# A CROSS SECTIONAL STUDY OF INTERCOLLEGIATE BASKETBALL AND SOCCER COACHES SALARIES AT STATE INSTITUTIONS IN NORTH CAROLINA 

Steve K. Stoute

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

Chapel Hill

2007

Approved by:
Barbara Osborne, Esq.
Dr. Fred Mueller
Dr. Ed Shields


#### Abstract

STEVE STOUTE: A Cross Sectional Study of Intercollegiate Basketball and Soccer Coaches Salaries at State Institutions in North Carolina (Under the direction of Barbara Osborne) This study examined the remuneration of intercollegiate athletics coaches at state institutions in North Carolina within the context of the Equal Pay Act of 1963 (EPA) and Title VII of the Civil Rights Act of 1964 (Title VII). The study analyzed the salaries of men's and women's basketball coaches and men's and women's soccer coaches at the fifteen state institutions in the University of North Carolina system. The purpose of this study was to determine if gender is a noteworthy factor in the comparatively lower remuneration of female coaches when compared to male coaches. This study found some important differences in salary across gender bounds, some of which are easily justified by legally recognized factors while some other differences are defensible only through inconsistencies in interpretation and application of the law. The study also found that the subject institutions were far closer to equitable salary distribution than the national averages.


## DEDICATION

To my wife Danielle for all her support and encouragement throughout this project, I am eternally grateful. To my daughter Zaria for being my inspiration in everything I do, I love you. To my parents Steve and Joanne for instilling in me the courage to pursue excellence in all my endeavors, I thank you from the depths of my heart. To my God because through him all things are possible, I am ultimately most thankful.

## ACKNOWLEDGEMENTS

The successful completion of this master's thesis project required many countless hours of research, writing and editing. Firstly, I would like to thank my advisor, Barbara Osborne for her unflagging support and guidance through this process. Next, I would like to thank the other members of the faculty in the Department of Exercise and Sport Science who challenged me both in class and in my research. I would also like to thank all my classmates who have encouraged me each in their own unique way. Finally I would like to thank all my friends and family who have held me and the completion of this thesis in their thoughts and prayers.

## TABLE OF CONTENTS

LIST OF TABLES ..... vii
LIST OF FIGURES ..... viii
CHAPTER I. ..... 1
INTRODUCTION ..... 1
PURPOSE OF THE STUDY ..... 3
ReSEARCH QUESTIONS. ..... 4
Limitations ..... 6
DELIMITATIONS ..... 7
Assumptions ..... 7
DEFINITIONS OF TERMS ..... 7
SIGNIFICANCE OF THE STUDY ..... 9
CHAPTER II ..... 11
REVIEW OF LITERATURE ..... 11
THE EQUAL PAY ACT OF 1963 ..... 17
TitLe Vii OF THE CIVIL RIGHTS ACT OF 1964 ..... 24
CHAPTER III ..... 27
METHODOLOGY ..... 27
Subjects ..... 27
InSTRUMENTATION ..... 28
Procedures ..... 29
CHAPTER IV ..... 31
RESULTS ..... 31
CHAPTER V ..... 50
SUMMARY ..... 51
RECOMMENDATIONS FOR FUTURE RESEARCH. ..... 56
Conclusion ..... 57
APPENDICES ..... 59
REFERENCES. ..... 67

## LIST OF TABLES

## Table

1. Coaches of men's teams vs. Coaches of women's teams ..... 33
2. Men's Basketball coaches vs. Women's Basketball Coaches ..... 35
3. Men's Soccer coaches vs. Women's Soccer coaches ..... 37
4. Male head coaches vs. Female head coaches ..... 39
5. Male head coaches of women's basketball vs. Female head coaches of women's basketball ..... 41
6. Male head coaches of women's soccer vs.
Female head coaches of women's soccer. ..... 43
7. Male head coaches of women's basketball in DII vs.
Female head coaches of women's basketball in DII. ..... 45
8. Female head coaches of women's basketball in DI vs.
Female head coaches of women's basketball in DII. ..... 47

## LIST OF FIGURES

## Figure

1. Salary for coaches of men's teams vs.
Salary for coaches of women's teams ..... 33
2. Salary of men's basketball coaches vs.
Salary of women's basketball coaches ..... 35
3. Salary of men's soccer coaches vs.
Salary of women's soccer coaches ..... 37
4. Salary for male coaches vs. Salary for female coaches. ..... 39
5. Salary of male coaches of women's basketball vs.
Salary of female coaches of women's basketball. ..... 42
6. Salary for male coaches of women's soccer vs.
Salary for female coaches of women's soccer ..... 44
7. Salary for male coaches of DII women's basketball vs. Salary for female coaches of DII women's basketball ..... 46
8. Salary for female coaches of DI women's basketball vs.
Salary for female coaches of DII women's basketball ..... 48

## CHAPTER I

## INTRODUCTION

Intercollegiate athletics is unique to the United States, and American society has embraced student-athletes, coaches and teams as part of the cultural fabric of the country. Intercollegiate athletics are perpetually linked to the educational institutions which sponsor them and the basic purpose of the National Collegiate Athletic Association (NCAA) is to maintain intercollegiate athletics as an integral part of the educational program (NCAA, 2005). Intercollegiate athletics has evolved concomitantly with higher education as the demands of society have changed.

One of the most significant changes to the landscape of higher education in recent history was the passage of Title IX of the Educational Amendments of 1972. Title IX is a law that makes gender discrimination in federally funded educational programs in the United States illegal. Title IX has led to expanded opportunities for women to compete in athletics and benefit from the invaluable learning that is a part of sport participation. It is undeniable that women's athletics has experienced growth since the passage of Title IX, highlighted by a comparison of the number of female college athletes -- 16, 000 participating in 1968 just a few years before Title IX was enacted, to the 166, 728 female student-athletes who competed on 9, 074 teams in 2005 (NCAA, 2005).

The benefits derived by female students through increased participation opportunities since the passage of Title IX, have not however been echoed for female coaches and athletics
administrators (Women's Sports Foundation, 2001). It has even been suggested that when Title IX mandated more money be spent on women's athletics programs, it made women's sports lucrative and attractive to men. In the early 1970's prior to the passage of Title IX, $90 \%$ of all coaches of women's teams were women, but that figure dwindled to $47 \%$ in 2003 (Lopiano, 2003). Compounding the impending extinction of female coaches from women's athletics, since the year 2000, $90 \%$ of the available head-coaching positions in women's athletics have been filled by men (Acosta and Carpenter, 2002).

According to an NCAA study on the perceived barriers to women in intercollegiate athletics careers, this mass exodus of women from the world of intercollegiate athletics following graduation is mainly attributable to a desire for more money (NCAA, 1989). This may be particularly relevant because women that desire to go into coaching are almost entirely limited to coaching women's teams. At the NCAA Division I level, men's basketball head coaches earned an average $\$ 211,600$ which is $78.8 \%$ more than the $\$ 118,300$ earned by head women's basketball coaches (NCAA, 2003). That pay disparity continues for assistant coaches, where the assistant coaches of men's basketball teams earned an average of \$51,900 compared to $\$ 42,964$ earned on average by assistant coaches of women's basketball teams (NCAA, 2003). On the surface the pay gap in intercollegiate athletics may suggest gender discrimination. This study will examine gender discrimination as a contributing factor to the wage gap in intercollegiate athletics coaching.

The University of North Carolina was chartered in 1789 and was the first public university in the United States. In her book about the history of sports in North Carolina Pamela Grundy says "after the Civil War, as interest in organized sports began to spread across the country, athletics wove into the fabric of existence in myriad American
communities" (Grundy, 2001, p. 4). Part of this fabric to which Grundy referred includes the educational institution. This sentiment is echoed in the statement of purpose of the NCAA which reads "a basic purpose of this Association is to maintain intercollegiate athletics as an integral part of the educational program" (NCAA, 2006, p. 1).

Today the University of North Carolina is a multi-campus university comprised of 16 institutions with a cumulative enrollment of 196,250 (UNC-GA, 2006). Each campus is characterized by diversity and is unique in its make up and history, a history that includes athletics at all except the North Carolina School of the Arts. This diversity includes undergraduate enrollments that vary from 2,470 to 18,670 , athletics programs in each NCAA Division with the exception of Division III and membership in eight different athletic conferences. As such the University of North Carolina and its member institutions are a microcosm of intercollegiate athletics in the United States.

## Purpose of the Study

The purpose of this study is to determine if gender is a significant factor in the comparatively lower remuneration of female coaches of basketball and soccer when compared to male coaches of basketball and soccer. Another objective of the study is to determine if any major differences exist in the remuneration of male and female coaches based on the level of NCAA classification, i.e. Division I, or II. This study will also attempt to discern what factors can be identified as major contributors to the compensation of intercollegiate athletics coaches and if there are any differences in those factors based on gender. Finally, this study will also compare the compensation of coaches at state institutions in North Carolina to the national averages.

## Research Questions

This study will be guided by the following questions:

1. Is there a difference in the salaries of head coaches of men's teams and the salaries of head coaches of women's teams for comparable sports at the institutions in the University of North Carolina system?

- Null Hypothesis: There is no difference in the salaries of head coaches for men's and women's teams of comparable sports.
- Alternate Hypothesis: There is a difference in the salaries of head coaches of men's and women's teams of comparable sports.
- Rationale: Variables other than the gender of the team influence the salaries of the head coaches.

2. Is there a difference in the salaries of male head coaches and female head coaches of the same sport within the athletics programs at the institutions that comprise the University of North Carolina system?

- Null Hypothesis: There is no difference in the salaries of male and female head coaches of the same sport.
- Alternate Hypothesis: There is a difference in the salaries of male and female coaches of the same sport.
- Rationale: Variables other than the gender of the coach influence the salaries of coaches.

3. Does NCAA classification have an impact on the salaries of male and female coaches of the same sport at institutions in the University of North Carolina system?

- Null Hypothesis: There is no difference among the NCAA Divisions in the salaries of male and female coaches of the same sport.
- Alternate Hypothesis: At least one of the NCAA Divisions differs in the salaries of male and female coaches of the same sport.
- Rationale: Division II and III institutions have smaller budgets and are less likely to spend significant monies on coaching salaries, as is the case with Division I.

4. Is there a difference between male and female coaches on the human capital variable years of coaching experience?

- Null Hypothesis: There is no difference between male and female coaches with regard to coaching experience.
- Alternate Hypothesis: There is a difference in coaching experience, between male and female coaches.
- Rationale: Experience has been identified as a mitigating factor in analyses of pay disparities between male and female coaches.

5. Is there a difference between male and female coaches on the human capital variable education?

- Null Hypothesis: There is no difference between male and female coaches in the level of education.
- Alternate Hypothesis: There is a difference in the level of education between male and female coaches.
- Rationale: Education has been identified as a justifiable factor for pay disparities between male and female coaches.

6. Is there a difference between the level of compensation of male and female coaches at institutions in the University of North Carolina system when compared to the national averages?

