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A Comparison of the Participation Rates and Perceptions of Males and Females
Regarding High School Athletic Participation

by

Edward Malcom Dreyer

A Dissertation submitted to the Education Faculty of Lindenwood University

in partial fulfillment of the requirements for the

degree of

Doctor of Education

School of Education

A Comparison of the Participation Rates and Perceptions of Males and Females
Regarding High School Athletic Participation

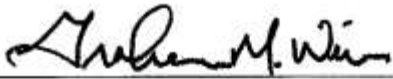
by

Edward Malcom Dreyer

This dissertation has been approved in partial fulfillment of the requirements for the
degree of

Doctor of Education

at Lindenwood University by the School of Education



Dr. Graham Weir, Dissertation Chair

9/18/15

Date


Dr. Samantha Sutton, Committee Member

9/18/15

Date



Dr. Donna Towers, Committee Member

9-18-15

Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

Full Legal Name: Edward Malcom Dreyer

Signature: Edward M. Dreyer Date: 9-18-15

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Abstract

The purpose of this study was to compare the athletic participation rate of males and females within the high school of study. Freshmen and senior students were surveyed to gather data on the reasons students chose to participate or not participate in athletics. Focus groups were conducted at a local university to further explore why students participated in athletics and why some of these students discontinued their participation in athletics. Focus groups also explored challenges facing athletes and student perceptions of female participation in athletics. Athletic participation data from the high school of study were also taken into consideration.

This study also touched on the history of females as they journeyed throughout history from the Theory of Separate Spheres to Title IX. The impact of Title IX on female athletics is also touched upon. Special attention was paid to the struggle female athletes have as they compete in athletics, why athletics are good for all participants, and health risks specific to females. Based on all of the data gathered, recommendations were made to the high school of study, to parents of female athletes, and for future studies to increase female athletic participation. Results of this study will assist administrators as they look for ways to increase female athletic participation within the high school of study.

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Chapter One: Overview of the Study

Background

At the time of this writing, high school athletics developed to the point, due to the Title IX legislation of the 1970s, where both males and females had an opportunity to participate. This legislation, signed into law in 1972, made it the business of the federal government to ensure that females were treated equally, while receiving an education. “These 37 words, which make up the federal law known as Title IX, forever changed the landscape of women’s sports as well as the lives of millions of girls and women, both on and off the playing fields” (Ladda, 2012, p. 2). With the passage of Title IX legislation, female participation in organized athletics increased dramatically. “In one generation, we have gone from young girls hoping there is a team to young girls hoping they make the team. Because of those 37 words, there is a universe of difference in that measure of hope” (Kane, 2012, p. 8). Numbers gathered from the 1990s through 2015 painted the picture of participation for both genders, with males participating in high school athletics at a higher rate than females.

It is now estimated that more than three million girls participate in interscholastic sports in high school and nearly 200,000 college women play sports. In 1972, there were less than 300,000 high school girls and fewer than 32,000 college women playing sports. (Kennedy, 2007, p. 78)

Female athletic participation definitely increased since the passing of Title IX, but males still participated in athletics more than females.

Young boys and girls were often introduced to sports at a young age. Kelly and Carchia (2013) stated the Sports and Fitness Industry Association reported that 21.5

million kids between the ages of 6 and 17 participated in at least one team sport (para. 5). Furthermore, the article reported that 60% of all boys and 47% of all girls were on at least one organized athletic team by the age of six (para. 7). There were numerous sports and programs geared towards young athletes. Cities ran youth leagues for both boys and girls in various sports, and YMCAs also organized and ran youth leagues. According to Kelly and Carchia (2013), 28.7 million, out of a possible 38.92 youth between the ages of 8 and 17, participated in youth sports in 2011 (para. 4). For those who became serious and were skilled, select sports for both males and females appeared to be on the rise. As these boys and girls grew up, they entered high school.

