# Historical Comparison Of Florida And National Title Ix Compliance Trends In High School Sports From 1985-2005 

Coury Matthew Knowles<br>University of Central Florida

Find similar works at: https://stars.library.ucf.edu/etd
University of Central Florida Libraries http://library.ucf.edu

This Doctoral Dissertation (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations, 2004-2019 by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

## STARS Citation

Knowles, Coury Matthew, "Historical Comparison Of Florida And National Title Ix Compliance Trends In High School Sports From 1985-2005" (2007). Electronic Theses and Dissertations, 2004-2019. 3227. https://stars.library.ucf.edu/etd/3227


# HISTORICAL COMPARISON OF FLORIDA AND NATIONAL TITLE IX COMPLIANCE TRENDS IN HIGH SCHOOL SPORTS FROM 1985-2005 

by

COURY MATTHEW KNOWLES

B.S. University of Florida, 1999
M.S. University of Florida, 2001


#### Abstract

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in Curriculum and Instruction in the Department of Educational Research, Technology and Leadership at the University of Central Florida Orlando, Florida


Fall Term
2007

Major Professor: Patricia Higginbotham
© 2007 Coury Matthew Knowles

To my family and friends, who believed that I could accomplish this dream even at times when I did not believe in myself; I am forever grateful for your love and support.


#### Abstract

The purpose of this study was to compare the Title IX compliance trends of high school sports in Florida over the past two decades (1985-2005) against national trends. The literature review discusses: the historical events leading to Title IX, the administrative implementation of Title IX, the legal perspective of Title IX, and the impact of Title IX on gender equity in sports.

The study was conducted between January and June, 2007. The data focused on: male and female participants in high school sports in Florida, the numbers of male and female participants in high school sports across the nation, and enrollment figures of high schools in both Florida and the nation. The results indicate there was no significant difference between national Title IX compliance trends and Florida Title IX compliance trends in high school sports during 1985 through 2005. In fact, there was widespread non-compliance with the substantial proportionality of Title IX, with some improvements in compliance over time.

Future research should focus on other strategies to comply with Title IX.


## ACKNOWLEDGMENTS

First, I must thank my Lord for giving me the discipline, determination, and perseverance to achieve a dream of this magnitude. I love you and am grateful for all your blessing that this achievement will bring in the future.

My parents, Lee and Charlotte Knowles, your "tough love" has made me a man of strong character. Thank you for always believing in me no matter the situation. I love you both!

I want to tell my brother, Mr. Kenny Knowles thanks for being the "standard" I have strived to live up to in my life. I hope this achievement makes you proud. I love you for always "standing up" for me when I did not have the courage/ability to do so as a child.

To my childhood "Fellas," Mr. Greg McManus, Mr. Jeff Troiano, and Dr. Michael Bazley, thanks for always "finding a way" for me to play despite my physical challenges. Your ability to accept me as an "athlete" formed the foundation to my courageous character, which compelled me to attempt and finish this miraculous endeavor.

My friend, David Eckstein, shortstop for the St. Louis Cardinals; David, you illustrated to me that hard work, desire, determination, and focus will get you where you want to be!

Taylor Wood, a friend and backup 2nd Baseman for the Gators in 2000; who tragically passed away at the age of 22; I miss you, "T-Wood." I think of you often. You showed me that life is precious and that dreams of this magnitude are accomplished by handling "setbacks" with integrity and maturity.

My students and athletes have given me more than I could ever give them. I appreciate your efforts in my classes and on the baseball field. Your efforts gave me a reason to keep working toward this accomplishment.

My friend, colleague and teaching mentor, Ms. Mary Lane recruited me from the University of Florida to Seminole County back in 2001. I thank you for giving me an opportunity to teach and coach when many did not believe in my abilities. Without such an opportunity, this achievement may have never happened!

My committee has been the driving force behind the completion of this study. Without them, I would not have been able to finish. Dr. Patricia Higginbotham, my chair, has the patience of a saint and for that I thank her wholeheartedly. She has encouraged me to continue on in the most caring and wise way. I thank Drs. Thomas Fisher, Debbie Mitchell, and Lea Witta for nurturing my drive to complete this work and more importantly, for never giving up on my ability to finish. I thank Dr. Christine Stopka, whom I have known for more than a decade, for being my "biggest fan" throughout the completion of this miraculous endeavor.

I want to tell my coaching mentors, Mr. Dan Baldry, former head boys' basketball coach at Lakeland Highlands Junior High, Mr. Michael Campbell former varsity baseball coach at George Jenkins High, Mr. Andy Lopez former head baseball coach at the University of Florida, and Mr. Mike Smith, head varsity baseball coach at Lake Brantley High, that they will always be apart of my heart and soul. These men have taught me how to "compete" in a profession, which can be unkind to a coach whom is challenged by cerebral palsy. My competitive spirit guided me through the times of trial and suffering that accompanied this great achievement.

My running and swimming partner, colleague, and friend Ms. Julie Gabrovic trained me to handle this "endurance race." She challenged me to reach and surpass my physical limits in the pool and on the road. I learned how to focus on the "finish line" despite the pain experienced during the race. This ability to focus steered me to the completion of this study when many doubted its course.

Thanks goes to my dear and close friends, Ms. Katie Kavaliauskas, Ms. Stephanie Swenson, and Mr. Darren Carlton for being my "rock" throughout the completion of this work. Each of you listened to me "ramble on and on" about this study. Your abilities to absorb my "research insecurities" tested the boundaries of our friendships. I am grateful for each of you and your support allowed me to continually move forward to this end product.

To my good friends, Ms. Janice Phillips and Mr. John Cassidy, thanks for teaching me that it is "strong" to ask for help after an honest effort. After failing with previous versions of this study as well as struggling with my typing skills, I entertained the option to quit. You both would not have anything of it and kept pushing me to get help. Because of your persistence and kindness, I got help and finished! Thank you for reminding me of the "strength" gained by humbling myself, and requesting assistance-for this lesson you both will be dear to my soul forever!

Thank you, Ms. Terrie Sypolt, a reference librarian at University of Central Florida. You kindly assisted me with the research framework for this project. Without your patience, understanding, knowledge, and time, I would have never completed this endeavor.

Ms. Deborah England, a friend and bookkeeper at Rock Lake Middle School in Seminole County, she graciously gave up her time to discuss this study even when many questioned its previous versions. Your positive insight guided me to the finish.

Lastly, to the late, Mr. George "Bud" Fernandez, former assistant athletic director at the University of Florida, Bud hired me in 1999 as the Graduate Assistant for the Gator baseball team. I held this position for two years and during this time Mr. Fernandez always referred to me as "Dr. Coach." Bud, you believed in this achievement long before it was a reality. For this reason, you and your family will always have a special place in my heart.

## TABLE OF CONTENTS

LIST OF FIGURES ..... xi
CHAPTER ONE: INTRODUCTION ..... 1
Statement of the Problem ..... 1
Research Question ..... 2
Definition of Terms ..... 2
Limitations of the Study ..... 3
Assumptions of the Study ..... 3
Contributions and Significance of the Study ..... 3
CHAPTER TWO: LITERATURE REVIEW ..... 5
Historical Events Leading to Title IX ..... 5
Administrative Implementation of Title IX ..... 8
Provision of Equipment Supplies ..... 11
Scheduling of Games and Practice Times ..... 11
Travel and Per Diem Allowances ..... 11
Opportunity to Receive Academic Tutoring, and Assignment and Compensation of Tutors11
Opportunity to Receive Coaching, and Assignment and Compensation of Coaches ..... 12
Provision of Locker Rooms, and Practice and Competitive Facilities ..... 12
Provision of Medical and Training Facilities and Services ..... 12
Provision of Housing and Dining Facilities and Services ..... 12
Publicity ..... 13
Provision of Support Services ..... 13
Recruitment of Student-Athletes ..... 13
Legal Perspective of Title IX ..... 13
Impact of Title IX on Gender Equity in Sports ..... 16
Summary ..... 18
CHAPTER THREE: METHODOLOGY ..... 22
Introduction ..... 22
Research Variables. ..... 22
Procedures and Data Collection ..... 22
Design and Data Analysis ..... 24
CHAPTER 4: RESULTS ..... 25
Timetable and Data of the Study ..... 25
Statistics Associated with Research Variables and the Title IX Compliance Proportions ..... 25
Tables and Linear Graphs Connected with the Title IX Compliance Trends ..... 26
Summary ..... 34
CHAPTER 5: SUMMARY, DISCUSSION, AND RECOMMENDATIONS ..... 38
Summary ..... 38
Discussion ..... 41
Recommendations for Further Research ..... 46
APPENDIX A: TABLE 1, FLORIDA/NATIONAL HIGH SCHOOL ATHLETIC
PARTICIPATION/ENROLLMENT FIGURES, 1985-2005 ..... 48
APPENDIX B: TABLE 2, FLORIDA/NATIONAL HIGH SCHOOL TITLE IX COMPLIANCE PROPORTIONS, 1985-2005 ..... 50
APPENDIX C: TABLE 3, FLORIDA/NATIONAL FEMALE ATHLETES PROPORTIONATE
TO TOTAL ATHLETIC OPPORTUNIES ..... 52
APPENDIX D: TABLE 4, FLORIDA/NATIONAL FEMALE ENROLLMENT PROPORTIONATE TO TOTAL ENROLLMENT ..... 54
APPENDIX E: TABLE 5, DESCRIPTIVE STATISTICS OF RESEARCH VARIABLES ..... 56
APPENDIX F: TABLE 6, DESCRIPTIVE STATISTICS OF FLORIDA/NATIONAL HIGH
SCHOOL TITLE IX COMPLIANCE PROPORTIONS, 1985-2005 ..... 58
REFERENCES ..... 60

## LIST OF FIGURES

Figure 1 State of Florida High School Title IX Compliance Trends, 1985-200528

Figure 2 National High School Title IX Compliance Trends, 1985-2005.................................... 30
Figure 3 Florida/National Female Athletes Proportionate to Total Athletic Opportunities in High School, 1985-2005................................................................................................................ 32

Figure 4 Florida/National Female Enrollment Proportionate to Total Enrollment in High School, 1985-2005 34

## CHAPTER ONE: INTRODUCTION

## Statement of the Problem

Title IX is all about the quest for equal opportunity in sports. It involves the physiological, sociological, and psychological benefits of sports and physical activity participation. According to National Association of Girls and Women's Sports (NAGWS) (2002), the Women's Sports Foundation in 1998 and 2000 found that girls who play sports enjoy greater physical and emotional health and are less likely to engage in a host of risky health behaviors (i.e. drug use, smoking, and drinking) than non-participants. Yet compared to boys, girls enjoyed 30\% fewer opportunities to participate in high school and college sports and are twice as likely inactive (NAGWS, 2002). Put simply, a large gap still exists between the current status of women and girls in sports and the ultimate goal of Title IX.