- Null Hypothesis: There is no difference between the national averages for compensation of male and female coaches and the averages at institutions in the University of North Carolina system.
- Alternate Hypothesis: There is a difference in the compensation of coaches at the national level when compared to the compensation of coaches at institutions in the University of North Carolina system.
- Rationale: Are institutions in the University of North Carolina system providing compensation more equitably than the national averages.


## Limitations

1. The study only considers institutional salary, which does not include income from camps/clinics, shoe and apparel contracts, speaking engagements and other perquisites often provided to coaches.
2. The study is limited to data for one fiscal year which may compromise its external validity.
3. The study generalizes to only basketball and soccer coaches.
4. There are extraneous variables which influence the salaries paid to coaches.

## Delimitations

1. The study was comprised of only NCAA institutions in the state of North Carolina.
2. The study was restricted to only public institutions in the University of North Carolina system.
3. Only the institutional salary paid to coaches was considered in the study.
4. The study focused only on basketball and soccer coaches at NCAA institutions.

## Assumptions

1. The information reported by the institutions and individuals in the study is accurate.
2. The institutions in the study are representative of the larger population.

## Definition of Terms

1. NCAA: The National Collegiate Athletic Association is a voluntary organization comprised of 1,024 active member institutions. The purpose of the NCAA is to govern competition in a fair, safe and sportsmanlike manner and to integrate intercollegiate athletics into higher education.
2. Salary: All wages an institution pays a coach as compensation attributable to coaching and documented by the institution as required by the state of North Carolina.
3. Comparable Sports: Sports that require equal skill, effort and performed under similar conditions.
4. NCAA Division I (DI): According to the NCAA (2005) "Division I member institutions have to sponsor at least seven sports for men and seven for women (or six for men and eight for women) with two team sports for each gender. Each playing season has to be represented by each gender as well. There are contest and participant minimums for each sport, as well as scheduling criteria. For sports other than football and basketball, Division I schools must play 100 percent of the minimum number of contests against Division I opponents -- anything over the minimum number of games has to be 50 percent Division I. Men's and women's basketball teams have to play all but two games against Division I teams; for men, they must play one-third of all their contests in the home arena. Division I schools must meet minimum financial aid awards for their athletics program, and there are maximum financial aid awards for each sport that a Division I school cannot exceed" (Membership section, differences between divisions). There are currently 326 active DI member institutions.
5. NCAA Division II (DII): According to the NCAA (2005) "Division II institutions have to sponsor at least five sports for men and five for women, (or four for men and six for women), with two team sports for each gender, and each playing season represented by each gender. There are contest and participant minimums for each sport, as well as scheduling criteria -- football and men's and women's basketball teams must play at least $50 \%$ of their games against Div. II or I-A or I-AA opponents. For sports other than football and basketball there are no scheduling requirements. There are maximum financial aid awards for each sport that a Div. II school must not
exceed" (Membership section, differences between divisions). There are currently 282 active DII member institutions.

## Significance of the Study

Gender discrimination is illegal in the United States but is still mentioned in discussions and debates about the administration and coaching of intercollegiate athletics. Title IX, Title VII and the Equal Pay Act (EPA) are all laws that exist to prohibit gender discrimination. By examining the salaries of intercollegiate athletics coaches for possible gender based differences, this study will provide useful information to support or refute the presence of gender discrimination in coaching salaries.

This study examines the effect of gender on compensation in two distinct ways, the first of which is the gender of the team. According to the law when a team is provided dissimilar support and resources than that afforded to a comparable team of the opposite gender, there may be a case for gender discrimination. For this purpose coaching is classified as a resource and as such institutions are required to provide access to coaching in a nondiscriminatory manner. This type of gender discrimination falls under the legal auspices of Title IX, which historically has not been applied to issues of coaching compensation. By examining the effect of gender in this way, this study attempts to apply the protections afforded by Title IX to cases of discrimination in intercollegiate athletics coaching compensation.

This study also examines the effect of gender by isolating the gender of the coach in comparing the salaries of male coaches to female coaches. The EEOC maintains that coaching requires similar effort and coaches operate under similar working conditions. As
such, if jobs are found to require substantially equal skill and responsibility then differences in compensation can be construed as gender discrimination, unless one of the four affirmative defenses apply. By examining gender in this way, this study attempts accurately show the effect of variables such as experience and education on the compensation of intercollegiate athletics coaches.

This study may also provide athletic administrators with a reference tool that can be utilized to examine the compensation practices at their institutions. By using the framework of this study athletic administrators would be able to conduct similar analysis on a program wide basis and make changes if necessary.

## CHAPTER II

## REVIEW OF LITERATURE

Gender based differences in the compensation of intercollegiate athletics coaches falls under the legal scope of the Equal Pay Act of 1963 (EPA) and Title VII of the Civil Rights Act of 1964 but not under Title IX of the Education Amendments Act of 1972. Although the passage of Title IX has led to dramatic increases in participation opportunities for girls and women in athletics those same positive strides have not reverberated in employment opportunities in the field (Acosta and Carpenter, 2002). The topic of remuneration for athletics coaches and the differences between male and female coaches in their levels of recompense has been a well researched topic, with scholars utilizing a multitude of models from various disciplines to examine the issue. In this study the compensation of male and female intercollegiate athletics coaches will be examined using an economic concept, the human capital theory, within a legal framework, provided by the EPA and Title VII.

An examination of the literature yielded two published studies that applied the human capital theory to the compensation of intercollegiate athletics coaches. Brad R. Humphreys published his work which examined the earnings gap between male and female NCAA Division I basketball coaches in the Journal of Sports Economics in 2000. In 2002, George B. Cunningham and Michael Sagas published an article in the Research Quarterly for Exercise and Sport which examined the differential effects of human capital for male and female basketball coaches at the NCAA Division I level. Both works examined the pay disparity
issue using the human capital theory and applied it to a similar subject group, Division I men's and women's basketball coaches. Both studies identified a set of measures which were used to define human capital and included: educational background, playing experience, coaching experience and winning percentage.

Humphreys' study analyzed the earnings of head coaches from 238 of the 279
Division I institutions that sponsored both men's and women's basketball, and used data from the 1990-1991 Title IX compliance survey of its member institutions conducted by the NCAA. The institutions not included in the study were those institutions that had missing observations. The survey data obtained from the NCAA was matched with institutional data from the Integrated Postsecondary Education Data System (IPEDS). The career won-lost record, and years of head coaching experience data were obtained from the 1991 NCAA Basketball records book. The earnings difference was then examined within women's basketball and also between men's and women's basketball coaches.

In the first instance, Humphreys found that within women's basketball, female head coaches $(\mathrm{n}=140)$ earned $9 \%$ more than their male $(\mathrm{n}=98)$ counterparts with a median ratio of female to male base salary of 1.09. The author acknowledged this as unusual and used a human capital earnings equation which suggested that differences in job performance and gender segregation by establishment explained the gap. In the earnings equation the dependent variable was the annual salary of the head coach and the independent variables were work experience and career winning percentage as a measure of job performance. Human capital theory predicts that the sign of the parameter on these variables is positive because increases in experience and superior job performance should increase earnings, all other things being equal. The earnings equation also controlled for institution specific
variables which included the revenues generated by the basketball program, location of the institution, control (i.e. public or private), and membership in Division I-A.

A regression analysis was performed with the following observed results from the ordinary least squares estimates of the earnings equation. Women's basketball coaches who win more games tend to earn more, other things equal. The experience variable is highly correlated with career winning percentage (correlation coefficient approximately .6). The human capital variables had positive signs but were not statistically significant. Larger institutions and institutions with major college football programs (Division I-A) tend to pay their women's basketball coaches more and the larger the revenues generated by the women's basketball program, the higher the salary paid to the head coach. The effect of the institution specific measure of gender discrimination is positive and significant with a $p$ value less than 05 .

Humphreys conducted a second comparison in his study, on this occasion the analysis was on the earnings differences between men's and women's basketball coaches. The parameter on female is positive although it is not statistically significant, which means gender alone does not influence the salaries of head basketball coaches. The variable women's basketball, captures the effect of coaching women's basketball on the earnings of head coaches, and is statistically significant with a p value less than .05 . This implies that women's basketball head coaches earn about half of what men's basketball head coaches earn, even when controlling for differences in human capital factors and revenue generation of programs. The author advanced several explanations for the discrepancy, which include the prestige associated with men's basketball, discriminatory preferences held by athletic
directors or consumers and the greater ability of men's basketball coaches to capture some or all of the salary expenditures than women's basketball coaches.

The purpose of the Cunningham and Sagas study was to examine the human capital, head coaching aspirations, and occupational turnover intentions of male and female assistant coaches. The authors attempted to expand on research (Tharenou, Latimer, \& Conroy, 1994) that found human capital had stronger effects on men's career progression and perceived success than on women's. The authors identified established research (Knoppers, Meyer, Ewing, \& Forrest, 1991) that found female coaches had lower career satisfaction and higher turnover intentions than male coaches. The researchers proposed that the reasons for this were because women were discriminated against in the hiring process (Inglis, Danylchuk, \& Pastore, 2000; Lovett, Lowry, \& Lopiano, 1991). The authors identified research (Becker, 1975) that suggested people invest in capital, in the form of training, education and experience to improve their competencies and careers. The authors acknowledged research (Cunnigham, Sagas, \& Ashley, 2001) that suggested playing experience might be the most salient human capital variable in coaches' career outcomes.

Questionnaires were sent to a random sample of assistant coaches for 300 National Collegiate Athletic Association (NCAA) Division I institutions. Basketball coaches were chosen because most institutions support both men's and women's basketball teams. Questionnaires were directed at assistant coaches for both men's and women's teams because it is possible for men to serve as coaches for both genders (Knoppers et al., 1991). Usable questionnaires were returned from 239 coaches, a response rate of $39.83 \%$. Of the respondents $62.8 \%$ were men $(\mathrm{n}=152)$, and $37.2 \%$ were women $(\mathrm{n}=90)$. The authors admitted the low response rate jeopardized the external validity of the findings, but to
counteract that fear the demographic content of the study was compared to other studies using similar samples (Jiang \& Klein, 1999-2000).

Frequency distributions were computed for the elements of human capital, chi-square analyses were then carried out to determine differences between men and women on those items. Multiple analyses of variance were also carried out to assess gender differences on specific variables that were not statistically related. The results of the chi-square analyses indicated no significant differences in the proportion of coaches with an undergraduate major pertaining to sport or education ( $\mathrm{men}=37.5 \%$, women $=41.1 \%$ ) and a similar trend was noted for the proportion of coaches with graduate majors in sport or education (men=36.2\%, women $=42.2 \%$ ). On average, women had more intercollegiate playing experience than men did and had longer careers than men $\left(\mathrm{X}^{2}=23.30, \mathrm{df}=2, \mathrm{p}<.001\right)$. Male assistant coaches served in the coaching profession more years than female assistant coaches and men had significantly higher intent to become a head coach than their female counterparts $\mathrm{F}(1,240)=$ $30.85, \mathrm{p}<.001$. Women also reported greater intent to leave the coaching profession than men $\mathrm{F}(1,240)=12.80, \mathrm{p}<.001$. The authors concluded that the results of the study coupled with current literature suggested women were possibly being discriminated against in the workplace. The limitations of the study were the size of the sample and because only Division I basketball coaches were surveyed, the results could not be generalized across intercollegiate athletics.