A majority of high schools across the nation offered extra-curricular athletic teams. As the seasons began for the various sports within a high school, practice and competitions became a high priority for the participants. In the high school setting in the state of Missouri, there were three seasons during which athletic competitions took place: fall, winter, and spring. While participating on teams, student/athletes learned life skills, such as responsibility, time management, and how to work with others. Athletes who participated on extra-curricular teams met individuals who had the same interests and drive they did. "Participating in a number of different extracurricular activities also can have developmental benefits in adolescence, as it allows youth to engage in identity exploration and develop relationships with a wide range of peers" (Fredricks, 2012, p. 296). Athletes also had the opportunity to build relationships, not only with teammates, but also with staff members who coached the various high school teams.

Study Site

The high school of study was located in a middle class suburban community. In October 2013, the high school of study had 2,011 total students in grades 9 – 12. Out of the 2,011 total students in the participating high school, 1,000 of those students were male, while 1,011 of those students were female (personal communication, study high school registrar, October 2013). The high school of study was in a district that had four traditional high schools and one alternative high school. Athletic programs were offered to both genders. These athletic programs were well within the traditional scope of what larger high schools were able to offer. Sports offered within the high school of study are listed below:

Fall Season / Male:	Cross-Country, Football, Tennis, Soccer, Swimming
Fall Season / Female:	Cheerleading, Cross-Country, Dance, Golf, Softball, Volleyball
Winter Season / Male:	Basketball, Wrestling
Winter Season / Female:	Basketball, Cheerleading, Dance, Swimming
Spring Season / Male:	Baseball, Golf, Track and Field
Spring Season / Female:	Soccer, Tennis, Track and Field

On some of the teams included in the study, students could be cut from the team during tryouts if too many students attempted to make the team. There were also sports, swimming, tennis, track and field, cross-country, that were able to accept all who wished to participate.

Background of Study

High schools around the nation offered students the opportunity to participate in extra-curricular activities while in high school. While the researcher felt that participation in all extra-curricular activities was positive, he chose for the sake of this project to focus solely on athletic participation. Studies were completed that showed the benefits of athletic participation. Prior to the passage of Title IX, there was a large discrepancy in athletic participation numbers between males and females. “While millions of high school boys played sports, organized high school sports for girls was a relative obscure activity with fewer than 300,000 girls participating the year that Title IX was passed” (Stevenson, 2007, p. 1). With the passage of Title IX legislation, there was a change in female participation rates. “The proportion of female high school students participating in athletics rose from 1 in 27 females in 1972 to 1 in 4 females by 1978. In contrast, male participation remained relatively constant at 1 in 2” (Stevenson, 2008, p. 2). Although great gains were made in high school athletic participation rates, females still participated at a lower rate than males. The National Federation of State High School Associations (NFSHSA, 2015) reported participation numbers for the 2011-2012 school year nationwide. “An additional 33,984 girls participated in high school sports last year, making the all-time record total 3,207,533. This also marks the 23rd consecutive year for an increase in the number of female participants” (NFSHSA, 2015, p.1). Even though female participation numbers continued to rise and male participation rates slightly declined, there was still a large difference between the genders when comparing athletic participation numbers. “While girl’s participation figures continued to climb, boys participation figures dipped for the first time since the 1992-93 school

year, down 9,419 from last year's number of 4,494,406 to 4,484,987" (NFSHSA, 2015, p. 10).

The focus of this research was to identify why students chose to participate or not participate in high school athletics, with an emphasis placed on female participation and non-participation. Research in this area was limited. Even more limited was identification of the reasons why females chose to participate or not participate. By surveying students about the reasons for participating, not participating, or discontinuing involvement in athletics, the researcher hoped to find trends in these areas that could help keep females involved in athletics.

Importance of Study

The researcher felt strongly that participation in athletic activities provided positive benefits to all participants. Literature and studies presented in Chapter Two of this project indicated that participation in athletics led to individuals becoming quality individuals and contributing to society after their high school experiences. With this in mind, both male and female students chose not to participate in athletics as they grew older, even though there were numerous opportunities to do so. By asking students why they did or did not choose to participate, the researcher hoped to discover the reasons students make their decisions. As results were examined, particular attention was paid to females and their responses.

