value of these sports, and to
continually monitor the needs of the various stakeholder groups involved with these sports. Additional work should be done to develop a unified and comprehensive instrument for measuring perceptions of all primary stakeholders. The scale developed in the present study should be expanded with additional items and tailored to include respondents from the USOC, NGBs, NCAA, and others. Further, more research devoted to the implications of Title IX and gender equity issues on men’s nonrevenue Olympic sports should be conducted. Data from this type of research may “de-bunk” the argument that many administrators have used in cutting these programs.

Additional work should be done in conjunction with coaches’ associations to develop best practices for coaches to emphasize the program values that can help sustain their programs. These best practices should include methods for identifying the stakeholders who ultimately hold the decision-making power.

As long as athletic departments view academics as a lower priority than the desire for competitive success among its marquee programs (Benford, 2007; Kessler, 2004; Malec, 2007; Zimbalist, 1999), there will always be both a threat to nonrevenue Olympic sports, as well as an opportunity to expound on the values those programs can provide. Coaches in this era must not only possess the technical proficiencies required by their sport, but must also have the entrepreneurial skills to address the needs of their various stakeholders.
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Mark


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APPENDIX A

PILOT STUDY CONSENT LETTER
CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: Perceptions on the Future of Olympic NCAA Sports
Researcher: Dean Ekeren
Phone Number: xxx-xxx-xxxx
e-mail: dekeren@usaswimming.org

Research Advisor: Dr. Randy Larkins
Phone Number: 970-351-2416
e-mail: Randy.Larkins@unco.edu

Under the guidance of Dr. Randy Larkins of the Applied Statistics and Research Methods Department at the University of Northern Colorado, this study will attempt to evaluate perceptions on the future of Olympic sports within the existing NCAA structure. To assist with this research we are asking that you participate in a brief survey of your perceptions about Olympic sports at your institution and within the NCAA framework. The survey contains 10 multiple choice questions, and should take less than five minutes to complete. Responses will help better understand how Division I coaches and administrators feel about the current status of Olympic sports in the NCAA.

Only the researchers will examine individual responses and compile results. Data will be analyzed to find consistent and problematic perceptions from NCAA Division I coaches and administrators with regard to the future of Olympic sports in the NCAA. Your name and title will not be recorded, however your specific sport and perceptions will be. Anonymity can never be guaranteed in the electronic environment, however the researchers will strive to protect the anonymity of all respondents by not publishing any individual data.

Risks to you are very minimal. You may feel anxious or frustrated about responding to the survey, but the researchers attempt to minimize these feelings by striving to protect the anonymity and confidentiality of your responses. The benefits to you may include a better understanding of how Division I coaches and administrators feel about the current status of Olympic sports in the NCAA. Participation in this interview is voluntary. You may decide not to participate, and if you begin participation you may still decide to stop and withdraw at any time. Having read the above and having had an opportunity to ask any questions, you may proceed if you would like to participate. By completing the interview, you give your consent and permission to be included in this study as a participant. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.
APPENDIX B

PILOT STUDY SURVEY
Perceptions on the Future of NCAA Olympic Sports

Thank you for taking time to complete this short survey on Olympic NCAA sports. Your responses will remain confidential and will help evaluate perceptions of Olympic sports within the NCAA. This survey should take less than 3 minutes to complete. By completing the survey, you are consenting to participate in this study. The complete consent information is attached to the e-mail.

Please indicate your FBS athletic conference

- ACC (1)
- American (2)
- Big 12 (3)
- Big Ten (4)
- C-USA (5)
- MAC (6)
- Mountain West (7)
- Pac-12 (8)
- SEC (9)
- Sun Belt (10)

Please indicate your role within your institution

- Administrator (1)
- Coach (2)

If Coach Is Selected, Then Skip To Please indicate your primary sport(s)

1 Olympic Sports are viewed as a priority in our department

- Strongly Disagree (14)
- Disagree (15)
- Agree (16)
- Strongly Agree (17)
2 The future of Olympic sport teams within our university depends on the team's success at the NCAA level

○ Strongly Disagree (11)
○ Disagree (12)
○ Agree (13)
○ Strongly Agree (14)

3 The future of Olympic sport teams within our university can be influenced by the team's success at the Olympic/International level

○ Strongly Disagree (11)
○ Disagree (12)
○ Agree (13)
○ Strongly Agree (14)

4 By supporting Olympic sports, our university contributes to U.S. Olympic success

○ Strongly Disagree (11)
○ Disagree (12)
○ Agree (13)
○ Strongly Agree (14)

5 By supporting Olympic sports, the NCAA contributes to U.S. Olympic success

○ Strongly Disagree (10)
○ Disagree (11)
○ Agree (12)
○ Strongly Agree (13)