Considering the results and conclusions of the research and the protection afforded by the laws promulgated to protect against gender discrimination it is alarming to even suggest that a pay disparity of any kind remains in the compensation of intercollegiate athletics coaches. It has been suggested that the EPA and Title VII have proven to be
inadequate protection against such discrimination (Osborne and Yarbrough, 2000). The lack of success of plaintiffs who brought action under the EPA and Title VII combined with the persistence of substantial disparities between the salaries of coaches of men's intercollegiate teams and those of women's teams led to action by the United States Equal Employment Opportunity Commission (EEOC). The EEOC, the agency under whose auspices falls the enforcement of Title VII and the EPA, issued a notice meant to serve as "enforcement guidance on sex discrimination in the compensation of sports coaches in educational institutions" (EEOC, 1997, p. 1).

The guidance utilized analysis of specific situations "to set out the proper framework for applying the EPA and Title VII to claims of gender inequity in the compensation of coaches" (EEOC, 1997, p. 2). The guidelines establish two general principles, then goes on to analyze each element of the EPA and Title VII. The first principle involved the analysis of jobs and stated expressly that jobs were to be analyzed in terms of the actual job requirements and not simply the job description (EEOC, 1997). That meant that under the EPA jobs coaching different sports could be identified as substantially equal and coaches of different sports could be used as appropriate comparators under Title VII. The second principle allowed that pay discrimination was unjustifiable if the differences used to prove the jobs were not substantially equal and were themselves based on discrimination (EEOC, 1997). Unfortunately the interpretation and application of the law falls under the jurisdiction of the courts and the EEOC does not have any direct enforcement responsibility. Over time the inconsistencies of interpretation and application may have altered the effectiveness of the guidelines.

The Equal Pay Act prohibits employers from discriminatory pay practices on the basis of sex between employees at the same establishment who perform equal work in jobs that require equal skill, effort, responsibility and are performed under similar working conditions (29 U.S.C. Section 206(d)(1)). Under the EPA the jobs being compared need not be identical, but only substantially equal (EEOC, 1997). The scope of substantially equal is defined as requiring equal skill, effort, responsibility and performed under similar working conditions.

According to the EEOC the first step in establishing a case under the EPA is selecting male and female comparators so that the jobs may be examined to determine if they are substantially equal. The comparator must be a specific individual of the opposite sex, not a hypothetical person, who was paid more for performing a substantially equal job (EEOC, 1997). This initial burden of proof falls on the plaintiff and the risk of pre-Guidelines failure in EPA claims arose most often when the plaintiff failed to choose an appropriate comparator (Osborne and Yarbrough, 2000). There may be more than one comparator identified by the plaintiff, although a single comparator satisfies the initial burden, and the defendant institution may also submit other comparators for consideration.

Several of these elements are involved in Bartges v. The University of North Carolina at Charlotte, 908 F. Supp. 1312 (U.S. Dist, 1995), where the plaintiff identified multiple comparators, including the head baseball coach, the assistant men's basketball coaches, the head volleyball coach and the head golf coach. The court ruled that the plaintiff did not identify a satisfactory male comparator because all the comparators she identified held full time positions and the plaintiff held two part time positions. In attempting to justify the
comparison the plaintiff combined her two part time positions, and "in so doing made the very comparisons with hypothetical or composite males that cannot be used to prove a violation of the EPA" (Bartges, 1995, p. 6).

The second element in establishing a prima facie case under the EPA is that the jobs tendered by the plaintiff as comparators are substantially equal. The job of each comparator must be taken separately and examined to determine if it achieves the substantially equal standard established by the law. The guidelines acknowledge that "what constitutes equal skill, equal effort, or equal responsibility cannot be precisely defined" but "the broad remedial purpose of the law must be taken into consideration" (29 C.F.R. Section 1620.14(a)). It was also noted in the guidelines that, although the analysis of jobs for substantial equality was compartmentalized into four elements, the focus should remain on the overall content of the job (EEOC, 1997).

The EEOC established factors that will be considered under each of the requirements to prove jobs substantially equal. Equal skill, considers "such factors as experience, training, education and ability" and it is important to note that any "additional training or education or abilities not required to perform the job will not be considered in determining whether the jobs are substantially equal" (EEOC, 1997, p. 4). In Harker v. Utica College of Syracuse University, 885 F. Supp. 378 (U.S. Dist. 1995) the court ruled that the jobs of the plaintiff head women's basketball coach and the men's basketball coach were substantially equal, though the men's basketball coach had a master's degree in Education and the plaintiff only had a bachelor's degree. The plaintiff argued that the difference in educational backgrounds had no effect on coaching and the court agreed.

Equal effort can be determined by examining the actual job requirements, which the EEOC states are typically similar for coaches, regardless of sport (EEOC, 1997). These requirements typically include: teaching/training, counseling/advising, budget management, fundraising, public relations, recruiting at the college level and general program management (EEOC, 1997). In Perdue v. City University of New York, Brooklyn College, 13 F. Supp. 2d 326 (U.S. Dist, 1998) the plaintiff provided testimony which claimed she coached the same season, number of games, practices and players as her male comparator. Her testimony also claimed similarities in recruiting, budget management, scholarship management, scouting, game preparation, supervising assistant coaches and ordering equipment. The testimony of the plaintiff was supported by the deposition testimony of her male comparator which allowed the jury to find that the plaintiff had established all the elements required under the EPA. The guidelines also provide an example of a male coach of boy's ice hockey and a female coach of girl's crew and note that despite the difference in the specific skills being taught, if there is no substantial difference in the aforementioned requirements, the jobs require equal effort.

Determining equal responsibility involves a close look at the actual duties performed by coaches, with consideration also given to "the size of the team, the number of assistants, and the demands of event and media management" (EEOC, 1997, p. 5). According to the EPA the equal responsibility standard "is concerned with the degree of accountability required in the performance of the job" (C.F.R. Section 1620. 17(a)). In Sobba v. Pratt Community College, 117 F. Supp. 1043 (U.S. Dist, 2000) the plaintiff, a female tennis coach, identified the male coaches of cross country, track and field and softball as comparators under the EPA. The court found that the track program had more participants, the coach was
responsible for supervising an assistant and competed in conference competition in both the fall and spring whereas tennis had a fall scrimmage season with conference competition only in the spring. Also, the court found that the softball coach had more athletes to supervise than the plaintiff, as well as an assistant coach and a budget more than twice the size of the tennis budget. The court ruled that the plaintiff's EPA claim failed as a matter of law, because the jobs of the comparators involved skills and responsibilities not required in the plaintiff's job.

Once equal skill, effort and responsibility are found, similar working conditions are inferred because for the purposes of the EPA "most coaches work under similar working conditions" (EEOC, 1997, p. 6). This interpretation is particularly important because it is an aspect of the law that was not applied as such in what is considered the significant case with regards to equal pay for intercollegiate coaches (Weiss, 2002). In Stanley v. University of Southern California, 13 F. 3d 1313, (U.S. App. 1994) the court ruled that greater pressure to win or generate revenue creates different working conditions for coaches. The EEOC guidance addressed revenue generation by noting that if the institution provided discriminatorily reduced support to the female coach to produce revenue for her team that constituted discrimination and as such could not then be used to justify a pay disparity under the EPA (EEOC, 1997).

After the plaintiff has identified a comparator and proved the jobs to be substantially equal a prima facie case has been established. The plaintiff is then required to show she was paid less than the comparator for substantially equal work. This then shifts the burden of proof to the defendant, who can then use one of the four affirmative defenses of the EPA.

The defendant in an EPA claim must then prove that the pay differential that exists is based on: "(i) a seniority system; (ii) a merit system; (iii) a system which measures earnings
by quantity or quality of production; or (iv) a differential based on any other factor other than sex" (29 U.S.C. Section 206 (d)(1)). The guidelines provide that defenses based on the seniority and merit systems will apply based on precedence, but that quantitative and qualitative measures are not applicable to coaching. If the defendant satisfies the burden of proof by providing any of the affirmative defenses the defendant will succeed and not be found liable. In Harker v. Utica College of Syracuse University, 885 F. Supp. 378 (U.S. Dist, 1995) the defendant institution provided that the male comparator in the claim had been coaching at the institution for nine years at the time the plaintiff was hired. The court cited a Supreme Court statement in addressing an EPA claim and a similar decision by the Seventh Circuit in finding that the male coach had nine years seniority over the plaintiff and as such the wage difference was justifiable.

The "factor other than sex" is the affirmative defense used most successfully and the guidelines addressed some of the manners in which it has been advanced, such as: "(a) the male coach produces more revenue for the school than the female coach; (b) the male coach must be paid higher wages in order to compete for him; (c) salary is based on prior salary; (d) salary is linked to the sex of the student-athletes rather than the coach; (e) the male coach has superior experience, education and ability; and (f) the male coach has more duties" (EEOC, 1997, p. 6). The EEOC also established that "an employer who uses this defense must show that the factor of sex is not an element underlying the wage differential either expressly or by implication" (EEOC, 1997, p. 6).

Revenue as a factor other than sex is justifiable as an affirmative defense according to the EEOC, only if the defendant institution has provided the female coach with adequate support to produce revenue for her team. The EEOC notes that an institution cannot control
all the possible variables that determine the amount of revenue actually produced by a team or coach. The different developmental stages of certain sports also may affect revenue generation potential but the historical bias against women's sports in resource allocation must be considered. As such, for a defendant institution to avail itself of this defense, the plaintiff must have been offered a similar opportunity and the requisite support to produce revenue. If not, the actions of the institution "would constitute discrimination in the terms and conditions of employment which cannot then be used to justify a pay disparity under the EPA" (EEOC, 1997, p. 7). The guidelines apply this discrimination in the terms and conditions of employment within the Title IX framework of program-wide analysis rather than sportspecific. Thus, if the necessary resources to revenue generation are made available overall in a non-discriminatory manner, even if the male and female coaches of the same sport are treated differently, the defense is applicable.

Marketplace as a factor other than sex defense is applicable according to the EEOC if a defendant can "demonstrate that it has assessed the marketplace value of the particular individual's job related characteristics" (EEOC, 1997, p.8). In Horner v. Mary Institute, 613 F. 2d 706 (U.S. App. 1980), the court stated similarly "an employer may consider the market place value of the skills of a particular individual when determining his or her salary" (Horner, 1980, p. 7). The guidelines do however, differentiate between "marketplace value" and "market rate" as defenses to EPA claims (EEOC, 1997, p. 8). The market rate defense is based on the assumption that market factors suggest women are available for employment at lower rates of pay. Both the EEOC and the courts have rejected this defense, citing the Supreme Court in Corning Glass Works v. Brennan (1974) and Brock v. Georgia Southwestern College, 765 F. 2d 1037 (11th Cir. 1985) but have accepted the marketplace
value defense, which is based on consideration of the skills of an individual rather than sex in setting wages.