To many early-twentieth-century observers, the female athlete represented the bold and energetic modern woman, breaking free from Victorian constraints, and tossing aside ideas about separate spheres for men and women (Cahn, 1994). Now, in a new century, interest in sport has grown. Popular interest in sport and concern over women's changing status converged in the growing attention paid to the "athletic girl," a striking symbol of modern womanhood (Cahn, 1994). These feminine ideals have disregarded traditional gender arrangements of the past. Title IX has been a major catalyst in changing the image of modern women. The purpose of this research study is to compare the Title IX compliance trends of high school sports in Florida over the past two decades (1985-2005) against national trends.

## Research Question

What is the difference between national Title IX compliance trends and Florida Title IX compliance trends in high school sports during 1985 through 2005?

## Definition of Terms

ACLU: American Civil Liberties Union
EADA: Equity in Athletics Disclosure Act.
FHSAA: Florida High School Activities Association.
HEW: Department of Health, Education, and Welfare.
NAGWS: National Association for Girls and Women in Sport.
NCAA: National Collegiate Athletic Association.
NFSHSA: National Federation of State High School Associations.
OCR: Office of Civil Rights.
"Post-Title IX" generation: Girls and women that grew-up after the passage of Title IX.
"Pre-Title IX" generation: Girls and women that grew-up before the passage of Title IX.
"Three Prong test": The test used by the OCR to determine if an educational institution complies with Title IX.

The terms "participation," "enrollment," and "opportunity" need to be clarified in the study. "Participation" represents the number of female athletes in high school sports. "Enrollment" signifies the number of students attending high school. "Opportunity" is defined as reasonable chances to play a sport equivalent to the ratio of male to female participants or offerings (Wong, 2002).

## Limitations of the Study

The following are recognized as limitations of the study:

1. The Florida and national numbers of male and female participants in high school sports from the 1980s and early 1990s may be absent due to a lack of record keeping.
2. National high school enrollment figures from the United States Census Bureau were reported every five years from 1985 thru 2000. From 2001-2005, these enrollment figures were estimates and not actual figures.
3. Generalizations may be questioned.

## Assumptions of the Study

The following were recognized as assumptions of the study:

1. All high school athletic programs in Florida and in the nation are not in compliance with Title IX.
2. Title IX compliance accompanies benefits for high school athletic programs in Florida and in the nation.
3. The lack of Title IX compliance results in consequences for high school athletic programs in Florida and in the nation.

## Contributions and Significance of the Study

The present study is of potential significance for athletic administrators and coaches through examination of Title IX compliance trends in high school sports. Athletic administrators and coaches will realize that the influence of their actions and decisions can either eliminate or
foster gender-based discrimination in sport. Put simply, Title IX would have been unnecessary had people truly valued females’ participation in sport (Lumkin, et. al., 1994).

This study also sheds light on the need for Office of Civil Rights (OCR) to step up its Title IX enforcement activities. As of 2001, OCR initiated only two Title IX athletics reviews of institutions (NAGWS, 2002). Since Title IX's passage, not one institution has had its federal funding withdrawn because it is in violation of Title IX (NAGWS, 2002). In the end, parties filing lawsuits must seek relief through the court system, incurring considerable cost and risk retribution (NAGWS, 2002). .

## Overview

The purpose of this research study is to compare the Title IX compliance trends of high school sports in Florida over the past two decades (1985-2005) against national trends. The study is organized as follows: this chapter is followed by a review of the existing literature on Title IX. The literature review discusses: the historical events leading to Title IX, the administrative implementation of Title IX, the legal perspective of Title IX, and the impact of Title IX on gender equity in sports. Based on the literature review, Chapter 3 describes the investigational process of important variables that influence Title IX compliance rates of high school sports programs. This includes descriptions of the methodology: research variables, data collection, and data analysis. Results are presented in Chapter 4, the research hypothesis is scrutinized. In Chapter 5, research findings, implications as well as recommendations are offered.

## CHAPTER TWO: LITERATURE REVIEW

The purpose of this research study is to compare the Title IX compliance trends of high school sports in Florida over the past two decades (1985-2005) against national trends. This chapter is a review of Title IX literature in order to provide a background for the study. The review consists of: the historical events leading to Title IX, the administrative implementation of Title IX, the legal perspective of Title IX, and the impact of Title IX on gender equity in sports.

## Historical Events Leading to Title IX

The landmark event in equal opportunity for girls and women in sport occurred in 1972 when Congress passed the Education Amendments Act (Lumkin, et. al., 1994). Title IX of this Act stipulated that schools and colleges could not discriminate in the educational programs, including athletics (Lumkin, et. al., 1994). Title IX was designed to be a strong and comprehensive measure to tackle all forms of the discrimination (NAGWS, 2002). In doing so, Title IX was meant to open the doors to educational opportunities formerly closed to women and girls, providing avenues to enhance their economic futures (NAGWS, 2002). Title IX was the nation's promise for ensuring that the talents of half of our citizens, women, no longer would be constricted by discrimination (NAGWS, 2002).

Before Title IX, schools limited the participation of women and girls. Many colleges and professional schools had quotas limiting the number of women who could participate (NAGWS, 2002). Female athletics generally consisted of cheerleading (NAGWS, 2002). With exception of black colleges and universities this review showed that virtually no college offered women athletic scholarships (NAGWS, 2002). Even high school boys were prohibited from taking home economics and girls from taking vocational classes such as auto mechanics (NAGWS,
2002). Female elementary and secondary school teachers left their jobs when they married or became pregnant, and pregnant and parenting students frequently were forced to drop out (NAGWS, 2002).

Title IX revolutionized athletic opportunities for women (Donnelly, Kilkelly, \& Berman, 2007). The following events had to take place before this was the case. According to Donnelly, Kilkelly, \& Berman (2007), 295,000 high school girls played sports compared to 3,600,000 high school boys in 1971. On June 23, 1972, Title IX was enacted by Congress and signed into law by President Nixon.

In 1974, the Tower amendment was proposed and rejected. Senator Tower proposed an amendment to exempt revenue-producing sports, like football and basketball, from being counted when evaluating Title IX compliance (Donnelly, Kilkelly, \& Berman, 2007). This Amendment was not well researched. Title IX does not state that there shall be no gender discrimination where revenue generation is equal (Simon, 2005). It simply states that there shall be no gender discrimination-period (Simon, 2005). Moreover, the constitutions of the National Collegiate Athletic Association and the National Federation of High School Athletic Associations state sports are based on the principle amateurism and the subordination of athletic to academic goals (Simon, 2005).

In July 1975, the Department of Health, Education, and Welfare (HEW) issued the regulations designed to implement Title IX (Wong, 2002). The regulations were criticized as being vague and inadequate (Wong, 2002). To alleviate the criticism, HEW released the control of Title IX to the Office of Civil Rights (OCR). In December 1979, seven years after the original passage of Title IX, OCR release guidelines (called the "three prong test") that specifically included athletics (Wong, 2002).

The first case against Title IX occurred in 1984. The case, Grove City vs. Bell removed the applicability of Title IX in athletics programs, stating that only those specific programs within an institution that are receiving federal funding would need to comply with Title IX (Donnelly, Kilkelly, \& Berman, 2007). This minimized the effect of the Title IX athletics programs. In response to the Grove City vs. Bell ruling, the Civil Rights Restoration Act was passed on March 22, 1988. This act stated that all educational institutions that receive any type of federal funding, whether indirect or direct, were to comply with Title IX restrictions (Donnelly, Kilkelly, \& Berman, 2007).

In 1990, the OCR published the Title IX Investigation Manual to help institutions comply with Title IX. This manual also helped evaluators access whether or not they do in fact meet the requirements of Title IX (Donnelly, Kilkelly, \& Berman, 2007). Another Title IX court case took place in 1992, Franklin vs. Gwinett County Public Schools. The Supreme Court ruled unanimously that a plaintiff filing a lawsuit is entitled to receive punitive damages if intentional action to avoid Title IX compliance was evident (Donnelly, Kilkelly, \& Berman, 2007). Soon after the Franklin decision, the NCAA and several high school athletic associations created a gender equity study (Donnelly, Kilkelly, \& Berman, 2007). These projects evaluated the gender equity status within amateur sports, which lead to the passage of the Equity in Athletics Disclosure Act (EADA) in 1994 (Donnelly, Kilkelly, \& Berman, 2007). Also, in 1994 a court case occurred that alleged violations of Title IX in high school athletic programs. The case, Horner vs. Kentucky High School Athletic Association (KHSAA), involved a challenge to the methods used for sanctioning sports (Chidester, et. al., 1997). Former female student athletes alleged that KHSAA and the Kentucky State Board of Education discriminated against them by
sanctioning fewer sports for girls than for boys and by refusing to sanction fast-pitch softball (Chidester, et. al., 1997). The court ruled that equity is not determined by the number of sports offered for each gender; KHSAA was mandated to sanction fast pitch-softball in order to comply with Title IX (Chidester, et. al., 1997). In October 1996, the first reports from the EADA were filed. It was concluded that over 2,400,000 high school girls are enrolled in sports programs (Donnelly, Kilkelly, \& Berman, 2007).

Since 2000, Title IX complaints have been brought against educational institutions by both males and females. These complaints have forced courts to rule directly on what is meant by nondiscrimination in athletics programs under Title IX and, ultimately, to confront difficult ethical questions about the meaning of equal opportunity in school athletics (Morgan, Meier, \& Schneider, 2001). For example, Rhoads (2004) stated that Title IX has harmed sports by limiting opportunities for men. Rhoads (2004) justified his thoughts by explaining that men bond with other men through activity, especially competition and sports. Girls outnumber boys in almost every extracurricular activity—student government, honor societies, debating clubs, and choir, among others (Rhoads, 2004). Girls also outperform boys in virtually every academic category as well (Rhoads, 2004). It is neither to the benefit of young men nor young women to have a policy that reduces opportunities for dedicated athletes by creating unwanted sports opportunities for others (Rhoads, 2004). Further studies could expand on this important point.

## Administrative Implementation of Title IX

In a speech on educational equality, the Speaker of the United States House of Representatives, Pelosi (2007) stated, "by ending gender discrimination in all educational programs, Title IX has given women the chance to excel and to take their rightful place as
leaders and achievers on campuses across the United States." "No longer would young women find their educational options limited by years of engrained discrimination" (Pelosi, 2007). "Thanks to Title IX, women can now prepare for their future, whether in the halls of power or corporate boardrooms, in the classrooms, or on the playing fields of America's schools" (Pelosi, 2007).

In spite of Speaker Pelosi’s positive and powerful words, gender equity in sport has yet to be achieved. Educational institutions must file a compliance report with OCR. Each institution must adopt and publish compliance procedures and designate one employee to carry out its Title IX responsibilities, including investigation of complaints (Wong, 2002). According to Wong (2002), OCR determines compliance with Title IX in one of the "three prongs":

1. Are interscholastic competitive opportunities in numbers substantially proportionate to the respective enrollment of each gender?
2. Is the institution's current and historical practice of program expansion responsive to the athletic interest of the underrepresented gender?
3. Does the institution fully accommodate the abilities and the interest of the underrepresented gender in the current program?