6 Recent NCAA changes to student-athlete funding will benefit our Olympic sport teams

○ Strongly Disagree (28)
○ Disagree (29)
○ Agree (30)
○ Strongly Agree (31)
7 Recent NCAA changes to student-athlete funding will require departmental resources that will threaten the future of our Olympic sport teams

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

8 Revenue generating sports should be treated differently by the NCAA than non-revenue generating sports

- Strongly Disagree (14)
- Disagree (15)
- Agree (16)
- Strongly Agree (17)

9 Funding issues required for football create hardships for many of our Olympic sports

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

10 Providing scholarship opportunities to foreign athletes ultimately benefits U.S athletes' chances in Olympic/International competition

- Strongly Disagree (10)
- Disagree (11)
- Agree (12)
- Strongly Agree (13)

11 One or more Olympic sports are in jeopardy of elimination at our institution.

- Disagree (1)
- Agree (2)

If Disagree Is Selected, Then Skip To The outlook for Olympic sports within...
Please rank up to five varsity Olympic sports that are in jeopardy of elimination at your institution, with 1 indicating the sport in greatest jeopardy, and 5 indicating the sport in least jeopardy.

<table>
<thead>
<tr>
<th>Sport</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball (M)</td>
<td>1</td>
</tr>
<tr>
<td>Basketball (W)</td>
<td>2</td>
</tr>
<tr>
<td>Cross Country (M)</td>
<td>3</td>
</tr>
<tr>
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<td>4</td>
</tr>
<tr>
<td>Fencing (M)</td>
<td>7</td>
</tr>
<tr>
<td>Fencing (W)</td>
<td>8</td>
</tr>
<tr>
<td>Field Hockey (W)</td>
<td>9</td>
</tr>
<tr>
<td>Golf (M)</td>
<td>10</td>
</tr>
<tr>
<td>Golf (W)</td>
<td>11</td>
</tr>
<tr>
<td>Gymnastics (M)</td>
<td>12</td>
</tr>
<tr>
<td>Gymnastics (W)</td>
<td>13</td>
</tr>
<tr>
<td>Ice Hockey (M)</td>
<td>35</td>
</tr>
<tr>
<td>Ice Hockey (W)</td>
<td>36</td>
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<tr>
<td>Rifle (M)</td>
<td>16</td>
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<tr>
<td>Rifle (W)</td>
<td>17</td>
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<tr>
<td>Rowing (M)</td>
<td>18</td>
</tr>
<tr>
<td>Rowing (W)</td>
<td>19</td>
</tr>
<tr>
<td>Skiing (M)</td>
<td>20</td>
</tr>
<tr>
<td>Skiing (W)</td>
<td>21</td>
</tr>
<tr>
<td>Soccer (M)</td>
<td>22</td>
</tr>
<tr>
<td>Soccer (W)</td>
<td>23</td>
</tr>
<tr>
<td>Swimming and Diving (M)</td>
<td>24</td>
</tr>
<tr>
<td>Swimming and Diving (W)</td>
<td>25</td>
</tr>
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<td>Tennis (M)</td>
<td>26</td>
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<tr>
<td>Tennis (W)</td>
<td>27</td>
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<td>Track and Field (M)</td>
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<td>Track and Field (W)</td>
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<tr>
<td>Volleyball (M)</td>
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<td>Volleyball (W)</td>
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<td>Water Polo (M)</td>
<td>32</td>
</tr>
<tr>
<td>Water Polo (W)</td>
<td>33</td>
</tr>
<tr>
<td>Wrestling (M)</td>
<td>34</td>
</tr>
</tbody>
</table>
12 The current structure for Olympic sports within the NCAA cannot be sustained

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

Please feel free to add any additional thoughts on the future of Olympic sports within the NCAA

If Please feel free to add any... Is Empty, Then Skip To End of Survey If Please feel free to add any... Is Not Empty, Then Skip To End of Survey
Please indicate your primary sport(s)

- Basketball (M) (1)
- Basketball (W) (2)
- Cross Country (M) (3)
- Cross Country (W) (4)
- Fencing (M) (7)
- Fencing (W) (8)
- Field Hockey (W) (9)
- Golf (M) (10)
- Golf (W) (11)
- Gymnastics (M) (12)
- Gymnastics (W) (13)
- Ice Hockey (M) (14)
- Ice Hockey (W) (15)
- Rifle (M) (16)
- Rifle (W) (17)
- Rowing (M) (18)
- Rowing (W) (19)
- Skiing (M) (37)
- Skiing (W) (5)
- Soccer (M) (22)
- Soccer (W) (23)
- Swimming and Diving (M) (35)
- Swimming and Diving (W) (36)
- Tennis (M) (26)
- Tennis (W) (27)
- Track and Field (M) (28)
- Track and Field (W) (29)
- Volleyball (M) (30)
- Volleyball W) (31)
- Water Polo (M) (32)
- Water Polo (W) (33)
- Wrestling (M) (34)
Did your team compete in last season's NCAA Championships?