The results of this project will be presented to the administration in the high school of study, administrators within the study district, and the superintendent and school board of the study district. The results of this project could assist not only the Athletic Director in the high school of study, but also other schools and administrators in

the area and throughout the country. Identifying the reasons that students chose to participate, or not, in athletics would be a very powerful planning tool. With this information, attempts to accommodate additional participants could be made.

Background of the Researcher

At the time of the study, the researcher was an assistant principal in the high school of study. He was an educator for over 19 years, served as a cross-country and track coach, teacher, and administrator during that time. Prior to his career in education, the researcher was a competitive athlete, participating in multiple sports as a youngster. The researcher received a track scholarship and participated in track for four years at the collegiate level. After college, the researcher began his career in education, teaching and serving as a cross-country and track coach. As a coach, the researcher witnessed firsthand the positive effect athletics had on adolescent males and females. After teaching and coaching for nine years, the researcher moved into school administration, serving as an assistant principal. The researcher has a daughter and a son, both of whom were active in a variety of sports. Having a daughter who within a few years of attending high school, at the time of this study, led the researcher to wonder if his daughter would continue in athletics as she reached high school age and beyond.

Statement of Problem

Athletics participation numbers nationwide supported that there was an uneven rate of participation between high school males and females in athletics. The 2013-14 High School Athletics Participation Survey, sanctioned by the NFSHSA, reported that 4,527,994 males and 3,267,664 females participated in high school athletics (p. 55). In Missouri that same school year, there were 103,408 male participants, as compared to

69,086 females participants (p. 56). Furthermore, it was widely accepted that the gap in participation between males and females increased as students get older.

The gender gap in physical activity widens when activity levels are traced across grade levels. As girls get older, they are less likely to engage in high rates of physical activity (five days or more a week), while boys remain highly involved with physical activity from childhood through high school. (Women's Sports Foundation, 2009, p. 57)

The reason for the decline of participation rate of females was studied in great detail. This study attempted to ascertain why fewer females participated in athletics than their male counterparts. It was also deemed important to determine why females continued to participate. "For female athletes to obtain the maximum benefits in sport in the physiological, sociological, and psychological domains, coaches and athletic directors must understand the variables which motivate these athletes to remain in sport after their initial exposure" (Stewart & Taylor, 2000, p. 170). Obtaining the opinion of approximately 500 students (male and female) who all had the opportunity to participate in numerous athletic opportunities within the high school of study potentially shed light on why this occurred. Focus groups held with both males and females were conducted to gain insight as to the perceptions males and females had about participation and nonparticipation in athletics. Responses on the surveys of freshman and senior males and females, along with the responses and input from the focus groups, gave the researcher an understanding as to why females quit or chose not to participate in athletics.

Purpose of Study

The purpose of this study was to compare the athletic participation rate of males and females within the high school of study. High school freshmen and senior students were surveyed to gather data on the reasons students chose to participate or not participate in athletics. Focus groups were conducted at a local university to further explore why students participated in high school athletics and why some of these students discontinued their participation in athletics. Focus groups also explored challenges facing athletes and student perceptions of female participation in athletics. Athletic participation data from the high school of study were taken into consideration.

The high school of study offered a wide variety of athletic choices. It appeared on the surface that there were plenty of opportunities for female participation in high school athletics. Athletic teams that did not cut athletes, such as track, cross-country, swimming, and tennis, and allowed all who come out to participate. Some athletic programs, such as basketball, soccer, and volleyball did make cuts. There were multiple avenues for females who wished to participate. The question for this project was very simple; why do female students choose to participate or not participate in the athletic opportunities presented to them? The research questions listed guided the researcher as he gathered data about the reasons for participation or non-participation in athletics:

Research Questions

- 1) Do females have a lower participation rate in athletics than males in the high school of study?
- 2) Does the participation rate of females in athletics decrease from freshman to senior year at the high school of study?

- 3) Does the participation rate of females in athletics decrease at a greater rate than males within the high school of study?
- 4) What perceptions do males and females have about the factors for participating or not participating in athletics, challenges facing those who chose to participate, and participation by females in athletics?
- 5) How did female and male athletic participation numbers compare in related sports within the high school of study?