The "first prong" was chosen to compute Title IX compliance in this study. The OCR and the courts compare the ratio of male and female athletes to the ratio of full-time students of each gender (Wong, 2002). The ratios should be equivalent (Wong, 2002).

The "second prong" assesses the financial assistance that male and female athletes receive from the institution (Wong, 2002). Financial assistance must be awarded on a "substantially proportional" basis (Wong, 2002). To analyze this "prong," the OCR and the courts compare the proportion of scholarship dollars spent on male and female athletes to the
proportion of athletes of each gender (Wong, 2002). For instance, compare schools A, B, C. At school A, $50 \%$ of the athletes are female, but only $20 \%$ of the total financial assistance goes to females. At school B, $50 \%$ of athletes are female, and $48 \%$ of the financial assistance goes to females. At school C, $40 \%$ of athletes are female, and $40 \%$ of the financial assistance goes to females. School A would not be in compliance with Title IX because the $20 \%$ assistance to females is significantly below the $50 \%$ participation rate (Wong, 2002). Schools C is clearly in compliance because the proportion of financial assistance equals the proportion of participation to females (Wong, 2002). School B’s situation requires further analysis. When the proportions are not equal, the OCR applies statistical tests to determine whether the proportions are substantially equal (Wong, 2002).

The "third prong" for Title IX compliance involves the degree to which the institution provides equal treatment, benefits, and opportunities in certain program areas (Wong, 2002). According to Wong (2002), the OCR may evaluate equivalent treatment in areas that include: 1) Provision of equipment and supplies, 2) Scheduling of games and practice times, 3) Travel and per diem allowances, 4) Opportunity to receive academic tutoring, and assignment and compensation of tutors, 5) Opportunity to receive coaching, and assignment and compensation of coaches, 6) Provision of locker rooms, and practice and competitive facilities, 7) Provision of medical and training facilities and services; 8) Provision of housing and dining facilities and services, 9) publicity, 10) provision of support services, 11) recruitment of student-athletes. However, some factors such as publicity, academic tutoring, housing, and dining services are relevant in intercollegiate programs but are not generally relevant in interscholastic programs (Wong, 2002). The following criteria must be met for compliance in each of the above program areas:

## Provision of Equipment Supplies

In the area of equipment and supplies, quality, amount, suitability and availability of equipment and supplies are the factors assessed (Chidester, et. al., 1997). These factors not only include sport specific equipment, but also uniforms, other apparel, instructional devices, and conditioning and weight-training equipment (Chidester, et. al., 1997).

## Scheduling of Games and Practice Times

Compliance in this area requires men and women to have an equivalent number of competitive events per sport. The number and length of practice opportunities, the time of day that competitive and practice opportunities are scheduled, and the opportunity to engage in available pre-season and postseason competitions must also be equal (Chidester, et. al., 1997).

## Travel and Per Diem Allowances

The literature is limited pertaining to high school travel and per diem allowances (Kendall, 1981). However, men and women must have equivalent modes of transportation and housing furnished during travel, the amount of per diem allowance provided, and dining arrangements for teams while traveling (Chidester, et. al., 1997).

## Opportunity to Receive Academic Tutoring, and Assignment and Compensation of Tutors

The availability of tutors, along with the procedures and criteria for obtaining tutorial assistance must be the same for male and female student-athletes (Chidester, et. al., 1997).

## Opportunity to Receive Coaching, and Assignment and Compensation of Coaches

The availability of full-time and part-time coaches must be equivalent for both male and female sports. OCR does not look at an institution's employment practices under Title IX, except to the extent that compensation or assignment policies with regard to coaches deny male or female student-athletes coaching of an equivalent quality, nature or availability (Chidester, et. al., 1997).

## Provision of Locker Rooms, and Practice and Competitive Facilities

Title IX provides for facilities to be in proportion to the number of male and female student- athletes participating in school sponsored sports (Kendall, 1981). Title IX does not require equal monies to be spent on men's and women's teams or that locker rooms be identical (Kendall, 1981). However, expenditures must be consistent with the interest of the student body (Kendall, 1981).

## Provision of Medical and Training Facilities and Services

Male and female student-athletes must have equivalent access to medical personnel, quality conditioning and weight training facilities (Chidester, et. al., 1997). In addition, health and accident insurance must be available on equal terms (Chidester, et. al., 1997).

## Provision of Housing and Dining Facilities and Services

The literature search pertaining to housing, dining facilities and services was nonexistent at the high school level. Most of the attention in this area was given to the college and university levels (Kendall, 1981). Title IX requires these items to be provided on an equal basis.

## Publicity

The quantity and quality of publications and promotional activities must feature teams of both sexes (Chidester, et. al., 1997). Access to publicity resources and sports information personnel must also be equivalent (Chidester, et. al., 1997).

## Provision of Support Services

Support services are available on a limited basis on the high school level. The literature spoke to colleges and universities in this area of compliance (Cozzillo \& Hayman, 2005). These services must be provided on a equal basis.

## Recruitment of Student-Athletes

High school recruiting is illegal for public schools; however private schools in some districts can recruit on a limited basis. The literature within the area of recruiting on the high school level is limited. Title IX compliance is required at the college and university levels in this area (Cozzillo \& Hayman, 2005).

## Legal Perspective of Title IX

Prior to Title IX, gender discrimination in sports programs could be filed under the Equal Protection Clause of the $14^{\text {th }}$ Amendment of the Constitution or the Due Process Clause of the Fifth Amendment (Kendall, 1981). The most common challenge was brought under the $14^{\text {th }}$ Amendment by women who were prohibited from participating on male teams by the rules or regulations of an athletic conference or association (Kendall, 1981). The Equal Protection Clause of the 14th Amendment mandates equal treatment of all individuals in public institutions
(Kendall, 1981). Nevertheless, female public high school students have successfully used litigation to gain equal access to sports.

In Reed v. Nebraska School Activities Association (1972), Debbie Reed, a student at Norfolk high school was denied the opportunity to try out for the boy's golf team. Norfolk high school did not offer a girl’s golf team. The Nebraska School Activities Association prohibited girls from participating on boys' teams. A transcript of the case revealed the lawsuit challenged the Association's practice of providing sports programs for boys while providing none for girls and prohibiting girls from participating with or against boys. The court ruled that an injunction be issued upon the posting of security in the amount of $\$ 500.00$ by or on behalf of the plaintiff Debbie Reed, for the payment of costs and damages incurred or suffered by any party (Kendall, 1981). This decision lead to changes in the operating procedures of high school sports programs in Nebraska.

Johnell Hass won her case against South Bend Community School Corporation. Based on Hass v. South Bend Community School Corporation (1972) case, Indiana High School Athletic Association prohibited males and females students enrolled in member schools from competing on the same team or against each other. Moreover, the court ruled in Morris $v$. Michigan State Board of Education (1973) to overturn the Michigan High School Athletic Association's policy that said in part:
"Girls are not to engage in interscholastic athletics contests when part or all of the membership of one or both of the competing teams is composed of boys."

The plaintiffs, two high school girls from Ann Harbor Union High School tennis team claimed this policy denied them both equal protection and due process under the $14^{\text {th }}$ Amendment of the

United States Constitution (Kendall, 1981). In the end, high school girls were allowed to compete against tennis teams composed of both genders in Michigan.

The previously mentioned cases were similar in that female teams did not exist within the school and no provisions were being made to form female teams. The cases also illustrated state laws or regulations of an athletic association, that permitted different treatment based on gender is not considered a defense to charges brought under the $14^{\text {th }}$ Amendment (Kendall, 1981). The same thought would apply for Title IX. The obligation to comply with federal law supersedes the obligation to comply with state laws or rules or regulations of private associations (Kendall, 1981).

As stated earlier, the year 2000 saw an influx of equal rights court cases sponsored by members of both sexes. The literature revealed several historical court cases that paralleled this trend. In Frontiero v. Richardson (1973), statutory rules that a female member of the armed services, seeking housing or medical benefits for her spouse, must prove his dependency, whereas no such burden is imposed upon male members. The Supreme Court reversed this statutory regulation. From the investigation of the Frontiero v. Richardson case, the court stated that laws must apply equally to all and that each case must be determined based upon its individual merits.

The case of Rosenfeld v. Southern Pacific Company (1971) involved discrimination solely based on gender. The defendant's company established a policy that exempted females from certain positions, which was considered a bona fide occupational qualification for a position. The plaintiff charged that the defendant's actions violated Title VII of the Civil Rights Act of 1964. The court ruled in favor of the plaintiff. The court stated that such a policy
imposed a limit upon women who might not have a need for protection, and which fail to protect men.

The Rosenfield decision suggested implications for athletic leaders. Rules adopted to protect participation in a sport must be germane to the activity. Rules also must not be based upon traditional stereotypes. When adopted for health and safety reasons, they must be applied for protection of all, with each individual being evaluated not by gender but on a person’s own merits (Kendall, 1981).

## Impact of Title IX on Gender Equity in Sports

Societal attitudes have hindered sport opportunities for females. Historically, girls are taught not to be assertive, independent, or tough, although success and many sports demand each of these traits, as well as other so-called masculine characteristics (Lumpkin, et. al., 1997). Boys and men receive praise for their achievements in sport (Lumpkin, et. al., 1997). Girls and women receive sport awards to a lesser extent than boys and men (Lumpkin, et. al., 1997). With the passage of Title IX in 1972, these trends began to shift. For example, women who were under 10 when Title IX passed have much higher sports participation rates than women who grew up before Title IX (Missouri Women’s Council, 2007). Of the "Post-Title IX" generation, 55\% participated in high school sports, compared to $36 \%$ of the "Pre-Title IX" generation (Missouri Women's Council, 2007). In fact, Rhoads (2004) stated that girls are not born less interested in sport, but society conditions them. Differences in athletic interest between the sexes begin early. As cited in Rhoads (2004), according to Thomas Power's book Play and Exploration in Children and Animals, in the preschool years girls are more interested in dance and boys are more interested in balls and rough play. Moreover, girls exposed to high in-utero
doses of androgens show more interest in rough play and are more interested in sports, including football (Rhoads, 2004). Before 1972, women accounted for a mere 8 \% of high school student athletes (Smucker, \& Whisenant, 2005). After Title IX (1972-2003), the percentage of girls as a total number of all participants at the interscholastic level increased to 41\% (Smucker, \& Whisenant, 2005). Many women Olympic athletes credit Title IX for the opportunity to attend college through athletics scholarships and to participate in sports (Missouri Women's Council, 2007).

With participation numbers soaring for girls, the plight of female coaches has not followed the same growth. In their study of job satisfaction ratings among Texas Public High school coaches, Smucker, \& Whisenant (2005) estimated females represent $37.7 \%$ of the coaches for girls basketball and $37.9 \%$ of the coaches for softball in the state of Texas. Female coaches often based their job satisfaction mostly on internal referents (Smucker, \& Whisenant, 2005). These internal assessments lead to comparing the satisfaction of male coaches to their own situation, which promote a positive working environment in the athletic department. Male coaches rate their job satisfaction 39\% based on external referents (past jobs, people in other organizations. and people outside the field) (Smucker, \& Whisenant, 2005). Women hope sports leaders make hiring decisions based on tangible qualifications rather from the "good ole boy" network, if so then eventually, more females will coach (Smucker, \& Whisenant, 2005). .