- Yes (1)
- No (2)

1. My sport is in jeopardy of elimination within my institution

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

2. My sport is in jeopardy of elimination within the NCAA program

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

3. Most Olympic Sports are in jeopardy of elimination within the current NCAA structure

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

4. The future of my sport within my university depends on our team's success at the NCAA level

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)
5 The future of my sport within my university can be influenced by our team's success at the Olympic/International level

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

6 By supporting Olympic sports, my university contributes to U.S. Olympic success

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

7 By supporting Olympic sports, the NCAA contributes to U.S. Olympic success

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

8 Recent NCAA changes to student-athlete funding will benefit my program

- Strongly Disagree (19)
- Disagree (20)
- Agree (21)
- Strongly Agree (22)

9 Recent NCAA changes to student-athlete funding will require department resources that will threaten my program

- Strongly Disagree (10)
- Disagree (11)
- Agree (12)
- Strongly Agree (13)
10 Revenue generating sports should be treated differently by the NCAA than non-revenue generating sports

- Strongly Disagree (10)
- Disagree (11)
- Agree (12)
- Strongly Agree (13)

11 Providing scholarship opportunities to foreign athletes ultimately benefits U.S. athletes' chances in Olympic/International competition

- Strongly Disagree (10)
- Disagree (11)
- Agree (12)
- Strongly Agree (13)

12 The current structure for Olympic sports within the NCAA cannot be sustained

- Strongly Disagree (11)
- Disagree (12)
- Agree (13)
- Strongly Agree (14)

Please feel free to add any additional thoughts on the future of Olympic sports within the NCAA

If Please feel free to add any... Is Empty, Then Skip To End of Survey
If Please feel free to add any... Is Not Empty, Then Skip To End of Survey
APPENDIX C

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
Project Title: Coaches’ Perceptions on the Sustainability of Nonrevenue, Olympic NCAA Sports as viewed through Stakeholder Theory
Researcher: Dean Ekeren
Phone Number: xxx-xxx-xxxx
e-mail: eker7489@bears.unco.edu

Research Advisor: Dr. Alan Morse
Phone Number: 970-351-1722
e-mail: Alan.Morse@unco.edu

This study will attempt to evaluate perceptions on the sustainability of nonrevenue, Olympic sports within the existing NCAA structure. For the purposes of this study, "nonrevenue, Olympic sports" will be defined as any Olympic sport within the NCAA program except football and men's basketball. To assist with this research we are asking that you participate in a brief survey of your perceptions about Olympic sports at your institution and within the NCAA framework. The survey contains 30 multiple choice questions, and should take less than five minutes to complete. Responses will help better understand how coaches and administrators of nonrevenue, Olympic sports feel about the sustainability of these sports in the NCAA.

Only the researcher will examine individual responses and compile results. Data will be analyzed to find consistent and problematic perceptions from NCAA coaches and administrators with regard to the future of nonrevenue, Olympic sports in the NCAA. Your name and title will not be recorded, however your specific sport and survey responses will be. Anonymity can never be guaranteed in the electronic environment, however the researchers will strive to protect the anonymity of all respondents by not publishing any individual data.

Risks to you are very minimal. You may feel anxious or frustrated about responding to the survey, but the researchers attempt to minimize these feelings by striving to protect the anonymity and confidentiality of your responses. The benefits to you may include a better understanding of how coaches and administrators feel about the sustainability of nonrevenue, Olympic sports in the NCAA. Participation in this interview is voluntary. You may decide not to participate, and if you begin participation you may still decide to stop and withdraw at any time. Having read the above and having had an opportunity to ask any questions, you may proceed if you would like to participate. By completing the interview, you give your consent and permission to be included in this study as a participant. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.
APPENDIX D

RESPONSES TO OPEN-ENDED SURVEY ITEMS (VERBATIM)
Section 1 Responses: Please feel free to add any additional thoughts on the future of nonrevenue, Olympic sports within the NCAA program