This study also touched on the history of females as they journeyed from the Theory of Separate Spheres to Title IX. Special attention was paid to the struggle female athletes had as they competed in athletics, why athletics were good for all participants, and health risks specific to females. Based on all of the data gathered, recommendations were made to the high school of study, to parents of female athletes, and for future studies to increase female athletic participation. Results of this study may assist administrators as they look for ways to increase female athletic participation within the high school of study.

Methodology

Surveys of Incoming Freshman

The researcher hoped to learn why students in the high school of study chose to participate or not participate in high school athletics, with an emphasis on why females made their decisions. Surveys were given to incoming male and female freshmen at the participating high school's schedule pick-up, which occurred a week before the school year began. Questions on the survey included asking students if they were planning to participate in a sport or not, to select reasons for participating or not participating (several

reasons were given, with the student selecting appropriate reasons), and if they participated in any out of school athletics. These surveys served as a baseline to determine the percentages of students who participated in sports.

Surveys of Graduating Seniors

Seniors in the high school of study were also asked to complete a similar survey. This survey asked if students were planning on participating in a sport in their final year of high school. Reasons for participating or not participating were also included in this survey. Graduating seniors were also asked what sports they participated in while in high school. The administration of this survey had to do with the age of the students surveyed. The researcher, by surveying students when they began high school and as they entered their final year of high school, was able to compare students' opinions of participation, or lack of, at two critical stages of the time in high school.

Focus Groups

To get more in-depth and meaningful opinions in this area, the researcher conducted focus groups. These focus groups included both males and females who recently completed high school and were enrolled at a university located in the Mid-West. Groups included students who participated in athletics all through high school, students who ended their participation while in high school, and students who chose not to participate in athletics while in high school. The focus groups were organized such that students answered a series of questions to record their opinions on high school participation, lack of participation, reasons they chose to participate or not, and feelings about female participation. Once those questions were complete, the researcher then led a conversation with the participants and asked follow-up questions.

Athletic Participation Data from the High School of Study

The Athletic Director provided athletic participation numbers from the high school of study. This data was provided for the 2011-2012, 2012-2013, and the 2013-2014 school years. The Athletic Director was required to gather this data every sport season and submit it to the state's athletic association to create eligibility lists. Only numbers were provided and no student names were given to the researcher.

Limitations of the Study

Coach characteristic threat. Each coach employed by the high school of study brought a different set of characteristics to his or her position. These characteristics were interpreted as either positive or negative by the student/athletes. Potential athletes may have decided to participate or not participate on a certain athletic team because of the coach, not because of the sport.

Data collection time. Surveys were given to freshman and senior students at the beginning of the school year schedule pick-up event. The survey was then completed by the student at one of the several stops completed while picking up his or her schedule. There was a possibility that students rushed through the survey to allow quicker pick up of the schedule for the school year and converse with friends who were also there. Focus groups were held in the evening for the college-aged participants. Some of these focus groups started as late as 7:00 in the evening. The students had been in classes for most of the day and, in some cases, also participated on an athletic team. Fatigue may have impacted their answers.

Instrumentation threat. The students who took the survey may have interpreted the questions or directions differently, thus leading to the possibility that results could be skewed.

Mortality threat. Every effort was made to survey students at schedule pick-up. Unfortunately, not every student attended schedule pick-up. Students who attended the event without a parent or guardian were not allowed to complete a survey, since parent permission was required. The survey was voluntary, so students who did have parents present could choose to not complete the survey. Athletic practices had already begun by this time, so athletes and their families were already in town, whereas non-athletes, who did not have to be in town for team practice, might have still have been out of town. Out of the 466 freshmen who attended the high school of study, 242 (114 males and 128 females) completed the survey. For the seniors, 286 students (159 males and 127 females) out of 465 completed the survey. Focus group students received credit from their professor in the psychology department to participate in the project. They represented a convenience sample and were not gathered randomly.

Respondent misinterpretation. Respondents may have misunderstood the written directions, rating scale, and/or questions on the survey.