Brylinsky and colleagues (1993) studied women in athletic leadership roles in Iowa. Iowa is the only state in which female outnumber males in interscholastic participation (Brylinsky, et. al, 1993). The study examined the effects of gender and coaching success on players' preference for high school girls’ basketball. Female varsity basketball players from 21 high schools throughout Iowa responded to coaching philosophy statements from two
hypothetical coaches. Results indicated female players from winning and losing teams chose a hypothetical female coach over a hypothetical male coach. A male coach was only chosen over a female coach when the choice was between a high status male coach and a low status female coach. Player preference failed to explain the small number of women coaches in Iowa (Brylinsky, et. al, (1993). Further research is needed in this area to understand it more thoroughly.

Title IX in 1972 has also changed the attitudes toward equal funding and publicity among men and women programs (Chrietzberg, 1988). Teachers, coaches, and administrators in public schools support equal funding and publicity for all teams regardless of success and fan support. High school sports are found upon educational and developmental values (Chrietzberg, 1988). Some leaders want profits while others want wins. Interestingly though, all want virtually what money cannot buy—a championship (Sheeham, 1996).

## Summary

This literature review provides a synthesis and a review of the existing literature on Title IX. The topics discussed are: the historical events leading to Title IX, the administrative implementation of Title IX, the legal perspective of Title IX, and the impact of Title IX on gender equity in Sports. The following is a brief summary of the findings from the literature review.

Regarding the historical events leading to Title IX, 295,000 high school girls played sports compared to 3,600,000 high school boys in 1971 (Donnelly, Kilkelly, \& Berman, 2007). On June 23, 1972, Title IX was enacted by Congress and signed into law by President Nixon. In 1984, Grove City vs. Bell removed the applicability of Title IX in athletics programs, stating that
only those specific programs within an institution that are receiving federal funding would need to comply with Title IX (Donnelly, Kilkelly, \& Berman, 2007). In 1990, the OCR published the Title IX Investigation Manual to help institutions comply with title IX. Then in 1992, Franklin vs. Gwinett County Public Schools decision gave a plaintiff punitive damages if intentional action to avoid Title IX compliance was evident (Donnelly, Kilkelly, \& Berman, 2007). 1994 saw the Horner vs. Kentucky High School Athletic Association (KHSAA), involved a challenge to the methods used for sanctioning sports (Chidester, et. al., 1997). In October 1996, the first reports from the EADA were filed. It was concluded that over 2,400,000 high school girls are enrolled in sports programs (Donnelly, Kilkelly, \& Berman, 2007). Since 2000, Title IX complaints have been brought against educational institutions by both male and females.

For the administrative implementation of Title IX, the literature search revealed that OCR determines compliance with Title IX in one of the "three prongs" (Wong, 2002):

1. Are interscholastic competitive opportunities in numbers substantially proportionate to the respective enrollment of each gender?
2. Is the institution's current and historical practice of program expansion responsive to the athletic interest of the underrepresented gender?
3. Does the institution fully accommodate the abilities and the interest of the underrepresented gender in the current program?

The "first prong" was chosen to compute Title IX compliance in this study.
On the topic of the legal perspective of Title IX, gender discrimination in sports programs could be filed under the Equal Protection Clause of the $14^{\text {th }}$ Amendment of the Constitution or the Due Process Clause of the Fifth Amendment (Kendall, 1981). Several court cases formed the legal perspective of Title IX:

1. In Reed v. Nebraska School Activities Association (1972), the court ruled that an injunction be issued upon the posting of security in the amount of $\$ 500.00$ by or on behalf of the plaintiff Debbie Reed, for the payment of costs and damages incurred or suffered by any party (Kendall, 1981).
2. Based on Hass v. South Bend Community School Corporation (1972) case, Indiana High School Athletic Association prohibited males and females students enrolled in member schools from competing on the same team or against each other.
3. In Morris v. Michigan State Board of Education (1973) to overturn the Michigan High School Athletic Association's policy that said in part:
a. Girls are not to engage in interscholastic athletics contests when part or all of the membership of one or both of the competing teams is composed of boys
4. Rosenfeld v. Southern Pacific Company (1971) involved discrimination solely based on gender. The defendant's company established a policy that exempted females form certain positions, which was considered a bona fide occupational qualification for a position. The plaintiff charged that the defendant's actions violated Title VII of the Civil Rights Act of 1964. The court ruled in favor of the plaintiff With reference to impact of Title IX on gender equity in sports, prior to 1972, women accounted for a mere eight percent of high school student athletes (Smucker, \& Whisenant, 2005). After Title IX (1972-2003), the percentage of girls as participants at the interscholastic level increased to $41 \%$ (Smucker, \& Whisenant, 2005). With participation numbers soaring for girls, the plight of female coaches has not followed the same growth. In their study of job satisfaction ratings among Texas Public High school coaches, Smucker, \& Whisenant (2005)
estimated females represent $37.7 \%$ of the coaches for girls' basketball and $37.9 \%$ of the coaches for softball in the state of Texas.

In general, Title IX is about equal opportunity in sports. According to NAGWS (2002), the Women's Sports Foundation in 1998 and 2000 found that girls who play sports enjoy greater physical and emotional health and are less likely to engage in a host of risky health behaviors (i.e. drug use, smoking, and drinking) than non-participants. Yet compared to boys, girls enjoyed $30 \%$ fewer opportunities to participate in high school and college sports and are twice as likely inactive (NAGWS, 2002). Put simply, a large gap still exists between the current status of women and girls in sports and the ultimate goal of Title IX. The next section will reveal the constructs of this investigation.

## CHAPTER THREE: METHODOLOGY

## Introduction

The chapter describes the methodology that was utilized for the present study. The research variables, procedures and data collection, and data analysis are outlined. The purpose of this research study was to compare the Title IX compliance trends of high school sports in Florida over the past two decades (1985-2005) against national trends. It was hypothesized that there will be a difference between national Title IX compliance trends and Florida Title IX compliance trends in high school sports during 1985 through 2005.

## Research Variables

This study had three variables: male and female participants in Florida high school sports, national numbers of male and female participants in high school sports, and enrollment figures of high schools in Florida and the nation. The numbers of male and female participants in Florida high school sports were gathered from the Florida High School Activities Association (FHSAA). The national numbers of male and female participants in high school sports were collected from the National Federation of State High School Associations (NFHSA). The enrollment figures of high schools in Florida and the nation were accessed from the FHSAA and the United States Census Bureau, Statistical Abstract of the United States, 2007. All the statistics gathered concerned the years 1985 through 2005.

## Procedures and Data Collection

The numbers of male and female participants in Florida high school sports were collected from the FHSAA website: (http://www.fhsaa.org/programs/participation) and through a personal
visit to the association's office in Gainesville Florida. The website contained the participation rates for 1995 through 2005. The rates from 1985 to 1994 were obtained during a visit to the FHSAA office on Friday, January 26, 2007. The national numbers of male and female participants in high school sports were collected from the NFHSA website: (http://www.nfhs.org/web/2006/09/participation_in_high_school_sports_increases_again_confir ms_nf.aspx) and from the NFHSA participation survey archives.

The Florida high school enrollment figures from 1985-2005 were gathered from the FHSAA. The enrollment numbers were included as part of the FHSAA's yearly athletic participation survey, which were collected from the FHSAA website: (http://www.fhsaa.org/programs/participation) and through a personal visit to the Association's office. The website contained the enrollment numbers for 1995 through 2005. The figures from 1985 to 1994 were obtained during a visit to the FHSAA office on Friday, January 26, 2007. Enrollment data from the Florida Department of Education (FDOE) was not utilized due to personal communication on June 25, 2007 with Ms. Linda Hewett of the Education Information Services office of the FDOE. The FDOE was only able to supply the enrollment numbers for 1991-2005. Ms. Hewett believed data often differ through the years and historical data was not always reported. Ms. Hewett also mentioned that prior to 1991-92, FDOE records were not diversified by school, grade, gender, or even race.

National enrollment figures of high schools from 1985-2004 were obtained the USCB Statistical Abstract of the United States, 2007, Table 211 entitled "School Enrollment by Sex and Level: 1970-2004". The 2005 enrollment numbers were accessed from the following USCB website:
http://www.census.gov/population/www/socdemo/school/cps2005.html

## Design and Data Analysis

Data from this study was the Title IX compliance trends for the State of Florida and the nation. The Title IX compliance trends were computed using the following formula:

Proportion 1 (Florida Title IX Compliance trend) equals the number of male and female participants in Florida high school sports divided by the respective high school enrollment figures of each gender in the State of Florida

Proportion 2 (National Title IX Compliance trend) equals the number of male and female participants in high school sports divided by the respective high school enrollment figures of each gender in the nation.

A Florida and a national Title IX compliance proportion were calculated for each of the years in consideration of this study (1985-2005). The trends were analyzed by linear graphs to compare the Title IX compliance proportions between Florida and the nation. The next chapter displays these illustrations and examines the research hypothesis.

## CHAPTER 4: RESULTS

The purpose of this research study was to compare the Title IX compliance trends of high school sports in Florida over the past two decades (1985-2005) against national trends. The research question associated with this present study was: what is the difference between national Title IX compliance trends and Florida Title IX compliance trends in high school sports during 1985 through 2005? The results consist of: (1) a description of the timetable and data of the study; (2) a description of the statistics associated with the research variables and the Title IX compliance proportions; and, (3) a description of the tables and linear graphs connected with the Title IX compliance trends.

## Timetable and Data of the Study

The study was conducted between January and June, 2007. The data collected concerned the years of 1985-2005 and consisted of three figures: male and female participants in Florida high school sports, national numbers of male and female participants in high school sports, and enrollment figures of high schools in Florida and the nation. All figures are displayed in Table 1 of Appendix A.

## Statistics Associated with Research Variables and the Title IX Compliance Proportions

Descriptive statistics of the research variables are exhibited in Table 5 of Appendix E. Table 5 shows that from 1985-2005, the range of Florida high school female athletes ( $\mathrm{R}=53,198$ ) to male athletes ( $\mathrm{R}=38,005$ ) increased approximately 15,200 ; however, the range of National high school female athletes to male athletes decreased about 600,000. In terms of female enrollment $(\mathrm{R}=270,606)$ to male enrollment $(\mathrm{R}=176,023)$, the range for Florida increased
roughly 95,000 in 20 years; nevertheless, the National range of female enrollment ( $\mathrm{R}=2,200,000$ ) to male enrollment $(\mathrm{R}=2,400,000)$ decreased by 200,000 during the same period. These facts illustrate Florida has experienced greater growth from 1985 to 2005 in providing high school female athletic opportunities and female enrollment compared to the nation. Table 5 of Appendix E also displays the sum, the mean, the standard deviation, and variance of the research variables.