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>dII not as revenue dependent as d1 but still sports are often tiered with &quot;non revenue sports&quot; at the lower end.</td>
</tr>
<tr>
<td>Title 9 is killing our sport because of Football. Football needs to be pulled out of the mix or we will lose Olympic sports and hurt the college athletic experience.</td>
</tr>
<tr>
<td>Thank you for the survey. I think that it is important to note a few items. First, I believe the use of the term &quot;nonrevenue&quot; refers to sports that never produce a surplus. I think it is important to indicate that most sports, Olympic or otherwise, are nonrevenue. That is the case with basketball at my institution. Also, I would make the case that most Olympic sport programs are the model for a sustainable athletic department. The &quot;revenue&quot; sports are also the most expensive sports, and when potentially revenue producing sports attempt to match spending with actual revenue producing programs problems occur. On many of the questions, I chose not to answer as I was neutral.</td>
</tr>
<tr>
<td>Thank you for taking on this topic. Another related matter is the high number of scandals of all sorts that are taking place by the same spoiled brats that are the beneficiaries of gross overspending. The adult administrators are to blame. Football in the power five conferences and the traditional top 40 basketball teams are the minor leagues of their professional counterparts. The hypocrisy of the institutions and NCAA even attempting to act like they are not is comical. Add to this that 99% of all DI athletic programs could not sustain themselves regardless of gender equity, number of sports, etc. without student fees from the undergrad population of the school. Put more restrictions on the Presidents and AD's with their hiring and firing tactics all in the name of 15 minutes of fame. Fire a coach who still is under contract...... and the President and the AD have to resign as well, since you hired them.... or you must keep the coach under contract to maintain their position. The problem is not supporting the sports, the problem is selling your soul all in the name of your school running on news ticker at the bottom of the TV screen. How is FGCU in Basketball since their 15 minutes of fame a number of years back. Thank goodness the coach left, or they would have sold their soul to keep him, and then when they came back to reality, they would be stuck placing large amounts of money into a program they could not sustain and would be looking for a program like swimming to cut to &quot;soften the bad decisions&quot; in the name of......wait for it..... the biggest oxymoron in NCAA athletics... &quot;revenue sports&quot;</td>
</tr>
<tr>
<td>In my institution, our swim program is valued and as of now is not in jeopardy of being cut.</td>
</tr>
</tbody>
</table>
Are we interpreting Title IX correctly? The phrase "No athlete will be barred from participation based on his or here inherited sex." This is precisely being violated on the men's sign when over and over again from university to university across the nation, men are being cut, squad sizes minimized for the sake of having to balance the women/men numbers in the athletic departments mainly because of the football numbers and the rising population of women to men enrollment. The fact is that no one except for the Title IX people care. At what cost would it be to this ruling to allow more men to walk on and participate? I have had to cut numerous wrestlers at my former job all who were fairly talented. Many of the wrestler in later years made the team and made the varsity and were strong contributors to the team. One walk-on became a DI NCAA Champion and won the Outstanding Wrestler Award at the NCAA. It frustrated me to see so many men that wanted to take part in a program for the university not be allowed to participate because the numbers on the women teams were low.

These questions could be dramatically effected by wether you work with men women or both

The loss of nonrevenue, olympic sports in the NCAA will decrease the number of motivated and dedicated persons coming from other countries to continue their athletic careers. The hard work of these people translates well in the working world and boost economic output, raising the standard of living of USA citizens. The NCAA is the only option for most non-American athletes to continue their athletic career after high school, an asset that strengthens this country.

Roughly 60% of our Olympic teams come from NCAA athletes and the relationship between the NCAA and the USOC is crucial to our sustainability. Collectively our athletes GPA's and graduation rates are extremely high. men's gymnastics at the younger ages is on the rise and I hope that these young boys will have the opportunity to compete in the NCAA while receiving their degree and pursuing their Olympic dreams.

Let the NCAA focus on what they want and are able to focus upon. Let the coaches/national governing bodies take over the rules/management related to each sport.

Our institution does not believe that wrestling at the D3 level leads to the Olympics. They are against coaching staff coaching outside the 19 week season. Even though there is a freestyle and greco season and they would have USA cards. Most institutions can not hire 2 different coaches for the different seasons. So why is that a rule from the NCAA?

the Olympic Committee should perhaps provide some funding to the olympic sports in the NCAA or have some sort of incentive (not necessarily monetary, but even a rating that becomes an internationally recognized thing) to schools that keep a certain percentage of athletes that compete in olympic sports. That percentage can be based on the athletic department in general or compared to the student body.

My sport as a whole will eventually cease to exist in almost all capacity, and sever every major USOC pipeline we have if we cease to exist in the NCAA.

Hopefully, the powers to be don't decide go down the road of the European model and make 'Club Sports" and distant sports from Universities? Our country is different, and must keep developing 'Leaders" not just revenues!? the power 5 conferences have all the 'say' and the disconnect is that we must keep in mind that Olympic sports develop
young men/women and impact their lives. This dynamic of College athletes provides opportunities that are 'game changes' in people's lives.