Survey development training. The researcher had no prior experience in creating surveys. Prior to administering the survey, it was evaluated by two professors at Lindenwood University, the principal of the high school of study, and a Communication Arts teacher. It is important to note that the principal of the high school of study was a former Communication Arts teacher; also, the veteran Communication Arts teacher had over 20 years of experience and was viewed by her peers as an expert within the building.

The professor had multiple years of experience in both the high school and collegiate environment. All three found the survey to be a valid and applicable assessment, with respect to content.

Focus group training. The researcher had no prior experience developing questions for, or conducting focus groups. Questions for the focus groups were evaluated by three professors at Lindenwood University, as well as by two administrators in the high school of study. All questions were found to be a valid and applicable assessment, with respect to content.

Delimitations of the Study

For the purpose of this study, only freshmen and seniors were asked to complete surveys at the high school of study. Students classified as sophomores or juniors were not asked to participate in the survey. The survey was conducted two weeks prior to the start of school, at a voluntary schedule pick-up event that not all students chose to attend. District policy did not allow for loss of instructional time for research projects of this nature, so students who did not attend schedule pick-up were not included in this study. In regards to the focus groups conducted at the collegiate level, students were volunteer-based and not randomly chosen.

Definitions of Terms

For the purpose of this study, definitions were created to be used solely for this project.

Athletics: Any sport sponsored by the high school of study, such as basketball, cheerleading, cross-country, dance, softball, swimming, tennis, track and field, and

volleyball. Coaches of these sports were provided by the high school of study and were allowed to use school facilities for practice and contests.

Freshman student: Any student in the first year of high school, regardless of age.

Non-participant: Any athlete who had not completed a full season of a sport.

Non-school sponsored sport: Any sport not sponsored by the high school of study, such as bowling, figure skating, gymnastics, ice hockey, lacrosse, and racket ball. Coaches of these sports were not employed by the high school of study. Facilities of the high school of study were not used by these sports.

Participant: Any female who completed a full season of a sport.

Related sports: A sport within the high school of study that had a team for males and females. For the purpose of this study, that included baseball, softball, basketball, cross-country, golf, soccer, swimming, tennis, track and field, and volleyball.

Senior student: Any student in the fourth year of high school, regardless of age.

Title IX: Stevenson (2007) defined Title IX as a part of the 1972 Education Amendments, which required schools to provide equal access to all school activities, including, perhaps most controversially, sport (p. 1).

Unrelated sports: A sport within the high school of study that only offered a team for one gender or the other. For the purpose of this study, that included cheerleading, dance, football, and wrestling.

Summary

This study investigated why high school-aged male and female students chose to participate or not participate in high school athletics. Ninth and 12th grade students completed surveys, which asked them to rate reasons for participating and quitting

athletics. Focus groups provided data used to explore these reasons in depth and also touched on participants' perceptions of female athletes. Feedback from the surveys and focus groups were then compared to identify trends in the responses, with close attention paid to females and reasons for not participating in athletics. Athletic participation data from the high school of study were also incorporated into this study.

Chapter Two offers a review of literature to examine research and writings concerning a) the history of the female in U.S. Society; b) the history and impact of the Title IX Legislation of 1972; c) the reality of high school-aged students at the time of this writing; d) positive and negative aspects of athletic participation; e) reasons why males and females chose not to participate in athletics; f) possible gender inequity and social barriers facing females in the world of athletics; and g) health risks specific to female athletes. Research pertaining to these areas was beneficial when reflecting on, discussing the results of, and making recommendations for increasing the number of females who chose to participate in high school athletics.

Chapter Two: Literature Review

A review of literature addressing the nature and impact of athletics on high school students comprises the contents of Chapter Two. A history of athletics in society was evaluated first and included additional consideration of the effect and implementation of the Title IX legislation. Further evaluation of topics centered on high school students and their participation in athletics. Literature and studies assessing the positive and negative aspects of high school participation were reviewed. Information that illustrated potential dangers that impact high-school-aged students, such as alcohol use and drug use, as well as health issues that impact high-school-aged children is also provided. Additional information is included about female participation in sports, health risks that specifically impact female athletes, and reasons why females may choose not to participate in athletics.