Reliance on the prior salary of the employee as a factor other than sex defense is flawed according to the guidelines, because this may perpetuate the lower salaries traditionally paid to women, which may be based on sex discrimination. The EEOC asserts that for this defense to apply the courts should examine whether the defendant institution has done any of the following: "(1) consulted with the employee's previous employer to determine the basis for the employee's starting and final salaries; (2) determined that the prior salary was an accurate indication of the employee's ability based on education, experience and other relevant factors; and (3) considered the prior salary, but did not rely solely on it in setting the employee's current salary" (EEOC, 1997, p. 9). The guidelines also suggest that whether the defendant has made practice of bargaining with men and not with women as relevant to the use of this defense as it may cast doubt on the justification for the higher wage paid to the male employee.

Sex of the athletes as a factor other than sex is a defense deemed unacceptable by the EEOC because by its nature it is not gender neutral. Though this defense suggests that the sex of the coach is not considered but rather the sex of the athlete, the sex of the coach remains a factor because historically females have been limited to coaching women's teams and earning less than males who coach men's teams. This is still an issue today because in 2004, less than $2 \%$ of the coaching positions on men's teams were held by women (Acosta and Carpenter, 2004). The EEOC views the "virtual exclusion of women from jobs coaching men's teams" (EEOC, 1997, p. 10) as shown above, is demonstration that the sex of the athletes is not a factor other than sex that can justify a pay differential.

Superior experience, education and ability as a factor other than sex are a legitimate defense of a pay differential according to the guidelines. The EEOC does however clarify through an example that the factors must provide relevant differentiation between a male and a female coach and should not be immaterial and superficial. In Harker, the court dismissed the claim although the plaintiff established a prima facie case, because the defendant provided that the male comparator had superior education, experience and length of service which justified the pay differential. The plaintiff failed to rebut the affirmative defense forwarded by the defendant which led to the court's decision.

Additional duties as a factor other than sex, is a justifiable defense only if the pay differential is related to the extra duties and if the opportunity to assume additional duties is offered in a non-discriminatory manner to both men and women. The guidelines provide an example of a male coach of men's soccer who performs a job requiring equal skill, effort and responsibility as a female coach of women's field hockey. The men's soccer coach however, is paid more because he coaches pre-season practice for his team while the field hockey coach does not, although she has requested the opportunity to have pre-season practices. The EEOC suggests that because the women's team was not given the opportunity then this pay differential is indefensible using the additional duties factor.

## Title VII of the Civil Rights Act of 1964

Title VII covers a broader range of wage discrimination than does the EPA and claims can be made under Title VII without having to satisfy the equal work standard required by the EPA. However, although the burdens are different under Title VII and the EPA, an unequal pay for equal work claim can be brought under Title VII and in that case,
the same burden will apply (EEOC, 1997). The precedent here has been established by the Supreme Court in County of Washington v. Gunther (1981) which held that plaintiffs are not required to satisfy the equal work standard of the EPA in order to state a claim of gender based wage discrimination under Title VII (EEOC, 1997).

An example of a Title VII claim is Perdue v. Brooklyn College (1998). To establish a claim under Title VII the plaintiff was required to prove that "she was treated less favorably than comparable male employees in circumstances from which a gender-based motive could be inferred" (Perdue v. Brooklyn College, 13 F. Supp. 2d 326, p. 5, citing Luciano v. Olsten Corp. 110 F.3d 210, 215). The testimony of the plaintiff, as well as the testimony of Linda Carpenter, Donna Lopiano and Ron Kestenbaum, illustrated the disparate treatment of the plaintiff as compared to the men's basketball coach. The court noted that the conditions of employment were also inferior in budget for housing, dining, recruiting, equipment, athletic undergarments and uniforms. The court also made mention of the fact the plaintiff was subjected to sexual slurs and improprieties.

The court deemed the plaintiff met her burden of proof under Title VII based on the evidence provided in the case and as such the burden then shifted to the defendant institution, "to put forth nondiscriminatory reasons which motivated its decisions with respect to the plaintiff" (Perdue v. Brooklyn College, 13 F. Supp. 2d 326, p. 5, citing the court in Texas Dep't of Community Affairs v. Burdine, 450 U.S. 248, 254). The jury found that the defendant, by virtue of its actions with respect to the plaintiff's compensation, terms, conditions, or privileges of employment, used sex as a motivating factor. As such, the jury determined the defendant intentionally discriminated against the plaintiff on the basis of her
gender in violation of Title VII. However, the district court did not rule on this matter because the defendant failed to raise the issue in its motion.

The guidelines also provide an example, where the male coaches of baseball and men's ice-hockey are provided with bonuses for winning seasons and none of the female coaches of women's teams are provided with bonuses. The guidance states that such differentiation in the provision of benefits unless unrelated to sex, is unlawful even without the jobs being substantially equal (EEOC, 1997). Therefore, depending on the facts of the case a claim of discrimination in compensation can be filed under one of or both the EPA and Title VII. Both Title VII and the EPA are meant to prohibit gender based discrimination in employment, especially in compensation and if applied as suggested in the EEOC guidance may significantly limit legal issues in this field.

## CHAPTER III

## METHODOLOGY

The purpose of this study is to determine if gender is a discernible factor in the comparatively lower remuneration of female coaches when compared to male coaches.

## Subjects

The subjects for this study were intercollegiate athletics basketball and soccer coaches of the fifteen universities which comprise the University of North Carolina system. These institutions were chosen because they are public institutions and as such, institutional salary information for intercollegiate athletics coaches is public information. Appalachian State University, East Carolina University, North Carolina Agricultural and Technical State (North Carolina A \& T), North Carolina State University, University of North Carolina at Asheville, University of North Carolina at Chapel-Hill, University of North Carolina at Charlotte, University of North Carolina at Greensboro, University of North Carolina at Wilmington and Western Carolina University are NCAA Division I institutions. Elizabeth City State University, Fayetteville State University, North Carolina Central University, University of North Carolina at Pembroke and Winston-Salem State University are NCAA Division II institutions. There are no NCAA Division III public institutions in the North Carolina school system.

The salaries for coaches of men's and women's basketball and men's and women's soccer at the above institutions were obtained and examined for the purpose of this study, with the following exceptions. Elizabeth City State University, Fayetteville State University, North Carolina A \& T, North Carolina Central University and Winston Salem State University do not sponsor men's or women's soccer and Western Carolina University does not sponsor men's soccer.

Basketball was chosen as one of the sports for the study because it is the sport with the highest sport sponsorship rate in the NCAA and is sponsored by all 15 institutions in the study. Men's and women's basketball are also comparable sports with similar squad sizes, scholarship limits, playing and practice seasons and coach limits. Soccer was chosen as the other sport used in the study because men's and women's soccer are comparable sports as are men's and women's basketball. Soccer is also sponsored at a reasonable rate at the institutions in the University of North Carolina system and there are multiple male coaches of women's soccer teams which allows for more effective analyses.

## Instrumentation

The data for this study was collected by contacting each institution for specific salary information of the men's and women's basketball and soccer head coaches. That information was supplemented by data from the NCAA Gender Equity Report, which contains salary information for all NCAA certified institutions and is filed with the NCAA national office each year.

Secondary sources were used to ascertain the number of years of full time coaching experience for each coach. The coach was only credited for experience for years in which the
position held was full time, as opposed to part time, volunteer and graduate assistant positions, and was comprised of mainly coaching duties.

Education encompassed every level of higher education completed by the coach. The education variable was coded to allow for effective comparisons between groups. The coding was as follows: each coach received 1 point for each level of higher education completed, with an additional point being awarded to any coach who earned a degree in a field pertinent to coaching or any of the supplemental fields involved in coaching. For the purpose of this study these fields include: teaching/training, counseling/advising, budget management, fundraising, public relations, which were all identified as typical job requirements by the EEOC (EEOC, 1997).

## Procedures

The effect of gender will be explored in two distinct ways; the first is through an examination of salaries for male and female coaches of comparable sports (e.g. men's basketball to women's basketball, or men's soccer to women's soccer). The second effect of gender will be analyzed by comparing the salaries of male and female coaches of the same sport (e.g. a male coach of a women's soccer team to a female coach of a women's soccer team). The latter analysis of gender involves only women's teams because female coaches account for only $2 \%$ of coaching positions in men's collegiate sports and there are no female coaches of men's basketball or men's soccer in the NCAA Division I or Division II and only one female part time assistant coach at Division III (NCAA, 2003).

The salary information collected from the institutions will be charted and descriptive statistics calculated. Multiple comparisons will then be performed. The average salary for
head coaches of men's teams will be calculated and compared to the average salary for the head coaches of women's teams without regard for the gender of the coach. The next comparison will involve the average salary for head men's basketball coaches and head women's basketball coaches. The same comparison will then be performed with the average salary of men's and women's soccer coaches. Next, the average salary of male coaches will be compared to the average salary of female coaches without regard to the sport coached or the gender of the athlete. Next, male head coaches of women's basketball will be compared to the female head coaches of women's basketball and male head coaches of women's soccer to female head coaches of women's soccer. The next comparison will be between male head coaches of women's basketball in NCAA Division II and female head coaches of women's basketball also in D II. Another comparison will be done between the female head coaches at NCAA Division I institutions and the female coaches at NCAA Division II institutions in the study. Finally, the difference between the average salaries of male and female coaches in the study will be compared to the difference at the national level.

A disparity in the salary of groups for each comparison will be considered important when the means are different by more than $10 \%$. The $10 \%$ threshold will identify a difference that is noticeable and merits further examination within the framework of the study.

## CHAPTER IV

## RESULTS

The purpose of this study was to compare the institutional salary of intercollegiate athletics head coaches to determine if gender was an identifiable factor in their remuneration. According to the EEOC, a disparity in remuneration between a male and female coach can be justified by differences in the level of education and experience of the coaches, which falls under the affirmative defense category any "factor other than sex" (EEOC, 1997). For that reason comparisons were also made between the groups based on education and experience. Experience was recorded as the number of years an individual served in a full time position which entailed coaching duties. For the purpose of the study education was coded to reflect each level of education attained (bachelor's degree $=1$, master's degree $=2$ ), with a bonus point for a degree in a field pertinent to coaching and the responsibilities characteristic of a coach. The study used the fifteen state institutions that sponsor intercollegiate athletics in the University of North Carolina school system. This included six institutions at the NCAA Division I level that sponsor football at some level, four Division I institutions that do not sponsor football and five institutions that compete at the Division II level.