The descriptive statistics associated with the Title IX compliance proportions are illustrated in Table 6 of Appendix F. From 1985-2005, the range of female athletes proportionate to the total athletic opportunities in Florida was .138 ; the range of female enrollment proportionate to the total enrollment in Florida was .166. The Florida Title IX compliance range difference calculated over 20 years was .028. Nationally, the range of female athletes proportionate to the total athletic opportunities was .087 ; the National range of female enrollment proportionate to the total enrollment was .016 . The National Title IX compliance range difference was .071 . These proportions show that the State of Florida high schools were closer to complying with Title IX than National high schools from 1985 to 2005. Table 6 of Appendix F also displays the sum, the mean, the standard deviation, and variance of the Title IX compliance proportions.

## Tables and Linear Graphs Connected with the Title IX Compliance Trends

As indicated earlier, the OCR determines compliance with Title IX in one of the three areas:

1. Are interscholastic competitive opportunities in numbers substantially proportionate to the respective enrollment of each gender?
2. Is the institution's current and historical practice of program expansion responsive to the athletic interest of the underrepresented gender?
3. Does the institution fully accommodate the abilities and the interest of the underrepresented gender in the current program?

The first area was chosen to compute Title IX compliance in this study. The OCR and the courts compare the ratio of male and female athletes to the ratio of full-time students of each gender (Wong, 2002). The ratios should be equivalent (Wong, 2002). These ratios (proportions) are presented in Table 2 of Appendix B from 1985 to 2005.

Graphic representations of the Title IX Compliance in high school proportions (trends) for the State of Florida and the nation are offered in Figure $1 \& 2$, respectfully. Figure 1 shows that the State of Florida was close to complying with Title IX from 1985-1987 (proportions fluctuated only from 2.5\%-4.6\%). Florida was furthest from Title IX compliance in 1989-1990 (proportions differed by 19.7\%). A gradual increase in Title IX trends was evident in Florida from 1990-1997. Beginning in 1997 and ending in 2005, Figure 1 illustrated a leveling off of proportions (difference ranging from $7 \%$ to $8.6 \%$ ). It is also important to note in Figure 1 the sudden increase in the female enrollment proportion to total enrollment from 33.3\% in 19861987 to $49.8 \%$ in 1987-1988. This drastic change is possibly due to data source error. As indicated in chapter 3, the data was gathered from the Florida High School Activities Association (FHSAA). The FHSAA kept minimal records that divided enrollment figures by gender between the mid-1980s to early 1990. Also, the substantially propionate compliance test used in the study is influenced by female enrollment figures. Historically, males have outnumbered females in society, therefore, Figure 1 illustrates the increase of female athletic opportunities to the steadiness of female enrollment figure beginning 1988-1989 (49.7\% and 30.1\%) and then ending
in 2005 ( $49.6 \%$ and $41.2 \%$ ) depicted by the merging lines on the graph. If data error did not exist in 1985-1987 the green linear trend would be flat, thereby reducing convergence with the orange linear trend.

## Figure 1: State of Florida High School Title IX Compliance Trends, 1985-2005

Female Athletes proportionate to Total Athletic Opportunities
Female Enrollment proportinate to Total Enrollment
Linear (Female Athletes proportionate to Total Athletic Opportunities)
Linear (Female Enrollment proportinate to Total Enrollment)


Figure 1 State of Florida High School Title IX Compliance Trends, 1985-2005

Figure 2 depicted that National high schools were almost in compliance with Title IX in 1989-1990 (proportions varied by 5.9\%). The nation was furthest from Title IX compliance in

1985-1986 (proportions differed by 14.2\%). A gradual increase in Title IX trends was also evident in the nation from 1990-1997. The nation experienced a similar leveling off of proportions from 1997-2005 (difference ranging from 7.5\% to 9\%). Finally, the linear trend of the Title IX ratios for the State of Florida (see Figure 1) and the nation (see figure 2 next page) is positive, indicating compliance in the future is possible.

Figure 2: National High School Title IX Compliance Trends, 19852005

- Female Athletes proportionate to Total Athletic Opportunities
-Female Enrollment proportinate to Total Enrollment
Linear (Female Athletes proportionate to Total Athletic Opportunities)
_ Linear (Female Enrollment proportinate to Total Enrollment)


Figure 2 National High School Title IX Compliance Trends, 1985-2005

In Table 3 of Appendix C, the Florida and national high school female athletes proportions to total athletic opportunities are compared from 1985-2005. From 1985-1989, the State of Florida was behind the nation only $4.5 \%-6.4 \%$. Then in 1989-1990, the nation increased more than $13 \%$ above the State of Florida. The female athletes’ proportion to total athletic opportunities quickly dropped from $43.7 \%$ to $35.7 \%$ in 1990-1991 for the nation. From 19911997, the nation hovered between $35 \%-40 \%$, while Florida lingered between $32 \%-39 \%$ at the same time. The State of Florida surpassed the nation in the ratio of female athletes to total athletic opportunities from 1997-2001. In 2001-2003, the nation over took Florida again. Lastly, 2003-2005 saw the State of Florida and the nation each occupy the top spot in their proportion of female athletes to total athletic opportunities in 2003-2004 and 2004-2005, respectfully.

Figure 3 illustrates the linear trend of the Florida and national female athletes proportion to total athletic opportunities in high school from 1985-2005. The same facts displayed in Table 3 of Appendix C were evident on the graph as well. The State of Florida surpassed the nation in the ratio of female athletes to total athletic opportunities from 1997-2001, signified by the crossing of the national line by the State of Florida line on the graph. In 2001-2003, the nation over took Florida again, shown by the crossing of the State of Florida line by the national line on the graph. In 2003-2005 the State of Florida and the nation each occupy the top spot in their proportion of female athletes to total athletic opportunities in 2003-2004 and 2004-2005, respectfully; the State of Florida and the national lines show a small variation. The difference for 2003-2005 was minimal (.2\%-.3\%) so the two lines appear to be on top of each other.

## Figure 3: State of Florida/National Female Athletes Proportionate to Total Athletic Opportunities in High School, 1985-2005



Figure 3 Florida/National Female Athletes Proportionate to Total Athletic Opportunities in High School, 1985-2005

The 1985-2005 Florida and National high school female enrollment proportion to total enrollments are compared in Table 4 of Appendix D. From 1985-1987, the nation superseded

Florida by 16\% in their enrollment ratios each year. 1987 through1995 saw the Florida and national high school female enrollment proportion to total enrollments basically the same (hovering between 48\%-50\%). In 1995-1998, the State of Florida experienced a greater ratio of high school female enrollment to total enrollments. Interestingly, in 1998-1999 the female enrollment proportions were equal at 49.4\%. From 1999 to 2002, Florida and the nation each experienced a year of enrollment superior, respectfully. The last few years studied (2003-2005) showed Florida and national high school female enrollment proportion to total enrollments basically the same (floating around 50\%).

Figure 4 contains the linear trend of the 1985-2005 Florida and national high school female enrollment proportion to total enrollments. The same facts displayed in Table 4 of Appendix D were evident on the graph as well. It is important to notice that for 1985-1987 the State of Florida line is $16 \%$ below that of the national. This could possibly be due to data source error. Enrollment records in the mid 1980s were not consistently kept in Florida as well as in the nation. From 1987-2005, the two lines appear to be on top of each other signifying that Florida and national high school female enrollment proportion to total enrollments were similar (between 48\%-50\%).


Figure 4 Florida/National Female Enrollment Proportionate to Total Enrollment in High School, 1985-2005

## Summary

This chapter provides a synthesis of the results of this study. The research question associated with this present study was: will there be a significant difference between national Title IX compliance trends and Florida Title IX compliance trends in high school sports during 1985 through 2005? The results consist of: (1) a description of the timetable and data of the study; (2) a description of the statistics associated with the research variables and the Title IX
compliance proportions; and, (3) a description of the tables and linear graphs connected with the Title IX compliance trends. The following is a brief summary of the findings:

Regarding the timetable and data of the study, it was conducted between January and June, 2007. The data collected concerned the years of 1985-2005 and consisted of three figures: male and female participants in Florida high school sports, national numbers of male and female participants in high school sports, and enrollment figures of high schools in Florida and the nation.

On the topic of the statistics associated with the research variables and the Title IX compliance proportions, descriptive statistics are part of a logical analysis. Descriptive statistics of the research variables are exhibited in Table 5 of Appendix E. By analyzing the range of descriptive statistics associated with the research variables illustrate Florida has experienced greater growth from 1985 to 2005 in providing high school female athletic opportunities and female enrollment compared to the nation. Table 5 of Appendix E also displays the sum, the mean, the standard deviation, and variance of the research variables.

The descriptive statistics associated with the Title IX compliance proportions are illustrated in Table 6 of Appendix F. Evaluating the range of these proportions shows that the State of Florida high schools were closer to complying with Title IX than national high schools from 1985 to 2005. Table 6 of Appendix F also displays the sum, the mean, the standard deviation, and variance of the Title IX compliance proportions.

With reference to the tables and linear graphs connected with the Title IX compliance trends, the Title IX compliance trends were computed using the following formula:

Proportion 1 (Florida Title IX Compliance trend) equals the number of male and female participants in Florida high school sports divided by the respective high school enrollment figures of each gender in the State of Florida

Proportion 2 (National Title IX Compliance trend) equals the number of male and female participants in high school sports divided by the respective high school enrollment figures of each gender in the nation.

These ratios (proportions) are presented in Table 2 of Appendix B from 1985 to 2005.
Graphic representations of the Title IX Compliance in high school proportions (trends) for the State of Florida and the nation are offered in Figure $1 \& 2$, respectfully. Figure 1 shows that the State of Florida was close to complying with Title IX from 1985-1987 (proportions fluctuated only from 2.5\%-4.6\%). Florida was furthest from Title IX compliance in 1989-1990 (proportions differed by 19.7\%). A gradual increase in Title IX trends was evident in Florida from 1990-1997. Figure 2 depicted that national high schools were almost in compliance with Title IX in 1989-1990 (proportions varied by 5.9\%). The nation was furthest from Title IX compliance in 1985-1986 (proportions differed by 14.2\%). A gradual increase in Title IX trends was also evident in the nation from 1990-1997.

In Table 3 of Appendix C, the Florida and national high school female athletes proportions to total athletic opportunities are compared from 1985-2005. The State of Florida surpassed the nation in the ratio of female athletes to total athletic opportunities from 1997-2001. In 2001-2003, the nation increased the ratio more than Florida again. 2003-2005 saw the State of Florida and the nation each occupy the top spot in their proportion of female athletes to total athletic opportunities in 2003-2004 and 2004-2005, respectfully.

Figure 3 illustrates the linear relationship of the Florida and national female athletes proportion to total athletic opportunities in high school from 1985-2005. It's important to note the spike of the national line in 1989-1990, which indicated the nation's increase to more than $13 \%$ above the State of Florida. The State of Florida surpassed the nation in the ratio of female athletes to total athletic opportunities from 1997-2001, signified by the crossing of the national line by the State of Florida line on the graph. In 2001-2003, the nation over took Florida again, shown by the crossing of the State of Florida line by the national line on the graph.