I would like to see more USOC involvement in the preservation of the non-revenue, Olympic sports.

At one point, the inclusion of NCAA sports was prioritized according to the educational component of the sport and value of participation in the sport to the student-athlete. I believe that this has been lost in the shuffle of compliance issues with Title IX; specifically the three-part test for university compliance. This was the first real blow to Olympic sports. The three-part test should be re-written so as to not basically turn the law into a quota system. As it is now, the only REAL solution for any university to maintain gender equity is to slash and burn men's non-revenue sports. As time passed, the focus shifted somewhat away from using Title IX as a reason for not building additional non-revenue men's sports toward simply the cost of the sport and the perceived ability of the new sport to self-sustain. The unfortunate truth is that there is now very little emphasis on the provision of a wonderful NCAA opportunity for participation in a student-athlete's chosen Olympic sport. These sports are generally ones that a student-athlete has participated in since he was very young and has dedicated a substantial portion of his life to. What a shame that there are not enough opportunities to accommodate them and to allow for the very important life's lessons to be learned through such a wonderful medium. I hope that one day, we'll be back to recognizing (and appropriately financing) the full value of all sport and what it contributes to the holistic education of the student-athlete.

If we are to survive, funding parameters for non revenue sports must be more restrictive than the revenue sports. An "arms race" among non revenue sports will be fatal.

We do not have football so that does not effect my program. We are also a small, private DII school so aside from our basketball teams all of our athletic teams are poorly funded, not just Olympic sports.

If not for me, this program would have already been eliminated. I've survived 1 AD & President, whom tried to "cut" wrestling. Another President tried-an got fired but still battling with the AD. Eventually, I'll retire -- then the axe will fall.

For NCAA Division III teams almost all sports are non revenue. In many cases they help report gender equity. High interest in our sports produces Admission and Retention goals at the NCAA Division III.

The amount of money spent on collegiate athletics is atrocious. The sports mentality in this country needs to change. Intellectually our country is suffering due in some part to this phenomenon.

This questionnaire is completely insufficient if you are looking any in depth response. For example: 1.5. Nonrevenue, Olympic sports must be treated differently from football and men's basketball by the NCAA if they are to be sustainable. You need to define “differently” according to what you really mean. All Olympic Sports are already treated differently than Football and Basketball at almost every school. Funding is different for scholarships for facilities, for the number of coaches, trainers, academic support personnel are different. The money spent on media, cheerleaders, dance team, the band are almost always based on their use for football and basketball, and more.
When viewing the issues across all three NCAA divisions you will get a very different opinion. I don't think you can compare the funding for D-I to D-III. They live in 2 completely different worlds.

Educational value in sport should be a priority

Rules are different for DI programs than they are for DIII

Nonrevenue, Olympic sports are often the best examples of what it means to be a student-athlete. The main issue is the fact that these sports are not highlighted by the institutions. These sports are capable of bringing so much positive press to the institutions, but they choose to fund the other sports with the hopes of them bringing that recognition. The bottom line is that the nonrevenue, Olympic sports get it done. They are successful in spite of less funding.

Having coached Division I, II & III men and women I have seen the imbalances in Division I be reflected in Division III. "what others have we need to be competitive"

The massive financial drain of FCS football is of major concern to Olympic sports of schools that participate at this level. The opportunity for collegiate competition in Olympic sports is critical to Olympic sports' success. It is also critical to providing coaches for many of the Olympic sport systems like gymnastics. The system will implode without coaches who have a college education.

as a university that has recently expanded NR-O sports and is planning on continuing to do so, the most important aspect is universities taking a true look in the mirror and recognizing who they are and where their place is in the Football/Basketball pecking order and then funding those sports to the levels appropriate levels.

13 months ago my department reduced out athletic scholarships for swimming from 23.9 to 4.

We do not have football so data may not reflect what you're looking for.

Wrestling and swimming is in deep trouble of elimination at my institution.
### Section 2 Responses: Please feel free to add any additional thoughts on the value of NCAA programs to Olympic/International success