The focus of the study was narrowed to incorporate only the basketball and soccer programs at the aforementioned institutions. The narrow focus of the study allowed for all the possible information to be collected, which represented population data and, as such, eliminated sampling error. The absence of sampling error allowed the data analysis to exhibit
actual differences between groups as opposed to inferred differences. Multiple comparisons were conducted and descriptive statistics were used to analyze the relationships between groups.

The data used in the comparisons is included following each discussion in the form of a table. Following each table is a figure which illustrates only the salary comparison between the groups that were compared. The figures are all box and whisker plots, which can be interpreted as follows: the bottom of each box represents the $25^{\text {th }}$ percentile, the top of each box the $75^{\text {th }}$ percentile and the line in the box represents the median value. The whiskers represent the range of values that fall within 1.5 box lengths of the median. Values that fall outside of the whiskers are outliers and are indicated by the symbols * and o.

The first comparison made was between the head coaches of all the men's teams in the study and the head coaches of all the women's teams. This comparison was done without regard for the gender of the coach. Comparisons were made between the dependent variables salary, experience and education. The results found that head coaches of men's teams earn an average of $\$ 87,496$ which was, just over $14 \%$ more than their female counterparts who earned an average of $\$ 76,588$ annually. The coaches of men's teams had two and a half years more experience on average, with the range of experience from 4 to 29 years, while the range of experience for coaches of women's teams was 3 to 33 years. The average level of education for both groups of coaches was a master's degree, although more coaches of women's teams received the highest rank for education. This meant that more coaches of women's teams had obtained a master's degree in a field of study which is pertinent to coaching and duties associated with coaching. Table 1 shows the data associated with these findings and Figure 1 illustrates the comparison of salaries between the two groups.

Table 1
Coaches of men's teams vs. Coaches of women's teams

| Variable | MT Mean | WT Mean | MT Median | WT Median |
| :--- | :--- | :--- | :--- | :--- |
| Salary | $\$ 87,496$ | $\$ 76,588$ | $\$ 62,689$ | $\$ 60,925$ |
| Experience | 17 years | 14.5 years | 18 years | 11 years |
| Education | 2 points | 2 points | 2 points | 2 points |

Figure 1
Salary for coaches of men's teams vs. Salary for coaches of women's teams
$(\mathrm{n}=24) \quad(\mathrm{n}=25)$


The second comparison made was between the head coaches of men's basketball and the head coaches of women's basketball. This comparison also was done without regard for the gender of the coach but rather focused on the gender of the athlete and tested the hypotheses in research question 1. Research question 1 inquired into the presence of a difference in the salaries of head coaches of men's teams and the salaries of head coaches of women's teams for comparable sports at the institutions in the University of North Carolina system. Comparable sports for the purpose of this comparison refer to men's and women's basketball.

Head coaches of men's basketball earned $\$ 109,788$ annually which was $15.9 \%$ more than the $\$ 94,721$ earned annually by head coaches of women's basketball. The median salary for both the head coaches of men's basketball and the head coaches of women's basketball was $\$ 86,951$. The difference in experience was less than 1 year, with the men's basketball head coaches averaging 16.1 years when compared to the 15.2 years averaged by women's basketball head coaches. The median amount of experience for the men's basketball coaches was 15 years compared to 13 years for the women's basketball coaches, with the range for the men's basketball coaches between 4 to 28 years and the range for the women's basketball coaches between 3 to 33 years. Both the men's and women's basketball head coaches have the same level of education on average although more women's basketball coaches obtained a master's degree in a field of study pertinent to coaching and duties associated with coaching. These findings applied to research question 1 lead to the null hypothesis, which stated there is no difference in the salaries of head coaches for men's and women's teams of comparable sports, being rejected. Table 2 shows the data associated with these findings and Figure 2 illustrates the comparison of salaries between the groups.

Table 2
Men's Basketball coaches vs. Women's Basketball Coaches

| Variable | MBB Mean | WBB Mean | MBB Median | WBB Median |
| :--- | :--- | :--- | :--- | :--- |
| Salary | $\$ 109,788$ | $\$ 94,721$ | $\$ 86,951$ | $\$ 86,951$ |
| Experience | 16.1 years | 15.2 years | 15 years | 13 years |
| Education | 2 points | 2 points | 2 points | 3 points |

Figure 2
Salary of men's basketball coaches vs. Salary of women's basketball coaches ( $\mathrm{n}=15$ )
( $\mathrm{n}=15$ )


The third comparison was between the head coaches of men's soccer and head coaches of women's soccer. Again, this comparison was done without regard for the gender of the coach but rather focused on the gender of the athlete and tested the hypotheses forwarded in the first research question. Research question 1 was directed at the existence of a difference in the salaries of head coaches of men's teams and the salaries of head coaches of women's teams for comparable sports at the institutions in the University of North Carolina system. The comparable sports in this instance refer to men's and women's soccer.

Head coaches of men's soccer earned \$50, 342 annually on average which was $1.92 \%$ more than the $\$ 49,389$ average earnings of women's soccer head coaches. The median salary for head men's soccer coaches was $\$ 48,515$ compared to $\$ 44,794$ which was the median salary for head women's soccer coaches. The average experience for head men's soccer coaches was 18.4 years which is 5 years more than the 13.4 years averaged by head women's soccer coaches. The range of coaching experience was 4 to 29 years for head men's soccer coaches and 8 to 28 years for head women's soccer coaches. The data also shows the average education for both groups of coaches is the same and the most common level of education for both the head men's soccer coaches and the head women's soccer coaches was a bachelor's degree. In this instance, the null hypothesis which stated there is no difference in the salaries of head coaches for men's and women's teams of comparable sports is accepted. Table 3 encompasses the data referenced by theses findings and Figure 3 illustrates the salary comparison between the head coaches of men's soccer and the head coaches of women's soccer.

Table 3
Men's Soccer coaches vs. Women's Soccer coaches

| Variable | MSO Mean | WSO Mean | MSO Median | WSO Median |
| :--- | :--- | :--- | :--- | :--- |
| Salary | $\$ 50,342$ | $\$ 49,389$ | $\$ 48,515$ | $\$ 44,794$ |
| Experience | 18.4 years | 13.4 years | 22 years | 11 years |
| Education | 2 points | 2 points | 1 point | 2 points |

Figure 3
Salary of men's soccer coaches vs. Salary of women's soccer coaches
( $\mathrm{n}=9$ )
( $\mathrm{n}=10$ )


The fourth comparison was between male head coaches and female head coaches without regard for their sport or the gender of the athlete. This comparison tested the hypotheses in research questions 4, which inquired as to a difference between male and female coaches on the human capital variable years of coaching experience and 5, which was directed at a difference between male and female coaches on the human capital variable education.

Male head coaches earned an average of \$77, 933 annually which was $13.57 \%$ less than the $\$ 90,176$ earned on average by female head coaches. The median salary for female head coaches was $\$ 82$, 401 which was $41 \%$ more than the median salary for male head coaches of $\$ 58,457$. Male head coaches had less than 2 years more experience than female head coaches on average, with male head coaches averaging 16.2 years compared to the 14.75 years experience averaged by female head coaches. The range of experience for male head coaches was 4 to 29 years and the range for female head coaches was 3 to 33 years. Both groups of coaches had similar levels of education on average but a closer look at the results on education revealed that more female coaches attained a degree pertinent to aspects of coaching. Ultimately, the null hypothesis for research question 4 which stated, there is no difference between male and female coaches with regard to coaching experience, was accepted. This was also the case for the null hypothesis for research question 5 which stated, there is no difference between male and female coaches in the level of education. It should be noted however that the size of the groups tested by these particular research questions were significantly different. The data for this comparison is encompassed in table 4 while Figure 4 illustrates the salary comparisons between the male head coaches and female head coaches.

Table 4
Male head coaches vs. Female head coaches

| Variable | MC Mean | FC Mean | MC Median | FC Median |
| :--- | :--- | :--- | :--- | :--- |
| Salary | $\$ 77,933$ | $\$ 90,176$ | $\$ 58,457$ | $\$ 82,401$ |
| Experience | 16.2 years | 14.8 years | 15 years | 12 years |
| Education | 2 points | 2 points | 2 points | 3 points |

Figure 4
Salary for male coaches vs. Salary for female coaches
( $\mathrm{n}=33$ )
( $\mathrm{n}=16$ )


The next comparison undertaken was between male head coaches of women's basketball and female head coaches of women's basketball at the fifteen institutions in the study, all of which sponsor women's basketball. This was the first comparison that addressed the gender of the coach and gender of the athlete. The comparison was limited to women's basketball because, as was mentioned previously, there are no female coaches of men's basketball in the NCAA. The hypotheses stated in research question 2 are tested by this data set. Research question 2 asked if there was a difference in the salaries of male head coaches and female head coaches of the same sport within the athletics programs at the institutions that comprise the University of North Carolina system. For the purpose of this comparison, same sport refers to women's basketball.

Female coaches of women's basketball earned $\$ 100,608$ on average when compared to $\$ 56,454$ earned by male coaches of women's basketball, a difference of $78.2 \%$. The median salary for female coaches of women's basketball was $\$ 92,000$ which was also more than the median salary of $\$ 56,454$ for male coaches of women's basketball. Female women's basketball coaches averaged 15.5 years experience, which is slightly more experience than the 13 years averaged by male women's basketball coaches. The years of experience for female women's basketball coaches ranged from 3 to 33 years, while the range of experience for male women's basketball coaches was 11 to 15 years. Both groups of coaches were found to be similarly educated on average. Such a difference in salary suggests that the null hypothesis which stated, there is no difference in the salaries of male and female head coaches of the same sport, be rejected. It is important to note however, that the size of the group of male coaches of women's basketball is notably smaller than the group it was
compared with. The data can be found in table 5 while Figure 5 depicts the salary comparison between the two groups.

Table 5
Male head coaches of women's basketball vs. Female head coaches of women's basketball

| Variable | MC Mean | FC Mean | MC Median | FC Median |
| :--- | :--- | :--- | :--- | :--- |
| Salary | $\$ 56,454$ | $\$ 100,608$ | $\$ 56,454$ | $\$ 92,000$ |
| Experience | 13 years | 15.5 years | 13 years | 13 years |
| Education | 2 points | 2 points | 2 points | 3 points |

Figure 5
Salary of male coaches of women's basketball vs. Salary of female coaches of women's basketball
( $\mathrm{n}=2$ )

$$
(\mathrm{n}=13)
$$



The next comparison is between the male head coaches of women's soccer and the female head coaches of women's soccer at all the institutions in the study that sponsor soccer. This comparison also incorporates both the gender of the coach and the athlete, as well as, tested the hypotheses contained in research question 2 . As mentioned in the previous comparison, research question 2 asked if there was a difference in the salaries of male head coaches and female head coaches of the same sport within the athletics programs at the institutions that comprise the University of North Carolina system. For this comparison same sport refers to women's soccer.