The 1985-2005 Florida and national high school female enrollment proportion to total enrollments are compared in Table 4 of Appendix D. From 1985-1987, the nation superseded Florida by $16 \%$ in their enrollment ratios each year. The years of 1987 through1995 saw the Florida and national high school female enrollment proportion to total enrollments basically the same (hovering between 48\%-50\%). In 1995-1998, the State of Florida experienced a greater ratio of high school female enrollment to total enrollments. Interestingly, in 1998-1999 the female enrollment proportions were equal at 49.4\%.

Figure 4 contains the linear relationship of the 1985-2005 Florida and national high school female enrollment proportion to total enrollments. It is important to note that for 19851987 the State of Florida line is $16 \%$ below that of the national. From 1987-2005, the two lines appear to be on top of each other signifying that Florida and national high school female enrollment proportion to total enrollments were similar (between 48\%-50\%).

In general, high schools in the State of Florida and across the nation did not comply with Title IX from 1985-2005 based on the first prong of OCR's "Three-prong test." The linear relationships of the Title IX ratios for the State of Florida (see Figure 1) and the nation (see Figure 2) is positive, indicating compliance in the future is possible.

# CHAPTER 5: SUMMARY, DISCUSSION, AND RECOMMENDATIONS 

Summary

The purpose of this research study was to compare the Title IX compliance trends of high school sports in Florida over the past two decades (1985-2005) against national trends. The research question associated with this present study was: will there be a significant difference between national Title IX compliance trends and Florida Title IX compliance trends in high school sports during 1985 through 2005?

The Title IX compliance trends from 1985-2005 confirmed that the range of Florida high school female athletes to male athletes increased 15,200. The national high school female athletes to male athletes range decreased about 600,000. For female enrollment to male enrollment the range for Florida improved by 95,000 in 20 years. Nationally during the same period, the range of female enrollment to male enrollment declined by 200,000. The sum, the mean, the standard deviation, and the variance of athletic participation and enrollment figures (see Table 5 of Appendix E) also illustrated boosts in Florida and reductions in the nation. In the end, Florida has experienced greater growth from 1985 to 2005 in providing high school female athletic opportunities and female enrollment compared to the nation.

The Title IX compliance proportions from 1985-2005 and their descriptive statistics (see Table 6 of Appendix F) displayed the Florida and national Title IX compliance range differences over 20 years as .028 and .071 , respectfully. The sum, the mean, the standard deviation, and variance of the Title IX compliance proportions (see Table 6 of Appendix F) present variations as well. In general, these figures clarify that State of Florida high schools were closer to complying with Title IX than national high schools from 1985 to 2005.

As stated earlier, the "substantially proportionate" requirement from the Office of Civil Rights (OCR) was chosen to compute Title IX compliance in this study (see Table 2 of Appendix B). The OCR and the courts compare the ratio of male and female athletes to the ratio of fulltime students of each gender (Wong, 2002). The proportions should be equivalent (Wong, 2002).

Graphic representations of the Title IX Compliance in high school trends for the State of Florida and the nation (see Figures 1 and 2). Figure 1 shows that the State of Florida was close to complying with Title IX from 1985-1987. Florida was also the furthest from Title IX compliance in 1989-1990. Nevertheless, a gradual increase in Title IX compliance was evident in Florida from 1990-1997. After 1997 and ending in 2005, Figure 1 illustrated a leveling off of proportions. Figure 2 depicted that national high schools were almost in compliance with Title IX in 1989-1990; however the nation was furthest from conformity in 1985-1986. Similar to the State of Florida, a gradual incline in Title IX compliance was clear in the nation from 1990-1997. The nation also experienced a comparable leveling off of proportions from 1997-2005. The linear relationships of the Title IX ratios for the State of Florida (see Figure 1) and the nation (see figure 2) is positive, indicating compliance in the future is possible.

The Florida and national high school female athletes proportions to total athletic opportunities (see Table 3 of Appendix C) are compared from 1985-2005. The State of Florida was behind the nation from 1985-1989. The nation improved to more than $13 \%$ above the State of Florida in 1989-1990. The next year, 1990-1991, female athletes’ proportion to total athletic opportunities quickly dropped from $43.7 \%$ to $35.7 \%$ for the nation. The nation hovered between 35\%-40\%, while Florida lingered between 32\%-39\% during 1991-1997. The State of Florida surpassed the nation in the ratio of female athletes to total athletic opportunities from 1997-2001.

In 2001-2003, the nation increased in numbers over Florida again. Then, 2003-2005 saw the State of Florida and the nation each occupy the top spot in their proportion of female athletes to total athletic opportunities in 2003-2004 and 2004-2005, respectfully.

The linear relationship of the Florida and national female athletes proportion to total athletic opportunities in high school from 1985-2005 (see Figure 3) noted a spike of the national line in 1989-1990, which indicated the nation's increase to more than $13 \%$ above the State of Florida. The State of Florida surpassed the nation in the ratio of female athletes to total athletic opportunities from 1997-2001, signified by the crossing of the national line by the State of Florida line on the graph. In 2001-2003, the nation over took Florida again, shown by the crossing of the State of Florida line by the national line on the graph. To imply that in 20032005 the State of Florida and the nation each occupied the top spot in their proportion of female athletes to total athletic opportunities in 2003-2004 and 2004-2005, respectfully; the State of Florida and the National lines demonstrate a small variation and even appear to be on the top of each other.

The Florida and national high school female enrollment proportion to total enrollments (see Table 4 of Appendix D) are compared. The nation superseded Florida by $16 \%$ in their enrollment ratios from 1985-1987. 1987 through1995 saw the Florida and national high school female enrollment proportion to total enrollments similar. A greater ratio of high school female enrollment to total enrollments was experienced by the State of Florida from 1995-1998. The female enrollment proportions were equal at 49.4\% in 1998-1999. From 1999 to 2002, Florida and the nation each experienced a year of enrollment increase, respectfully. The last few years studied (2003-2005) Florida and national high school female enrollment proportion to total enrollments were again similar.

The linear relationship of the 1985-2005 Florida and national high school female enrollment proportion to total enrollments (see Figure 4) illustrated a substantial difference for 1985-1987; the State of Florida line is $16 \%$ below that of the national. From 1987-2005, the two lines appear to be on top of each other signifying that Florida and national high school female enrollment proportion to total enrollments were related.

With respect to the research question associated with the study, the results indicated there was no significant difference between national Title IX compliance trends and Florida Title IX compliance trends in high school sports during 1985 through 2005. In fact, there was widespread non-compliance with the substantial proportionality prong of Title IX, with some improvements in compliance over time.

## Discussion

In a country devoted to democratic principles of fairness, tolerance, equality, freedom, and justice, the fulfillment of the legal mandate and societal imperative embodied in Title IX of the Education Amendments of 1972 would seem, on the surface, to be within reach (Cozzillio \& Hayman, 2005). After all, the provision that "no person in the United States shall be on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal assistance," resonates with those ideals most Americans hold dear (Cozzillio \& Hayman, 2005). "The challenges and imperfections associated with any democracy emerge when citizens confront the task of upholding the very ideals they believe central to their identity as a people and the country they call home" (Cozzillio \& Hayman, 2005). Although fundamental principles of equality ought not to inspire controversy, nevertheless in "the land of the free", debates about
the meaning of equality flow, sometimes is nothing more than a disturbing undercurrent, at other times in the form of full-blown debates and disputes that take place in the media, in the courts, in schools and in our institutions of government (Cozzillio \& Hayman, 2005).

In fact, Title IX would have been unnecessary had people truly valued females’ participation in sport (Lumkin, et. al., 1994). Birch Bayh, a United States Senator and one of the drafters of the Title IX legislation once stated, what we were really looking for was... equal opportunity for young women and for girls in the educational system of the United States of America... equality of opportunity... equality... that should not really be a controversial subject in a nation that now for 200 years has prided itself in equal justice (Cozzillio \& Hayman, 2005).

Despite the realization of equality, thirty-five years after the passage of Title IX, society erupts in controversy at the thought of Title IX enforcement. In June of 2002, a reverse discrimination case was brought against the US Department of Education by the National Wrestling Coaches Association and other men's minor sport groups came to an end with the establishment of Title IX enforcement guidelines (Cozzillio \& Hayman, 2005). These enforcement guidelines came out of the Commission on Opportunity in Athletics created by President Bush’s Secretary of Education, Rod Paige. The Commission called for a review of Title IX policy interpretation. Even with policy revisions, not one institution has had its federal funding withdrawn because it is in violation of Title IX (NAGWS, 2002). Consequently, many girls and women still confront gender discrimination in their education programs.

Girls and women are severely underrepresented in the area of technology (NAGWS, 2002). Gender segregation is persistent in vocational training programs, with girls and women clustered in programs that are traditional for their sex and that lead to low wage jobs (NAGWS, 2002). Gender bias continues to permeate the learning environment. Schools continue to brush
aside pregnant and parenting students (NAGWS, 2002). Little also has been done to address the multiple barriers faced by girls of color, girls with disabilities, and girls from poor backgrounds all of whom experience a disproportionate number of inequalities (NAGWS, 2002).

Gender inequalities in American society have led to comparisons of women players with premiere male players in most sports. The post-Title IX generation of girls and women are attempting to recapitulate the male model of sports. Theberge (2000) cited the loss of "morality and passion" in men's sports as reason to pose the question, "Can women change sports before it changes them?" With 35 years removed from the passage of Title IX, the answer is still unclear.

Societal norms and values continue to be defined by dominant groups in some of America's major city parks. For example, Los Angeles, within the Southern California region, created the first municipal playground department in the United States in 1904, and was the site of two lawsuits filed by the American Civil Liberties Union (ACLU) on behalf of girls aged 5-18 years of age (Hartmann-Tews \& Pfister, 2003). In 1998 and 2000 the ACLU filed two lawsuits on behalf of girls seeking equal access to playing fields in Los Angeles and Montebello, respectively (Hartmann-Tews \& Pfister, 2003). In Los Angeles, the West Valley girls softball league was denied access to the same facilities as made available to boys baseball leagues. In this case, the defendant was the city of Los Angeles Parks and Recreation Department (Hartmann-Tews \& Pfister, 2003). Girls were only allowed inferior school fields to which they and their parents carried their own dirt in order to render the fields playable (Hartmann-Tews \& Pfister, 2003). The City not only provided fields with appropriate amenities to the boys' teams; they also sponsored three leagues (Hartmann-Tews \& Pfister, 2003). Citing gender-based discrimination, the ACLU expanded the case to all girls in the city. The Los Angeles city

Council responded by adopting a "Raise the Bar" program, which provided equal access to participation opportunities and facilities for girls (Hartmann-Tews \& Pfister, 2003).