A Brief History of Athletics in American Society

When considering the history of sports in American society, the average American citizen of the 1800s found participation in sports to be something that men and women participated in together. “The primary purpose of sport or early physical recreation seemed to be an opportunity for a respectable social encounter” (Gerber, Felshin, Berlin, & Wyrick, 1974, p. 4). Women and men participated in sports such as croquet, archery, and bowling during this time. Clothing styles significantly limited participation in more physical athletics, which in turn limited an individual’s ability to truly be in shape. “The clothing did not permit much movement and those who were engaged in sport were typically gentleman and gentlewomen who had no taste for hard movement” (Gerber et al., 1974, p. 4). It is from these beginnings, in which sports were

no more than a social encounter limited by restrictive clothing that sports evolved into what it has become; both genders having the right to participate in athletics. For the sake of this review of literature and to define and explain the female journey into sport, female participation in athletics has been divided into four time periods: 1) The late 19th century and early 20th century, 2) The start of World War I to the end of World War II (1914-1945), 3) The time period from the end of World War II to the passage of the Title IX legislation (1945-1972), and 4) The passage of Title IX to present day (1972-present).

Period One: The Late 19th and Early 20th Century

As the Industrial Revolution swept through Europe and into the United States, beginning in the late 1800s and into the 1900s, men and women became segregated. Gone were the days of men and women working together to make a living. This separation was commonly known in history as the Doctrine of Separate Spheres (Wright, 2011). “The defining aspect of separate spheres is that women act and are influenced by the values of the domestic space focused on the needs of family, while men act in public space focused on the needs of civil society” (Wright, 2011, p. 45). The long day that males were required to work during the Industrial Revolution led to a separation between men and women. Women, especially in the middle and upper classes, focused primarily on homemaking and childbearing, which reinforced the stereotype of women not being able to handle physical activity. The main idea behind the Doctrine of Separate Spheres, according to Wright (2011), involved men and women having separate areas in which they lived their lives. Prior to this era of U.S. history, females always worked with their husbands and other family members throughout the day. It was common for females to work side-by-side with males in the fields raising crops and taking care of animals, all

while raising their children. The Industrial Revolution not only changed the role of the female socially and economically, but also athletically, as well. “Publicly, men were cast as the competitors in the amoral, economic, legal, and political realms, whereas women were positioned either as decorative acquisitions or as spiritual guardians of men’s immortal souls” (Hogshead-Makar & Zimbalist, 2007, p. 7). During this time period, it was still acceptable for both men and women to participate in individual sports for social reasons. Team sports, such as basketball and baseball, were only acceptable for males. “By the 1870’s, ‘more elevated’ women were attaining approval to engage in ‘genteel’ sports such as archery, tennis, and golf” (Park, 2012, p. 732). Upper class women at this time were able to participate in physical activities focused on physical activity, but not competition.

With females socially required to focus on childbearing and homemaking during this time period, a power shift in society occurred. Women had a specific ‘sphere’ to which they belonged. Education at this time was not considered necessary for females. Being a homemaker and raising children was not believed to require a formal education (Ladda, 2012). Whereas in the past men and women worked as a team to raise their families and meet their needs, the Industrial Revolution and the Doctrine of Separate Spheres emphasized the importance of the male and de-emphasized the importance of the female. “The stereotype of the perfect female of the time involved two components: getting married and having children” (Ladda, 2012, p. 10). As a result of middle and upper class females being tied to the home and losing the influence they once had, females’ overall health began to deteriorate. Throughout the Industrial Revolution, doctors were concerned about females and their health, but not enough to allow females

to participate in athletics at the same level as males. “The call was not for sports and competition; rather it was for walking and calisthenics to improve women’s physical and mental health for the purposes of childbearing and homemaking” (Hogshead-Makar & Zimbalist, 2007, p. 7). Although physicians of the time period acknowledged that the health of the female was important, there was also concern that women were not able to withstand the strains of being an athlete. “Women were often perceived as being too weak for sport, particularly endurance sports, such as marathons, weightlifting, and cycling, and it was often argued in the past that sport was harmful to women’s health, particularly their reproductive health” (Women 2000 and Beyond, 2007, p. 2). The overwhelming concern during this time period focused on females and their ongoing ability to bear children.