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>usoc needs ncaa more than ncaa needs usoc unless we keep a broad base sports requirement to maintain ncaa membership</td>
</tr>
<tr>
<td>Unfortunately the end result for an AD is different than what is the true mission of collegiate athletics. Just look at their salaries..... taking care of their favorite sport or sports, a fat pay check along with the high school notion of feeling good about their little fiefdoms of assistants and associates is what they are focused on.</td>
</tr>
<tr>
<td>You have two sports (football and basketball) that in addition to the crazy amount of resources that are awarded to participate you spend the greatest amount on health care, and student welfare in regard to the classroom. Add to this the concussion protocol and how more that will add to the sport..... When LSU has to sustain their ACADEMIC mission based off the millions of dollars they generate through football doesn't that REEK of crazy?</td>
</tr>
<tr>
<td>The NCAA has the power to help sustain the Olympic sports at universities by flexing some of its muscle to Universities but it will take some creativity since we are constantly dealing with the increase of funding to men's basketball and football. At my end it would seem that there should be a cap to salaries. Will someone coach football and only make 2 million instead of 4? I would think the answer would be yes.</td>
</tr>
<tr>
<td>The actual programs may not contribute but the carrot of cilkhebcomoetituon creates the large number at the base levels that cintunuevtibcimoete</td>
</tr>
<tr>
<td>Vital to Olympic Sports that we work together and understand the dynamic on both sides!</td>
</tr>
<tr>
<td>The contribution of the NCAA toward our international efforts depends completely on the nature of the sport itself and both it's ideal somatotype and physiological requirements. In sports where the athlete requires a robust anaerobic strength component and specifically strength to bodyweight ratio, the male athlete will not reach peak performance until at or beyond college age. In a case such as this the contribution of the NCAA to our international efforts is invaluable. More and more of our athletes in men's gymnastics are opting to continue to train at their private club foregoing a college education in order to train for international success. What a shame. Such a decision will often negatively influence one's life beyond the international gymnastics career. We would see less of this if there were the 230+ programs available in the early 70's instead of the 16 remaining today. There simply is not enough NCAA opportunity any more for our athletes.</td>
</tr>
<tr>
<td>The possibility of a college scholarship is the single most influential incentive for young athletes to make a career commitment to their sport.</td>
</tr>
<tr>
<td>NCAA only cares about TV and $$. If the NCAA care about DII wrestling, NCAA DII would have a 3-day National Championship, 64-man bracket and NO NCAA Regional Tournaments. NCAA Regional's are a travel hazard to the student-athlete in winter, many schools traveling way to many miles/hours on the road.</td>
</tr>
<tr>
<td>The USOC needs to let the NCAA know they want the nonrevenue Olympic sports to succeed.</td>
</tr>
</tbody>
</table>
The existence of nonrevenue, Olympic sports' teams is the reason why the US is as successful in Olympic/international competition. If there were only a few teams, the country wouldn't have as much depth as we have. Every institution should strive to support nonrevenue, Olympic sports' teams.

Wrestling and swimming at my University need your help!
Feel little to no value by administration by their actions, failure to address areas of concern regarding enough funding, staffing and facility needs by swimming as compared to other sports. Continue to be at the bottom of the totem pole.....success has lead to little or no improvement.....

As long as the kids are happy, nobody cares about us. That's both a blessing and a curse.

This depends very much on general athletic approach if the university and current success levels of other sports

Based on the annual budget the team receives, and the age of our current facility...my fear is that if something breaks from a facility viewpoint, the team's future will be in jeopardy.

I feel moderately valued and I also feel only moderately in jeopardy. The biggest issue we face is that the football, and basketball coaches/programs are so high maintenance that the Administration that they often have to prioritize those sports and interactions with those coaches. Either real or perceived, that becomes an issue with the Olympic sports that more or less take care of themselves but at times find themselves in jeopardy without much interaction or indication.

As one of the remaining 16 men's gymnastics programs in the NCAA, I feel as if our program is exceptionally well-valued.

Too much emphasis on winning with no financial support to do so. Operating budget is very low as well as salary.

My program was started to increase enrollment at my institution. I have been given bare bones to work with and we are still the most successful program in the entire athletic department. I am the only full-time coach for 48 athletes. Football sucks (0-8 right now) and they have at least 5 full-time coaches for 90+ athletes. It's not right. Something has to change. I no longer watch football on TV as a boycott. I do not feel valued. They see me as a piece of meat that can bring in 48 athletes for minimal cost and then they ask me to fundraise half of my operating budget. We still succeed in spite of their lack of support.

Although administrators use a lot of these numbers to prove their success they have less value if the priority sports need (want)

Wrestling was cut. We have never had gymnastics. Diving coach is p/t position. Swimming and diving scholarships were reduced from 23.9 to 4.
APPENDIX E
SURVEY INSTRUMENT
Coaches' Perceptions on the Sustainability of Nonrevenue, NCAA Olympic Sports

Thank you for taking time to complete this brief survey on the sustainability and value of nonrevenue, Olympic sports in the NCAA program. For the purposes of this study, "nonrevenue, Olympic sports" will be defined as any Olympic sport within the NCAA program except football and men's basketball. This survey will include coaches of men's gymnastics, swimming, and wrestling, as these sports are among the most-often cited as being in jeopardy. Your responses will remain confidential and will help evaluate perceptions of Olympic sports within the NCAA. This survey should take less than 5 minutes to complete.