The second case involved a dispute over playing fields in Montebllo, California. A three to one ratio existed in the allocation of playing fields to boys and girls respectively (HartmannTews \& Pfister, 2003). The 450 member Montebello Girls Softball League was assigned one playing field. The resultant crowding, the problems in scheduling of the field, and the increased risk of injury were all cited by the ACLU to justify the need for relief (Hartmann-Tews \& Pfister, 2003). A settlement was reached in 2000.

Societal roles are also encouraged in sport practice. American culture demands heterosexual role play (Hartmann-Tews \& Pfister, 2003). Adolescent girls attempt to be popular with the most popular boys by over emphasizing their femininity and de-emphasizing the skills that may challenge boys, physically and emotionally (Hartmann-Tews \& Pfister, 2003). Athletic participation is viewed incorrectly. Having firm buttocks, lean thighs, and long hair are means of legitimizing femininity for female athletes. In fact, the Sporting Goods Manufacturers Association has noted the growth in the female market and has accommodated products accordingly. For example, special batting helmets with holes in the back for ponytails have been produced (Hartmann-Tews \& Pfister, 2003).

With respect to high school sports, Title IX applies to three broad prongs: financial assistance to athletes (i.e., private schools only); other program areas, such as treatment, benefits, and opportunities for athletes; and equal opportunity (equally effective accommodation of the interests and abilities of male and female athletes) (Simon, 2005). This study focused on whether the female share of athletes was "substantially proportionate" to the female share of the total enrollment. In recent years compliance has become nearly synonymous with substantial
proportionality (Simon, 2005). As a matter of fact, the OCR removed substantial proportionality from its compliance guidelines in June 2003; however OCR failed to provide additional guidelines regarding how institutions can comply with the second and third prong (Simon, 2005). As a result, the courts are unlikely to reduce their reliance on substantial proportionality at this time (Simon, 2005).

In conclusion, substantial proportionality is the most common method used in determining Title IX compliance in athletics. It has also been suggested to calculate the proportionality gap in order to ease the strain of Title IX compliance on institutions (Simon, 2005). The formula to compute the proportionality gap equals [(percent of students who are female) - (percent of athletes who are female) $] * 100$. The OCR has declined to define what gap, if any, would be considered substantially proportionate under Title IX (Simon, 2005). However, several lawsuits involving collegiate athletics suggest that a gap of $3 \%$ or $5 \%$ would be acceptable in a court of law and as a result researchers have defined compliance to consist of a differential of no more than three to five percentage points (Stafford, 2004). Anderson, Cheslock, and Ehrenberg (2004) found in their sample of 741 NCAA institutions, noncompliance (in terms of women being underrepresented among athletes) decreased from about 90-93 percent of the sample in 1995-1996 to about 82-89 percent of the sample 2001-2002 allowing for leeway of 3-5 percentage points in measuring proportionality. Over the same period, the average proportionality gap for all institutions considered compliant fell from 15.2 to 13.1 percentage points (Anderson, Cheslock, \& Ehrenberg, 2005). These results clearly indicate that despite improvements over time, gender inequalities in intercollegiate athletic opportunities exist in the vast majority of institutions (Anderson, Cheslock, \& Ehrenberg, 2005). The outcomes from this study are comparable to intercollegiate athletics, which also demonstrated
widespread non-compliance trends with the substantial proportionality prong of Title IX, with some improvements in compliance over time.

## Recommendations for Further Research

Several recommendations for further research have resulted from the findings of the present study. Is it obvious that equalizing up is the optimal strategy to comply with Title IX? It is not always preferable to replace some male athletic opportunities with female athletic opportunities (Simon, 2005). Does the answer depend upon the cost to fund new women's teams? The money must come from somewhere; men's athletics seems just as good a source of these funds as dollars that are spent on other important educational activities like need-based financial aid or expanded library and computing resources, for example (Simon, 2005).

An institution's female share of enrollment is a major determinant of its compliance with substantial proportionality. Does the "one size fits all" formula to calculate substantial proportionality create problems at extreme values of the female portion of students (Simon, 2005)? This fact is exacerbated by the history of gender inequality in sports. Recall that Smucker, \& Whisenant (2005) indicated earlier, women accounted for a mere $8 \%$ of high school student athletes before 1972. Thus, resulting in institutions with a higher share of women in their student body facing much larger proportionality gaps once Title IX was implemented (Simon, 2005). The results from the present study illustrate most high schools in Florida and around the nation have yet to adjust their athletic offerings to eliminate proportionality gaps.

The present study's findings discovered that Title IX has been a major catalyst in changing the image of modern women. Growing attention is being paid to the "athletic girl," a striking symbol of modern womanhood (Cahn, 1994). These feminine ideals have disregarded
traditional gender arrangements of the past. Why then are women still not equally represented in athletic administration and coaching positions? Moreover, what about Title IX compliance trends of sanctioned versus non-sanctioned sports?

Finally, are Title IX compliance trends in high school sports different, if researchers use "prong 2" or "prong 3" to define compliance? More studies focused on gender equity in high school sports are needed in the future.

APPENDIX A: TABLE 1, FLORIDA/NATIONAL HIGH SCHOOL ATHLETIC PARTICIPATION/ENROLLMENT FIGURES, 1985-2005

|  | 1985.86 | 1986887 | 1987.88 | 198889 | 1989.90 | 1990.91 | 1991.92 | 1992.93 | 1993.94 | 1994.95 | 1995.96 | 1996.97 | 1997.98 | 1998.99 | 19992000 | 200001 | 2001.02 | 202.03 | 2003.04 | 200405 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State of Florida |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \#o f Femle Athletes | 36,31 | 41.879 | 40,271 | 41,36 | 40,192 | 46,39 | 48,94 | 51,913 | 54,123 | 5,075 | 58,843 | 61,216 | 75,60 | 74,218 | 85,034 | 88,291 | 86,990 | 87,449 | 88,974 | 89,22 |
| \#otMale Atilletes | 91,106 | 94,172 | 91,24 | 93,36 | 93, 216 | 98,631 | 101,543 | 102,050 | 103,129 | 102,75 | 101,398 | 97,21 | 108,29 | 100,40 | 115,519 | 123,422 | 126,508 | 124,59 | 123,86 | 129,111 |
| Fotal fof flilitheicicraticipates | 127,87 | 136,051 | 131,512 | 135,082 | 134,08 | 144,90 | 150,87 | 153,68 | 157,25 | 159,850 | 160,241 | 158,837 | 184,049 | 174,618 | 200,53 | 211,723 | 213,488 | 212,408 | 2212,760 | 219,000 |
| \#of femile Efrolled in High School | 116,15 | 136,361 | 215,091 | 29,194 | 21.694 | 222,684 | 228,85 | 232,578 | 239,269 | 24,240 | 242,193 | 264,153 | 27,689 | 281,275 | 310,683 | 338,200 | 322,548 | 364,872 | 375,48 | 387,21 |
| \#ot Males Enollededin High School | 233,29 | 222,723 | 216,77 | 221,713 | 244,213 | 222,64 | 230,936 | 236,883 | 24.686 | 250,923 | 246,089 | 265,374 | 275,703 | 233,41 | 312,158 | 356,49 | 358,962 | 311,17 | 381,917 | 399,800 |
| Toall foffl Emolmmentin High School | 349,84 | 409,084 | 43.1868 | 440,007 | 455,007 | 488,848 | 459,792 | 469,961 | 484,955 | 496,163 | 488,282 | 529,527 | 549,392 | 581,216 | 622841 | 694,409 | 711510 | 176,049 | 751,375 | 780,021 |
| National |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \#of Femle Athletes | 1,807,121 | 1,88, 3 56 | 1,849,684 | 1,889,952 | 1,88,659 | 1,829,316 | 1,904,801 | 1,99,489 | 2,130,315 | 2,240,61 | 2,36,936 | 2,44,043 | 2,50,333 | 2,65,7126 | 2665,874 | 2,78,154 | 2,80,998 | 2,86, 358 | 2,86,299 | 2,08,390 |
| \#of:Male Atiletes | 3,34,275 | 3,34, 275 | 3,42,771 | 3,416,844 | 2,38, 192 | 3,00, 355 | 3,229,853 | 3,416,389 | 3,472,967 | 3,56,359 | 3,634,052 | 3,70,225 | 3,76,120 | 3,882, 352 | 3,861,79 | 3,921,069 | 3,900,517 | 3,98,738 | 4,088, 53 | 4,110,319 |
| Totall of National Athletic Paticipipes | 5,51, 1,36 | 5,180,631 | 5,275,661 | 5,256,196 | 4,256,851 | 5,288,611 | 5,30,054 | 5,413,878 | 5,60, 282 | 5,76,820 | 6,001,888 | 6,180,268 | 6,33,453 | 6,48,078 | 6,53, 23 | 6,705,223 | 6,70,5,515 | 6,845,096 | 6,003,55 | 7,018,709 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \#of femile Smorleded Higig School | 7,00,000 | 6,80,000 | 6,40,000 | 6,300,00 | 6,40,000 | 6,40,000 | 6,50,000 | 6,60,000 | 7,20,000 | 7,30,000 | 7,40,000 | 7,70,000 | 1,60,000 | 7,70,000 | 7,70,000 | 7,80,000 | 8,000,000 | 8,40,000 | 8,40,000 | 8,50,000 |
| \#of Males Enolleded H High School | 7,20,000 | 7,00,000 | 6,70,000 | 6,000,00 | 6,50,000 | 6,800,000 | 6,80,000 | 1,00,000 | 1,40,000 | 7,70,000 | 7,90,000 | 8,00,000 | 7,90,000 | 8,20,000 | 8,10,000 | 8,20,000 | 8,30,000 | 8,60,000 | 8,40,000 | 8,90,000 |
| Total National Enolmentin Higigh chool | 14,200,00 | 13,80,000 | 13,100,00 | 12,90,000 | 12,900,00 | 13,200000 | 13,30,000 | 13,60,000 | 14,600,00 | 15,000,00 | 15,300,00 | 15,700000 | 15500,00 | 15,900,00 | 15,800,00 | 16,000000 | 16.30000 | 17000000 | 16800000 | 17400,000 |

## APPENDIX B: TABLE 2, FLORIDA/NATIONAL HIGH SCHOOL TITLE

 IX COMPLIANCE PROPORTIONS, 1985-2005| Female Athletes proportionate to Total Athetic Opporunities | 28.7\% | 30.8\% | 30.6\% | 30.1\% | 30.\% | 32.0\% | 32.5\% | 33.7\% | 34.4\% | 35.7\% | 36.7\% | 385\% | 41.2\% | 42.5\% | 42.4\% | 41.7\% | 40.7\% | 41.4\% | 41.8\% | 41.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Female Enrollment proportinate to Total Enrollment | 333\% | 33.3\% | 49.8\% | 49.7\% | 49.7\% | 49.6\% | 49.8\% | 49.5\% | 49.3\% | 49.4\% | 49.6\% | 49.\% | 49.8\% | 49.4\% | 499\% | 48.7\% | 495\% | 49.6\% | 49.6\% | 49.\% |
| National | 1985.86 | 198687 | 1987.88 | 1988.89 | 1989.90 | 1900.91 | 1991.92 | 1992.93 | 1993.94 | 1994.95 | 1995.96 | 1996.97 | 1997.98 | 1998.99 | 1999-200 | 200.01 | 2001.02 | 2002-03 | 203.04 | 20405 |
| Female Athletes proportionate to Total Athletic Opportunities | 35.1\% | 35.4\% | 35.1\% | 35.\% | 33.\% | 35.7\% | 36.1\% | 36.\% | 38.0\% | 38.8\% | 39.5\% | 40.0\% | 40.6\% | 40.\% | 40.\% | 41.5\% | 41.8\% | 41.7\% | 41.5\% | 41.4\% |
| Female Enrollment proportinate to Total Enrollment | 493\% | 49.3\% | 48.9\% | 48.8\% | 49.6\% | 48.5\% | 48.9\% | 48.5\% | 49.3\% | 48.7\% | 48.4\% | 490\% | 49.\% | 48.4\% | 48.7\% | 48.8\% | 49.1\% | 50.\% | 50\% | 48.\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