Male coaches of women's soccer earned $\$ 51,282$ on average, which was $14 \%$ more than the $\$ 44,973$ earned by the female coaches of women's soccer. The median salary for male coaches of women's soccer was $\$ 45,589$ and was $\$ 38,850$ for female coaches of women's soccer. This salary difference coincided with an average difference in experience of approximately 3 years, where the male coaches of women's soccer averaged 14.3 years experience and female coaches of women's soccer averaged 11.3 years experience. The range of experience for the male coaches of women's soccer was 8 to 28 years and the range for female coaches of women's soccer was 8 to 15 years. However, the education variable did not differ between the male coaches of women's soccer and female coaches of women's soccer, as both groups averaged a bachelor's degree in a pertinent field of study. As such, the null hypothesis which stated, there is no difference in the salaries of male and female head coaches of the same sport, was accepted. Again the difference in the size of the groups tested should be noted. The data follows in table 6 and the illustration of the salary comparison between the groups is in Figure 6.

Table 6
Male head coaches of women's soccer vs. Female head coaches of women's soccer

| Variable | MC Mean | FC Mean | MC Median | FC Median |
| :--- | :--- | :--- | :--- | :--- |
| Salary | $\$ 51,282$ | $\$ 44,973$ | $\$ 45,589$ | $\$ 38,850$ |
| Experience | 14.3 years | 11.3 years | 11 years | 11 years |
| Education | 2 points | 2 points | 2 points | 2 points |

Figure 6
Salary for male coaches of women's soccer vs. Salary for female coaches of women's soccer ( $\mathrm{n}=7$ ) ( $\mathrm{n}=3$ )


The next comparison involved male head coaches of women's basketball in NCAA Division II and female head coaches of women's basketball within that same NCAA classification. This comparison tested the hypotheses in research question 3 which asked if NCAA classification had an impact on the salaries of male and female coaches of the same sport at institutions in the University of North Carolina system. For the purpose of this comparison same sport refers to women's basketball and all the coaches work in Division II.

On average female women's basketball head coaches earned $\$ 67,922$ compared to the $\$ 56,454$ earned by male women's basketball head coaches, a difference of $20.3 \%$. The median salary for female women's basketball head coaches was $\$ 60,925$ and the median
salary for male women's basketball head coaches was $\$ 56,454$. Male women's basketball head coaches had 1 year more experience than female women's basketball head coaches who had 12 years experience on average. The range of experience for female women's basketball head coaches was 8 to 20 years and that range was 11 to 15 years for male women's basketball head coaches. Female women's basketball head coaches had attained higher educational qualifications that were more pertinent to coaching, on average. The 20.3\% difference in salary between male and female head coaches of women's basketball in Division II is an important one and as such, the null hypothesis which stated, there is no difference among the NCAA Divisions in the salaries of male and female coaches of the same sport, was rejected. The data referenced above can be found in table 7 and Figure 7 provides an illustration of the salary comparison between the two groups.

Table 7
Male head coaches of women's basketball in DII vs. Female head coaches of women's basketball in DII

| Variable | MC Mean | FC Mean | MC Median | FC Median |
| :--- | :--- | :--- | :--- | :--- |
| Salary | $\$ 56,454$ | $\$ 67,992$ | $\$ 56,454$ | $\$ 60,925$ |
| Experience | 13 years | 12 years | 13 years | 8 years |
| Education | 2 points | 3 points | 2 points | 3 points |

Figure 7
Salary for male coaches of DII women's basketball vs. Salary for female coaches of DII women's basketball
( $\mathrm{n}=2$ )

$$
(\mathrm{n}=3)
$$



Another comparison made was between the female head coaches of women's basketball in NCAA Division I and female head coaches of women's basketball in Division II. This comparison tested for differences in salary practices across the two NCAA classifications in the study. On average female coaches of women's basketball at the DI level earn $\$ 110,393$ which is $62.4 \%$ more than the $\$ 67,992$ earned by female coaches at the DII level. The median salary for female women's basketball coaches at DI was $\$ 99,500$ and the median salary for female women's basketball coaches at DII was $\$ 60,925$. Female women's basketball coaches at the DI level also had 4 more years of experience than coaches at DII,
16.6 years compared to 12 years respectively. The range of experience for female women's basketball coaches at DI was 3 to 33 years and at DII was 8 to 20 years. Female women's basketball coaches at DII had more pertinent educational experience than their DI counterparts on average. The difference in salary is noteworthy especially when combined with the difference in experience which is similarly evident. The data for this comparison can be found in table 8 and the illustration of the salary comparison found in Figure 8.

Table 8
Female head coaches of women's basketball in DI vs. Female head coaches of women's basketball in DII

| Variable | DI Mean | DII Mean | DI Median | DII Median |
| :--- | :--- | :--- | :--- | :--- |
| Salary | $\$ 110,393$ | $\$ 67,992$ | $\$ 99,500$ | $\$ 60,925$ |
| Experience | 16.6 years | 12 years | 14 years | 8 years |
| Education | 2 points | 3 points | 3 points | 3 points |

Figure 8
Salary for female coaches of DI women's basketball vs. Salary for female coaches of DII women's basketball
$(\mathrm{n}=10) \quad(\mathrm{n}=3)$


The final comparisons are between the salaries of coaches nationally at NCAA institutions and those coaches at the institutions in this study. These comparisons are a measuring stick for the remuneration practices of institutions in the study and answer research question 6 , which asked if there is a difference between the level of compensation of male and female coaches at institutions in the University of North Carolina system when compared to the national averages.

At the national level, coaches of men's basketball earned $56.3 \%$ more than coaches of women's basketball on average. As mentioned earlier coaches of men's basketball in this
study earned $15.9 \%$ more than the coaches of women's basketball. Head coaches of men's soccer nationally, earned $5.5 \%$ more than head coaches of women's soccer, and at institutions in this study that difference was $1.92 \%$. On the national level the data sets are much larger than the ones utilized in this study which may account for some of the difference, but institutions in the study appear to be closer to parity than their peers nationally. These comparisons are also very general because the data the NCAA provides in the gender equity report does not break down salaries by gender of coach or athlete. As such that information can only be utilized to make general comparisons between men's basketball and women's basketball and men's soccer and women's soccer.

## CHAPTER V

SUMMARY

Intercollegiate athletics is an integral part of the fabric American higher education and of society. Over the 100 year existence of the NCAA intercollegiate athletics has evolved just as society has evolved. Some of these changes have been necessary to meet the demands of an ever changing society and yet still other things have not changed as society has demanded. One of those stagnant areas is the salary gap that exists between the men and women who coach at the intercollegiate level. The NCAA has produced research that demonstrates the differences in coaching salaries and in spite of the promulgation of laws to protect against discrimination in remuneration, little has changed.

This study examined salaries paid to intercollegiate athletics coaches at one of the oldest and largest multi-system educational institutions in the country, The University of North Carolina. This study examined only the institutional salary paid to coaches which was defined in Chapter 1 as compensation attributable to coaching and documented by the institution according to North Carolina state law. This does not include income derived from external sources such as: shoe and apparel contracts, television and radio coach's shows and coaching clinic and camp revenues. These external sources have traditionally added significant value to the salary packages of coaches but because the money does not come directly from the institution it is not regulated by the state and as such those figures are not easily acquired. However, when these external income elements are stipulated in institutional
contracts as additional duties the EEOC guidelines have stated that a pay disparity is justifiable only if the pay differential is related to the extra duties and if the opportunity to assume additional duties is offered in a non-discriminatory manner to both men and women.. The guidelines also state that whether an institution has made practice of bargaining with men and not with women is relevant as it may cast doubt on the justification for the higher wage paid to the male coach (EEOC, 1997).

Considering that limitation the study found that head coaches of men's teams, a profession that almost completely excludes women, earn $14 \%$ more than head coaches of women's teams. This difference may possibly be explained by the difference in experience of 2.5 years between coaches of men's teams and coaches of women's teams, although 2.5 years is certainly not a large difference. The $14 \%$ salary difference is not attributable to a difference in education because the study found that coaches of men's teams and coaches of women's teams have a similar level of education on average. According to the EEOC, superior education, experience and ability falls under the "factor other than sex" as an affirmative defense to an EPA claim and as such a male coach may be paid more than a similarly situated female coach if the defendant institution can meet that burden of proof (EEOC, 1997). The EEOC guidance does however state that the experience, education and ability factors must provide relevant differentiation and should not be immaterial and superficial (EEOC, 1997).

The study also found that head men's basketball coaches earned $15.9 \%$ more than women's basketball coaches. This is considerably less than the $78.8 \%$ difference that exists on a national level at DI institutions, but is still alarming. A minimal difference in experience, 16.1 years for men's basketball coaches compared to 15.2 years for women's
basketball coaches, and no noticeable difference in education failed to explain the discrepancy in salaries for basketball coaches. The median salary for both groups of coaches is the same, which suggests that the average salaries may be affected by outliers in the data. Within the study seniority is evenly distributed between men's and women's basketball coaches which means the difference may possibly be legally explained based on a merit system and factors other than sex, not explored by this study.

It is important to note within the first findings of the study that coaches of men's teams are better compensated than coaches of women's teams which should be even more alarming because less than $2 \%$ of men's teams are coached by women. This disparity is magnified when looking at men's basketball where there is not one single female head coach at any NCAA institution. This means women are being excluded from the higher paying jobs in intercollegiate athletics with no real grounds, because according to the EEOC the job requirements of coaching are typically similar regardless of sport (EEOC, 1997). One justification that has been advanced for why there are no female coaches of men's basketball is the sex of the athlete, as opposed to the sex of the coach, but the EEOC has deemed this unacceptable because by its nature it is not gender neutral.

Another finding of the study was that, unlike basketball, there was no considerable difference in salary between head coaches of men's soccer and head coaches of women's soccer. Head coaches of men's soccer earned \$50, 342 annually on average which was $1.92 \%$ more than the $\$ 49,389$ average earnings of women's soccer head coaches. This pay disparity occurred where there was also a difference of 5 years experience in favor of men's soccer coaches who averaged 18.4 years experience when compared to 13.4 years experience averaged by women's soccer head coaches. The $1.92 \%$ pay disparity, although miniscule,
could be justifiable under the law because men's soccer coaches have superior experience. Education does not play a factor in this pay differential because both men's soccer coaches and women's soccer coaches were found to have similar levels of experience on average. It is important to note however, that only three of the nineteen coaches involved in this comparison were female and all three were head women's soccer coaches. So although there is only a small pay differential and it may be justifiable under the law, the comparison is largely void of female coaches and their salaries.