In collaboration with the USOC and College Swimming Coaches Association, this study is being conducted because of perceived threats to the sustainability of nonrevenue, Olympic sports in the NCAA program due to increased commercialism in college athletics and increased spending on football and men's basketball programs. Following a few demographic questions, the survey is divided into three sections: The sustainability of nonrevenue, Olympic sports in the NCAA program (12 items); The value of NCAA programs to the U.S. Olympic movement (10 items), and; The program values that Olympic sports bring to the athletic department and university (11 items).

By completing the survey, you are consenting to participate in this study. Anonymity can never be guaranteed in the electronic environment, however the researchers will strive to protect the anonymity of all respondents by not publishing any individual data. Your name and title will not be recorded, however your specific sport, NCAA Division, and survey responses will be. The complete consent information is attached to the e-mail.

Please indicate your primary sport affiliation

☑ Gymnastics (1)
☑ Swimming (2)
☑ Wrestling (3)
Please indicate how many years you have coached in the NCAA:

- Less than 5 years (1)
- 5-10 years (2)
- More than 10 years (3)

Please indicate your school's primary NCAA Athletic Division:

- NCAA Division I (1)
- NCAA Division II (2)
- NCAA Division III (3)

If NCAA Division I is selected, then skip to please indicate your athletic departm...If NCAA Division II is selected, then skip to end of block. If NCAA Division III is selected, then skip to end of block.

Please indicate your athletic department's primary NCAA Division I Athletic Conference:

- Autonomy Conferences (ACC, Big 10, Big XII, Pac 12, SEC) (1)
- Non-Autonomy Conferences (American, C-USA, Mid-American, Mountain West, Sen Belt) (2)
- FCS or Non-Football Conference (3)
Please indicate your perception of the following statements related to the future of nonrevenue, Olympic sports in the NCAA program

1.1 Nonrevenue, Olympic Sports are viewed as a priority within my department

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

1.2 The future of nonrevenue, Olympic sport teams within my college/university depends on that team's success at the NCAA level

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

1.3 Nonrevenue, Olympic sports add value to our college/university

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)
1.4 Increasing funding for football creates hardships for many of our nonrevenue, Olympic sports

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

1.5 Nonrevenue, Olympic sports must be treated differently from football and men's basketball by the NCAA if they are to be sustainable.

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

1.6 Recent NCAA changes that allow greater financial autonomy to the largest athletic programs will threaten the sustainability of many nonrevenue, Olympic sports

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

1.7 The future of my sport is in jeopardy of elimination within my institution if athletic department spending continues to increase,

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)
1.8 The future of my program is threatened due to gender equity issues within my department

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

1.9 Nonrevenue, Olympic sports require resources needed for other programs in my department

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

1.10 Recent NCAA changes that allow for increased student-athlete funding will benefit all sports in my department

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

1.11 The current structure for nonrevenue, Olympic sports within the NCAA cannot be sustained

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)
1.12 I feel my administrators value my input as it relates to the overall priorities of my department.

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

Please feel free to add any additional thoughts on the future of nonrevenue, Olympic sports within the NCAA program.

Please indicate your perception on the following statements related to the value of NCAA programs to Olympic/International success.

2.1 The NCAA greatly contributes to the success of the United States in Olympic/International competition by supporting nonrevenue, Olympic sports.

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

2.2 My college/university greatly contributes to the success of the United States in Olympic/International competition by supporting nonrevenue, Olympic sports.

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)
2.3 Providing scholarship opportunities to foreign athletes ultimately benefits U.S. athletes' chances in Olympic/International competition

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

2.4 The sustainability of nonrevenue, Olympic sport teams within my college/university can be influenced by U.S. success at the Olympic/International level

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

2.5 U.S. Olympic/International success greatly depends on NCAA support

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

2.6 Only the top performing NCAA Division I programs contribute to U.S. Olympic/International success

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)
2.7 NCAA Division II and III programs have little influence on U.S. Olympic/International success

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

2.8 Most nonrevenue, Olympic sports are in jeopardy of elimination within the current NCAA structure.

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

2.9 Olympic National Governing Bodies (NGBs) can influence the sustainability of nonrevenue, Olympic sports within the NCAA program

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)

2.10 The NCAA and USOC need each other to succeed

- Strongly Disagree (1)
- Moderately Disagree (2)
- Slightly Disagree (3)
- Slightly Agree (4)
- Moderately Agree (5)
- Strongly Agree (6)
Please feel free to add any additional thoughts on the value of NCAA programs to Olympic/International success