# APPENDIX C: TABLE 3, FLORIDA/NATIONAL FEMALE ATHLETES PROPORTIONATE TO TOTAL ATHLETIC OPPORTUNIES 

|  | 1985886 | 198688 | 1987.88 | 198889 | 1899.0 | $1900 \cdot 91$ | 1991.2 | 1992.33 | 1993.94 | 1994.45 | 199596 | 199697 | 1997.98 | 199899 | 920 | 20000 | 200102 | 200.03 | 203304 | 204-45 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sate offorida | 28.7\% | 308\% | 30.6\% | 30.1\% | 30\%\% | 320\% | 325\% | 337\% | 344\% | 35.7\% | 36.7\% | 385\% | 4.2\% | 4.25\% | 42.4\% | 4.17\% | 40.7\% | 4.4\% | 41.8\% | 41.2\% |
| National | 35.1\% | 354\% | 35.1\% | 35.0\% | 330\% | 35.7\% | 36.1\% | 369\% | 380\% | 388\% | 395\% | 40.0\% | 40.6\% | 40.9\% | 40.9\% | 4.5\% | 41.8\% | 4.17\% | 4.5\% | 4.1.\% |

APPENDIX D: TABLE 4, FLORIDA/NATIONAL FEMALE ENROLLMENT PROPORTIONATE TO TOTAL ENROLLMENT

|  | 198588 | 198687 | 198788 | 198889 | 1889.90 | 199091 | 1991-92 | 1992.93 | 199394 | 199495 | 1995.56 | 1996.97 | 1997.88 |  | 1999200 | 200001 | 200:-02 | 200:03 | 203304 | 200405 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stateofforida | 333\% | 333\% | 498\% | 49.7\% | 49.7\% | 49.6\% | 498\% | 49.5\% | 493\% | 49.9\% | 49.6\% | 499\% | 498\% | 49.4\% | 499\% | 48.7\% | 495\% | 49.6\% | 499\% | 49.9\% |
| National | 493\% | 49.3\% | 489\% | 488\% | 49.6\% | 48.5\% | 489\% | 48.5\% | 493.3/ | 48.7\% | 48.4\% | 49.0\% | 490\% | 48.4\% | 48.7\% | 488\% | 49.1\% | 50,\% | 500\% | 489\% |

APPENDIX E: TABLE 5, DESCRIPTIVE STATISTICS OF RESEARCH VARIABLES

|  | N | Range |  | Minimum | Maximum | Sum | Mean | Std. Deviation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variance |  |  |  |  |  |  |  |  |  |
| \# OF FL HS FEMALE ATHLETES | 20 | 53,198 | 36,731 | 89,929 | $1,256,277$ | 62,814 | 19,688 | $387,604,831$ |  |
| \# OF FL HS MALE ATHLETES | 20 | 38,005 | 91,106 | 129,111 | $2,122,432$ | 106,122 | 12,844 | $164,957,775$ |  |
| FL HS FEMALE ENROLLMENT | 20 | 270,606 | 116,615 | 387,221 | $5,273,942$ | 263,697 | 73,815 | $5,448,585,073$ |  |
| FL HS MALE ENROLLMENT | 20 | 176,023 | 216,777 | 392,800 | $5,613,517$ | 280,676 | 59,822 | $3,578,647,510$ |  |
| \# OF NATL HS FEMALE ATHLETES | 20 | $1,101,269$ | $1,807,121$ | $2,908,390$ | $46,354,665$ | $2,317,733$ | 419,575 | $176,043,197,884$ |  |
| \# OF NATL HS MALE ATHLETES | 20 | $1,712,127$ | $2,398,192$ | $4,110,319$ | $70,947,680$ | $3,547,384$ | 434,951 | $189,182,340,162$ |  |
| NATL HS FEMALE ENROLLMENT | 20 | $2,200,000$ | $6,300,000$ | $8,500,000$ | $146,100,000$ | $7,305,000$ | 728,716 | $531,026,315,789$ |  |
| NATL HS MALE ENROLLMENT | 20 | $2,400,000$ | $6,500,000$ | $8,900,000$ | $152,200,000$ | $7,610,000$ | 738,348 | $545,157,894,737$ |  |
| Valid N (listwise) | 20 |  |  |  |  |  |  |  |  |

## APPENDIX F: TABLE 6, DESCRIPTIVE STATISTICS OF FLORIDA/NATIONAL HIGH SCHOOL TITLE IX COMPLIANCE PROPORTIONS, 1985-2005

|  | $\mathbf{N}$ | Range | Minimum | Maximum | Sum | Mean | Std. Deviation | Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State of Florida: Female Athletes proportionate to <br> Total Athletic Opportunities | 20 | 0.138 | 0.287 | 0.425 | 7.266 | 0.3633 | 0.050037986 | 0.0025038 |
| State of Florida: Female Enrollment proportinate <br> to Total Enrollment | 20 | 0.166 | 0.333 | 0.499 | 9.6 | 0.48 | 0.050299105 | 0.00253 |
| National: Female Athletes proportionate to Total <br> Athletic Opportunities | 20 | 0.087 | 0.35 | 0.437 | 7.796 | 0.3898 | 0.028156704 | 0.0007928 |
| National: Female Enrollment proportinate to Total <br> Enrollment $\operatorname{20}$ | 0.016 | 0.484 | 0.5 | 9.801 | 0.49005 | 0.004673272 | $2.1839 \mathrm{E}-05$ |  |
| Valid N (listwise) | 20 |  |  |  |  |  |  |  |

## REFERENCES

Anderson, D., Cheslock, J., \& Ehrenberg, R. (2005). Gender Equity in Intercollegiate Athletics: Determinants of Title IX Compliance. Journal of Higher Education, forthcoming.

Brylinsky, J., et. al. (1993). The effects of gender and coaching success on players' preference for a coach in high school girls’ basketball. Eric Document 359150.

Cahn, S. (1994). Coming on Strong: Gender and Sexuality in Twentieth-Century Women's Sport. NY: The Free Press.

Chidester, M., et. al. (1997, March). Legal Handbook on School Athletics. Alexandria, VA: National School Boards Association.

Chrietzberg, A. (1988, Spring). Equity in Sports Programs for Girls and Women: The View of Sports Leaders. In Conference Preceding, Citizens for Sports Equity, May 1987. Richmond, KY: Eastern Kentucky University Press.

Cozzillo, M. \& Hayman, R. (2005). Sports and Inequality. Durham, NC: Carolina Academic Press.

Donnelly, K., Kilkelly, S., Berman, N. (2007). Title IX: Gender Equality in Sports. Retrieved July 2nd, 2007 from http://nhs.needham.k12.ma.us/cur/Baker_00/2002_p5/baker\ p5-7_sk_kd_nb_1-02/title_ix2.htm.

Frontiero v. Richardson, 93 S. Ct. 1764 (1973).
Grossman, J. (2003). The Future of Title IX, The Federal Statute Concerning Gender Equality in Athletics: Can It Survive the Secretary of Education's Planned Revisions? Retrieved August $7^{\text {th }}, 2007$ from http://writ.news.findlaw.com/grossman/20030311.html.

Halden-Brown, S. (2003). Mistakes Worth Making: How to Turn Sports Errors into Athletic Excellence. Human Kinetics: Champaign, IL.

Hartmann-Tews, I. \& Pfister, G .( Eds.) (2003). Sport and Women: Social Issues in International Perspective. NY: Routledge.

Hass v. South Bend Community School Corporation, 289 N. E. 2d 497 (1972).
Lumkin, A., Stoll, S., \& Beller, J. (1994). Sport Ethics: Applications for Fair Play. NY: Mosby-Year, Inc.

Kendal, R. (1981). Some relationships between Title IX regulations and athletic programs of public senior high schools in middle Tennessee. An Unpublished Doctoral Dissertation, Vanderbilt University, Nashville, TN.

Morris v. Michigan State Board of Education, 472 F. 2d 1207 (1973).
Missouri Women’s Council (2007). Title IX and Girl’s Athletics. Retrieved July 1st, 2007 from http://www.ded.mo.gov/employment/womencouncil/pdf/titleix.pdf

Morgan, W., Meier, K. \& Schneider, A. (Eds.). (2001). Ethics in Sport. Champaign, IL: Human Kinetics.

National Association for Girls and Women in Sport (2002, June). Title IX at 30: Report Card on Gender Equity. Retrieved July 1st, 2007 from http://www.aahperd.org/nagws/pdf_files/title930.pdf.

Pelosi, N (2007, June). Title IX assured a women’s right to educational equality. Retrieved July 16th, 2007 from http://www.aahperd.org/nagws/pdf_files/pelosi.pdf.

Reed v. Nebraska School Activities Association, 341 F. Supp. 258 (1972).

Rhoads, S. (2004). Spots, sex, and Title IX. Public Interest, 1(154), 86-98.

Rosenfeld v. Southern Pacific Company, 444 F. 2d 1219 (1971).
Sheeham, R. (1996). Keeping Score: The Economics of Big-Time sports. South Bend, IN: Diamond Communications, Inc.

Simon, R. (Ed.). (2005). Title IX Thirty Years Later: Sporting Equality. New Brunswick, NJ: Transaction Publishers.

Smucker, M. \& Whisenant, W. (2005). The impact of comparisons on the satisfaction of Interscholastic coaches of girls' sports. Public Organization Review, 5(2), 109.

Stafford, S. (2004). Assessing the effect of formal and informal enforcement on progress toward Title IX compliance. Social Science Quarterly, forthcoming.

Theberge, N. (2000). Higher Goals:Women's Ice Hocey and the Politics of Gender. Albany, NY: State University of New York Press.

United States Census Bureau (2007). Statistical Abstract of the United States.
Washington, DC: Department of Commerce, Economics, and Statistics Administration.
Witta, L. (2004). EDF 6481: Graduate Research Methods Class Notes. Taken July, 2004 in the College of Education at the University of Central Florida in Orlando, FL.

Wong, G. (2002). Essentials of Sports Law (3 ${ }^{\text {rd }}$ Ed.). Westport, CT: Praeger.