The study also examined for differences between male and female head coaches, without regard for the sport or gender of the athlete. The findings were that female coaches earned $\$ 90$, 176 which was $15.7 \%$ more than male coaches who earned $\$ 77,933$ on average. However, this finding may be skewed because the size of the group of male coaches $(\mathrm{n}=33)$ was more than two times the size of the group of female coaches $(\mathrm{n}=16)$, with the vast majority of the difference being male soccer coaches who are paid much less than men's basketball coaches. The median salary for female head coaches was $\$ 82,401$ which was $41 \%$ more than the median salary for male head coaches which was $\$ 58,457$. Such a difference of the median values reflects the wider range of salaries for the group of male coaches which was again dominated by male coaches of both men's and women's soccer. The mean and median salaries for female coaches could also have been skewed because thirteen of the sixteen female coaches examined were women's basketball coaches. That is important because women's basketball coaches are paid more than women's soccer coaches. The presence of outliers within the group of female coaches, who earn much more than other female coaches, may have also been a component of the skewed results in this comparison.

Another finding was that there was no major difference in the level of experience and education between male and female coaches. Male coaches averaged just over 16 years experience when compared to 14.75 years experience of female coaches and both male and female coaches had the same level of education on average.

In examining for differences between male and female head coaches of the same sport the study found, female head coaches of women's basketball earned $78.2 \%$ more than male head coaches of women's basketball. This drastic difference may however be explained by the two male head coaches of women's basketball in the study both being from DII institutions, where historically less resources have been devoted to coaching salaries. Female head coaches of women's basketball averaged 15.5 years experience when compared to the 13 years experience averaged by male head coaches of women's basketball. The level of education for both female head coaches of women's basketball and male head coaches of women's basketball was found to be the same, on average.

The comparison of male and female head coaches of the same sport, when applied to women's soccer found that male head coaches earned $14 \%$ more than their female counterparts. Male coaches of women's soccer also average 3 years more experience than female coaches of women's soccer. This difference can possibly be explained by the almost 3 years superior experience male women's soccer coaches were found to have over female women's soccer coaches. The study also found that the male coaches of women's soccer and the female coaches of women's soccer had similar levels of education on average. Therefore, if the coaches are similarly situated that difference in experience could act as legal justification for the salary discrepancy. However, this $14 \%$ pay disparity with only 3 years difference in experience is not likely to be justifiable based on the law because the EEOC
does also clarify through an example that the experience, education and ability factors must provide relevant differentiation and should not be immaterial and superficial (EEOC, 1997).

This study also examined for differences in salary for coaches at institutions in the different NCAA Divisions. The study found that female coaches of women's basketball at DII earn 20.3\% more than male coaches of women's basketball at DII. This difference may be attributed to the more relevant educational experiences which female coaches of women's basketball presented as opposed to male coaches of women's basketball at DII. The difference could not be based on experience because female women's basketball coaches averaged 1 year less experience than male women's basketball coaches at DII. It is important to note that at the DII level coaching duties are often broader and salaries can be influenced by differing responsibilities coaches may have. The findings for this comparison may have also been affected by an outlier in the group of female women's basketball coaches who had vastly more experience than any of the other coaches, both male and female, and as such her salary was also concomitantly higher.

Another comparison which involved NCAA divisional classification found that female coaches of women's basketball at DI institutions earn $62.4 \%$ more than female coaches of women's basketball at DII institutions. This difference can be attributed to the approximately 5 years superior experience female women's basketball coaches at DI institutions have over their DII compatriots. It is much more likely however, that this difference is due in large part to the difference in budgets between the divisions, especially the amount of money traditionally spent to compensate coaches.

The study also compared differences in average salaries nationally at NCAA institutions to those differences observed at institutions in the study. It was found that
institutions in the study are far closer to equitable salary distribution between coaches of men's and women's basketball, as well as, coaches of men's and women's soccer. The differences nationally are larger than those observed at institutions within the study, and should be a concern to administrators nationwide. In addition to the much smaller salary gaps present at institutions in this study when compared to national averages, $64 \%$ of the head coaches of women's teams are women. This is a far cry from the $47 \%$ of women's teams coached by women nationally in 2003 (Lopiano, 2003). Therefore, it is a positive sign that institutions in the North Carolina system have been able to minimize the differences between male and female coaches in intercollegiate athletics and hopefully continue to strive toward gender equity in this area.

## Recommendations for future research

Based on the data collected for this study and considering its findings, the following are recommendations for future studies in this area:

1. Expand the study to include more institutions that compete in intercollegiate athletics at the various NCAA divisions. This may include trying to collect data from private institutions. This will increase the data set and allow for better comparisons.
2. Collect and study the data over an extended period of time in order to determine trends in the remuneration of coaches. A five or ten year study may exhibit very interesting trends and allow for better generalizations.
3. Incorporate additional sports that have high sport sponsorship rates and can be labeled as comparable sports according to the law. This will allow for a more inclusive representation of the coaching industry and as such more accurate generalizations.
4. Include other sources of income or a measure of the total value of compensation packages for coaches. This would provide a more accurate picture of the salaries paid to intercollegiate athletics coaches.
5. Survey coaches to ascertain their perception on: trends in compensation, gender based pay disparities and the importance of experience and education to successfully fulfilling coaching responsibilities.

## Conclusion

In today's climate of intercollegiate athletics it is common place for institutions to compete for the most qualified coaches, with a proven record of winning and pay almost any price for their services and that is evident by how frequently coaches change positions. This study has found some important differences in salary across gender bounds, some of which are easily justified by legally recognized factors while some other differences are defensible only through inconsistencies in interpretation and application of the law. Ultimately, as the law states, the essential functions of coaching remain the same and as such institutions need to adhere to some type of equitable principles in the compensation of coaches.

The NCAA states its basic purpose as maintaining intercollegiate athletics as an integral part of the educational program but somehow coaches of intercollegiate athletics have become bigger than the enterprise and many have the salaries to prove it. Athletic administrators at the institutional, conference and national level need to take responsibility for the compensation practices which currently prevail in the industry. This requires integrity and diligent adherence to the laws of the United States, which prohibit discriminatory pay practices on the basis of sex between employees at the same establishment who perform
equal work in jobs that require equal skill, effort, responsibility and are performed under similar working conditions (29 U.S.C. Section 206(d)(1)).

Appendix 1 A:
Salary, Education and Experience Data Set
Coaches of men's teams vs. Coaches of women's teams

| MBB | Salary | Experience | Education | WBB | Salary | Experience | Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | 95,946 | 18 | 3 | F | 73,185 | 13 | 2 |
| M | 159,999.84 | 17 | 1 | F | 99,999.84 | 14 | 3 |
| M | 59,275 | 8 | 3 | F | 56,100 | 8 | 3 |
| M | 59,048 | 13 | 2 | M | 54,450 | 11 | 1 |
| M | 78,024 | 13 | 2 | F | 77,850 | 3 | 1 |
| M | 62,825 | 4 | 1 | F | 60,925 | 8 | 3 |
| M | 200,000 | 19 | 1 | F | 200,000 | 33 | 1 |
| M | 78,663 | 28 | 1 | F | 60,000 | 17 | 1 |
| M | 271,830 | 26 | 2 | F | 171,392 | 28 | 2 |
| M | 195,000 | 20 | 3 | F | 120,000 | 10 | 3 |
| M | 110,000 | 22 | 3 | F | 110,500 | 27 | 3 |
| M | 52,576 | 15 | 2 | M | 58,457 | 15 | 3 |
| M | 98,450 | 12 | 2 | F | 99,000 | 11 | 3 |
| M | 38,237 | 14 | 3 | F | 92,000 | 10 | 3 |
| M | 86,951 | 13 | 2 | F | 86,951 | 20 | 3 |
| MSOC |  |  |  | WSOC |  |  |  |
| M | 45,492 | 11 | 3 | M | 43,100 | 21 | 1 |
| M | 30,000 | 4 | 1 | M | 43,999.92 | 13 | 2 |
| M | 62,553 | 26 |  | F | 62,553 | 15 | 2 |
| M | 37,613 | 22 | 1 | F | 33,517 | 11 | 1 |
| M | 75,000 | 18 | 2 | M | 95,000 | 28 | 1 |
| M | 48,515 | 22 | 1 | M | 47,000 | 11 | 3 |
| M | 58,131 | 29 | 3 | M | 45,589 | 8 | 1 |
| M | 50,272 | 27 | 1 | M | 36,785 | 10 | 3 |
| M | 45,500 | 7 | 1 | M | 47,500 | 9 | 2 |
|  |  |  |  | F | 38,850 | 8 | 3 |
| MEAN | 87,496 | 17.00 | 2 |  | 76,588 | 14.48 | 2 |
| MEDIAN | 62,689 | 18 | 2 |  | 60,925 | 11 | 2 |
| MODE |  | 13 | 1 |  |  | 8 | 3 |

Appendix 1 B:
Salary, Education and Experience Data Set
Men's Basketball coaches vs. Women's Basketball Coaches

| MBB | Salary | Experience | Education | WBB | Salary | Experience | Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | 95,946 | 18 | 3 | F | 73,185 | 13 | 2 |
| M | 159,999.84 | 17 | 1 | F | 99,999.84 | 14 | 3 |
| M | 59,275 | 8 | 3 | F | 56,100 | 8 | 3 |
| M | 59,048 | 13 | 2 | M | 54,450 | 11 | 1 |
| M | 78,024 | 13 | 2 | F | 77,850 | 3 | 1 |
| M | 62,825 | 4 | 1 | F | 60,925 | 8 | 3 |
| M | 200,000 | 19 | 1 | F | 200,000 | 33 | 1 |
| M | 78,663 | 28 | 1 | F | 60,000 | 17 | 1 |
| M | 271,830 | 26 | 2 | F | 171,392 | 28 | 2 |
| M | 195,000 | 20 | 3 | F | 120,000 | 10 | 3 |
| M | 110,000 | 22 | 3 | F | 110,500 | 27 | 3 |
| M | 52,576 | 15 | 2 | M | 58,457 | 15 | 3 |
| M | 98,450 | 12 | 2 | F | 99,000 | 11 | 3 |
| M | 38,237 | 14 | 3 | F | 92,000 | 10 | 3 |
| M | 86,951 | 13 | 2 | F | 86,951 | 20 | 3 |
| MEAN | 109,788 | 16.13 | 2 |  | 94,721 | 15.20 | 2 |
| MEDIAN | 86,951 | 15 | 2 |  | 86,951 | 13 | 3 |
| MODE |  | 13 | 2 |  |  | 8 | 3 |