3.0 The following nonrevenue, Olympic sport program elements are extremely important to senior administrators in your NCAA athletic department:
<table>
<thead>
<tr>
<th>3.1 Athletic Success: High levels of individual/team success in sport competition (1)</th>
<th>Strongly Disagree (1)</th>
<th>Moderately Disagree (2)</th>
<th>Slightly Disagree (3)</th>
<th>Slightly Agree (4)</th>
<th>Moderately Agree (5)</th>
<th>Strongly Agree (6)</th>
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<tbody>
<tr>
<td>3.2 Academic Achievement: High levels of individual and team success in the classroom (2)</td>
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<td>3.3 Community Involvement: Strong team presence in local community service initiatives (3)</td>
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<td>3.4 Conduct (Competition): Proper behavior exhibited by coaches and student-athletes during competition (4)</td>
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<td>3.5 Conduct (Social): Proper behavior exhibited by coaches and student-athletes outside of competition (5)</td>
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<td>3. 6 Enrollment: Increase in university enrollment from student-athlete participation on sport team (6)</td>
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<td>3. 7 Fan Support: Strong team support by fans in surrounding geographical region (7)</td>
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<tr>
<td>3. 8 Fundraising: Development of external funds to supplement team’s operating budget (8)</td>
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<tr>
<td>3. 9 Personal Relationships: Strong relationships between administrators and members of coaching staff (9)</td>
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<tr>
<td>3. 10 Program Sponsorship Cost: Low cost to fund the annual operating budget of sport team (10)</td>
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</tr>
</tbody>
</table>
Please feel free to elaborate here on your general thoughts regarding how you feel valued as an Olympic sport by administrators within your athletic department.

Thank you for taking the time to complete this survey. Your responses are very appreciated.
APPENDIX F

INTRODUCTORY LETTER AND FOLLOW-UP
Greetings,

In collaboration with the USOC and College Swimming Coaches Association, we are asking you to complete a brief survey to evaluate perceptions on the sustainability of nonrevenue, Olympic sports in the NCAA program.

With recent changes to NCAA student-athlete funding and increasing commercialism and spending on football and men's basketball programs, many coaches of Olympic sports have expressed concern for the future of their program. Following a few demographic questions, this survey is divided into three sections: The sustainability of nonrevenue, Olympic sports in the NCAA program (12 items); The value of NCAA programs to the U.S. Olympic movement (10 items), and; The program values that Olympic sports bring to the athletic department and university (11 items). Responses will help us understand how coaches and administrators across all NCAA Divisions feel about the current status of Olympic sports in the NCAA. *This survey should take less than five minutes to complete.*

By completing the survey, you are consenting to participate in this study. Only the researchers will examine individual responses and compile results, and your name and title will not be recorded, however your specific sport, NCAA Division, and survey responses will be. Anonymity can never be guaranteed in the electronic environment, however the researchers will strive to protect all respondents and will not publish any individual information. The complete consent form is attached to this e-mail.

Begin the survey here: [https://unco.co1.qualtrics.com/SE/?SID=SV_eYfew6DlfLUa4ER](https://unco.co1.qualtrics.com/SE/?SID=SV_eYfew6DlfLUa4ER)

Thank you for your time and valuable feedback.

*Dean Ekeren*

*School of Sport and Exercise Science*

*University of Northern Colorado*
FOLLOW-UP LETTER

Good morning.

As a follow-up to the request you received last week I would like to thank all who completed the survey, as the response so far has been very good. If you did not have a chance to complete it, I would like to ask one more time. The survey is very brief, and the responses will help us immensely in evaluating perceptions on the sustainability of nonrevenue, Olympic sports in the NCAA program.

The survey can be found here:  https://unco.co1.qualtrics.com/SE/?SID=SV_eYfew6DlfLUa4ER

Again, thank you for your time and we will not bother you again.

Best Regards,

Dean Ekeren
School of Sport and Exercise Science
University of Northern Colorado
APPENDIX G

INSTITUTIONAL REVIEW BOARD APPROVAL
DATE: August 11, 2016

TO: Dean Ekeren
FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [943270-1] Coaches' Perceptions on the Sustainability of Nonrevenue, Olympic NCAA Sports as viewed through Stakeholder Theory

SUBMISSION TYPE: New Project

ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS

DECISION DATE: August 11, 2016
EXPIRATION DATE: August 11, 2020

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

Dean -

Thank you for an exceptionally well-prepared and thorough IRB application. Your materials are verified/approved exempt and you may begin with participant recruitment and data collection.

Best wishes with this interesting research and don't hesitate to contact me with any IRB-related questions or concerns.

Sincerely,

Dr. Megan Stelino, UNC IRB Co-Chair

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.