Appendix 1 C :

| Salary, Education and Experience Data Set <br> Men's Soccer coaches vs. Women's Soccer coaches |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSOC | Salary | Experience | Education | WSOC | Salary | Experience | Education |
| M | 45,492 | 11 | 3 | M | 43,100 | 21 | 1 |
| M | 30,000 | 4 | 1 | M | $43,999.92$ | 13 | 2 |
| M | 62,553 | 26 |  | F | 62,553 | 15 | 2 |
| M | 37,613 | 22 | 1 | F | 33,517 | 11 | 1 |
| M | 75,000 | 18 | 2 | M | 95,000 | 28 | 1 |
| M | 48,515 | 22 | 1 | M | 47,000 | 11 | 3 |
| M | 58,131 | 29 | 3 | M | 45,589 | 8 | 1 |
| M | 50,272 | 27 | 1 | M | 36,785 | 10 | 3 |
| M | 45,500 | 7 | 1 | M | 47,500 | 9 | 2 |
|  |  |  |  | F | 38,850 | 8 | 3 |
| MEAN | $\mathbf{5 0 , 3 4 2}$ | $\mathbf{1 8 . 4 4}$ | $\mathbf{2}$ |  | $\mathbf{4 9 , 3 8 9}$ | $\mathbf{1 3 . 4 0}$ | $\mathbf{2}$ |
| MEDIAN | $\mathbf{4 8 , 5 1 5}$ | $\mathbf{2 2}$ | $\mathbf{1}$ |  | $\mathbf{4 4 , 7 9 4}$ | $\mathbf{1 1}$ | $\mathbf{2}$ |
| MODE |  | $\mathbf{2 2}$ | $\mathbf{1}$ |  |  | $\mathbf{1 1}$ | $\mathbf{1}$ |

Appendix 1 D:
Salary, Education and Experience Data Set
Male head coaches vs. Female head coaches

| Gender | Salary | Experience | Education | Gender | Salary | Experience | Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | 95,946 | 18 | 3 | F | 73,185 | 13 | 2 |
| M | 159,999.84 | 17 | 1 | F | 99,999.84 | 14 | 3 |
| M | 59,275 | 8 | 3 | F | 56,100 | 8 | 3 |
| M | 59,048 | 13 | 2 | F | 77,850 | 3 | 1 |
| M | 78,024 | 13 | 2 | F | 60,925 | 8 | 3 |
| M | 62,825 | 4 | 1 | F | 200,000 | 33 | 1 |
| M | 200,000 | 19 | 1 | F | 60,000 | 17 | 1 |
| M | 78,663 | 28 | 1 | F | 171,392 | 28 | 2 |
| M | 271,830 | 26 | 2 | F | 120,000 | 10 | 3 |
| M | 195,000 | 20 | 3 | F | 110,500 | 27 | 3 |
| M | 110,000 | 22 | 3 | F | 99,000 | 11 | 3 |
| M | 52,576 | 15 | 2 | F | 92,000 | 10 | 3 |
| M | 98,450 | 12 | 2 | F | 86,951 | 20 | 3 |
| M | 38,237 | 14 | 3 | F | 62,553 | 15 | 2 |
| M | 86,951 | 13 | 2 | F | 33,517 | 11 | 1 |
| M | 45,492 | 11 | 3 | F | 38,850 | 8 | 3 |
| M | 30,000 | 4 | 1 |  |  |  |  |
| M | 62,553 | 26 |  |  |  |  |  |
| M | 37,613 | 22 | 1 |  |  |  |  |
| M | 75,000 | 18 | 2 |  |  |  |  |
| M | 48,515 | 22 | 1 |  |  |  |  |
| M | 58,131 | 29 | 3 |  |  |  |  |
| M | 50,272 | 27 | 1 |  |  |  |  |
| M | 45,500 | 7 | 1 |  |  |  |  |
| M | 54,450 | 11 | 1 |  |  |  |  |
| M | 58,457 | 15 | 3 |  |  |  |  |
| M | 43,100 | 21 | 1 |  |  |  |  |
| M | 43,999.92 | 13 | 2 |  |  |  |  |
| M | 95,000 | 28 | 1 |  |  |  |  |
| M | 47,000 | 11 | 3 |  |  |  |  |
| M | 45,589 | 8 | 1 |  |  |  |  |
| M | 36,785 | 10 | 3 |  |  |  |  |
| M | 47,500 | 9 | 2 |  |  |  |  |
| MEAN | 77,933 | 16.18 | 2 |  | 90,176 | 14.75 | 2 |
| MEDIAN | 58,457 | 15 | 2 |  | 82,401 | 12 | 3 |
| MODE |  | 13 | 1 |  |  | 8 | 3 |

## Appendix 1 E:

Salary, Education and Experience Data Set
Male head coaches of women's basketball vs. Female head coaches of women's basketball

| Gender | Salary | Experience | Education | Gender | Salary | Experience | Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | 73,185 | 13 | 2 | M | 58,457 | 15 | 3 |
| F | $99,999.84$ | 14 | 3 | M | 54,450 | 11 | 1 |
| F | 56,100 | 8 | 3 |  |  |  |  |
| F | 77,850 | 3 | 1 |  |  |  |  |
| F | 60,925 | 8 | 3 |  |  |  |  |
| F | 200,000 | 33 | 1 |  |  |  |  |
| F | 60,000 | 17 | 1 |  |  |  |  |
| F | 171,392 | 28 | 2 |  |  |  |  |
| F | 120,000 | 10 | 3 |  |  |  |  |
| F | 110,500 | 27 | 3 |  |  |  |  |
| F | 99,000 | 11 | 3 |  |  |  |  |
| F | 92,000 | 10 | 3 |  |  |  |  |
| F | 86,951 | 20 | 3 |  | 56,454 | 13 |  |

## Appendix 1 F:

Salary, Education and Experience Data Set
Male head coaches of women's soccer vs. Female head coaches of women's soccer

| Gender | Salary | Experience | Education | Gender | Salary | Experience | Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | 43,100 | 21 | 1 | F | 62,553 | 15 | 2 |
| M | $43,999.92$ | 13 | 2 | F | 33,517 | 11 | 1 |
| M | 95,000 | 28 | 1 | F | 38,850 | 8 | 3 |
| M | 47,000 | 11 | 3 |  |  |  |  |
| M | 45,589 | 8 | 1 |  |  |  |  |
| M | 36,785 | 10 | 3 |  |  |  |  |
| M | 47,500 | 9 | 2 |  | 44,973 | $\mathbf{1 1 . 3 3}$ | $\mathbf{2}$ |
| MEAN | $\mathbf{5 1 , 2 8 2}$ | $\mathbf{1 4 . 2 9}$ | $\mathbf{2}$ |  | $\mathbf{3 8 , 8 5 0}$ | $\mathbf{1 1}$ | $\mathbf{2}$ |

Appendix 1 G:
Salary, Education and Experience Data Set
Male head coaches of women's basketball in DII vs. Female head coaches of women's basketball in DII

| Gender | Salary | Experience | Education | Gender | Salary | Experience | Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | 56,100 | 8 | 3 | $M$ | 54,450 | 11 | 1 |
| F | 60,925 | 8 | 3 | $M$ | 58,457 | 15 | 3 |
| F | 86,951 | 20 | 3 |  |  |  |  |
| MEAN | 67,992 | 12 | 3 |  | 56,454 | 13 | 2 |
| MEDIAN | 60,925 | 8 | 3 |  | 56,454 | 13 | 2 |

## Appendix 1 H :

Salary, Education and Experience Data Set
Female head coaches of women's basketball in DI vs. Female head coaches of women's basketball in DII

| Division | Salary | Experience | Education | Division | Salary | Experience | Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 73,185 | 13 | 2 | II | 56,100 | 8 | 3 |
| I | $99,999.84$ | 14 | 3 | II | 60,925 | 8 | 3 |
| I | 77,850 | 3 | 1 | II | 86,951 | 20 | 3 |
| I | 200,000 | 33 | 1 |  |  |  |  |
| I | 60,000 | 17 | 1 |  |  |  |  |
| I | 171,392 | 28 | 2 |  |  |  |  |
| I | 120,000 | 10 | 3 |  |  |  |  |
| I | 110,500 | 27 | 3 |  |  |  |  |
| I | 99,000 | 11 | 3 |  |  | $\mathbf{3}$ |  |
| I | 92,000 | 10 | 3 |  |  | 3 |  |

## REFERENCES

Bartges v. University of North Carolina at Charlotte, 908 F. Supp. 1312 (U.S. Dist. 1995)
Duderstadt, J. J. (2000). Intercollegiate Athletics and the American University: a university president's perspective. Ann Arbor, MI: University of Michigan Press

Equal Pay Act of 1963, 29 U.S.C. 206(d) (1997)
Harker v. Utica College of Syracuse University, 885 F. Supp. 378 (U.S. Dist. 1995)
Horner v. Mary Institute, 613 F. 2d 706 (U.S. App. 1980)
Jacobson, J. (2001, June 8). Female Coaches Lag in Pay and Opportunities to Oversee Men's Teams. Chronicle of Higher Education, p. A38

Journal of Sports Economics. (2000). Equal Pay on the Hardwood: The Earnings Gap Between Male and Female NCAA Division I Basketball Coaches. Humphreys, B.R.

Journal of College and University Law. (2002). Gender-based Pay Disparities in Intercollegiate Coaching: The Legal Issues. Gaal, J., Glazier, M.S., Evans, T.

Marquette Sports Law Review. (2002). Pay Equity for Intercollegiate Coaches: Exploring the EEOC Enforcement Guidelines. Weiss, M.R.

National Collegiate Athletic Association (2005). Division I Manual. Indianapolis, IN: NCAA
National Collegiate Athletic Association (2003). Gender Equity Report 2002-2003. Indianapolis, IN: NCAA

National Collegiate Athletic Association (1989). Study of Perceived Barriers to Women in Intercollegiate Athletics Careers. Mission, KS: NCAA

Naughton, J. (1997, December 5). U.S. examines salary equity form men's and women's coaches. Chronicle of Higher Education, p. A58

Perdue v. City University of New York, Brooklyn College, 13 F. Supp. 2d 326 (U.S. Dist. 1998)
R. Vivian Acosta \& Linda Jean Carpenter (2004). Women in Intercollegiate Sport: A Longitudinal, National Study- Twenty Seven Year Update 1977-2004. West Brookfield, MA.

Sobba v. Pratt Community College, 117 F. Supp. 1043 (U.S. Dist. 2000)
Stanley v. University of Southern California, 13 F. 3d 1313 (U.S. App. 1994)

Title VII of the Civil Rights Act of 1964, 42 U.S.C. 2000(e) (1997)
United States Equal Employment Opportunity Commission, EEOC Notice No. 915.002:
Enforcement Guidance on Sex Discrimination in the Compensation of Sports Coaches in Educational Institutions, EEOC Compliance Manual (CCH), Oct. 29, 1997

University of Michigan Journal of Law Reform. (2001). Pay Equity for Coaches and Athletic Administrators: An Element of Title IX? Osborne, B., Yarbrough, M.V.

University of North Carolina System, Board of Governors, Special Committee on Intercollegiate Athletics. (1985). Intercollegiate athletics in fifteen institutions of the University of North Carolina: report of the Special Committee on Intercollegiate Athletics. Chapel Hill, NC: The Board

Women's Sports Foundation. (2001). Coaching Issues: Recruiting, Retention and Advancement of Women in Athletics. Lopiano, D. Retrieved October 16, 2005, from http://www.womenssportsfoundation.org/cgi-bin/iowa/issues/coach/article.html?record=878

Zimbalist, A. (1999). Unpaid Professionals: Commercialism and Conflict in Big-Time College Sports. Princeton, NJ: Princeton University Press