Cahn (1994) wrote a book titled *Coming on Strong: Gender and Sexuality in Twentieth-Century Sports*. An excerpt was later reprinted in Hogshead-Makar and Zimbalist’s (2007) book, *Equal Play: Title IX and Social Change*. Cahn’s (1994) essay explained the trial and tribulations of females as they struggled to participate in athletics. Obviously, females participating in sports considered male-centered led to a direct conflict with the Doctrine of Separate Spheres. Cahn wrote in her article that when females entered the male sphere of athletics, they were immediately perceived as being a disruptive force within society. Followers of the Doctrine of Separate Spheres frowned upon the idea that females could participate in the same types of sports, especially team sports, in which men competed (Cahn, 1994).

Period Two: Between the World Wars (1914-1945)

Although not everyone was supportive of females participating in sports at the turn of the 20th century, there was some support among educators of the time period. As females became more involved in society, the conflict between a woman's right to participate in sports came into direct conflict with the Doctrine of Separate Spheres (Wright, 2012). "Balancing claims of equality and difference, physical educators articulated a women-centered philosophy of sport that proposed 'moderation' as the watchword of women's physical activity" (Cahn, 1994, p. 10). Although moderation was a step above the Doctrine of Separate Spheres, it still was not equality. Moderation kept males and females on different playing fields. As women became more active, it was natural for them to become more competitive. It was during this time, while men were away fighting in World War I and World War II, that women began participating in both team and individual sports.

Women during this time period had to combat another stereotype. A concern of the time was that females would lose their femininity by participating in traditionally male-dominated sports. With women participating at a moderate level, educators believed females were benefitting from athletics while still remaining feminine. The belief also existed, from 1900 into the 1950s, that women who participated in sports at an elite level may no longer be considered attractive to men (Cahn, 1994). There were also unfounded concerns that females may not only be considered unattractive to men, but also that these female athletes may be attracted to other females, more so than to males. Female athletes during this time period were deemed failures in heterosexuality. "The impression of heterosexual 'failure' contained a further possibility as well: The

Amazonian athlete might not only be unattractive but un-attracted to men—she might prefer women” (Cahn, 1994, p. 10). This belief, that females who were athletes were lesbians, was prevalent in the years before and after World War II.

Females who wished to participate in athletics benefitted from two major events of the 20th century: World War I and World War II. In both of these cases, the U.S. mobilized its resources to fight wars in Europe. One of the greatest resources the U.S. had, according to Gerber et al. (1974) was its population. Millions of men were pressed into the armed services. As the men of the U.S. fought in Europe, the women of America were also mobilized. “For women, some of this country’s greatest tragedies have caused fuller participation in the rights and responsibilities of the nation. In times of stress and/or flux society cannot afford to ignore the talents of more than half of the nation” (Gerber et al., 1974, p. 17). Women worked in factories, cared for families on their own, and kept America running while America fought in both World Wars. In their spare time, and with males away at war, females began to participate in athletics at an even higher rate.

Although it was frowned upon, from both a social and health standpoint, women began to participate in some of the same sports that males did. Specifically, females began to participate in individual sports. Their participation was not just for the sake of exercise, but for competition. “With the exception of basketball, individual sports were much more popular than team sports for women at this time” (Ladda, 2012, p. 11). Females participated in sports, such as gymnastics, ice skating, and track and field. It was only a matter of time before society began to integrate females into all sports. Starting in the time period after World War II, it was generally accepted that females

would participate in athletics. “The Division of Girls and Women’s Sports realized that women were going to find opportunities to compete in elite, Olympic-style sports and decided that it would be better for those women to compete within the American educational system” (Suggs, 2005, p. 14). The educational system was one of the first organizations to organize female athletics. With females learning that they were just as capable as their male counterparts, both in the workplace and socially, the struggle for equality was fought in several arenas. One of those arenas was the field of athletics.

Period Three: The Road to Title IX (1945-1972)

In the time period after World War II, males returned from the war and females were once again pushed out of sports. Men coming back from fighting in the war were given their jobs back, which in turn left women looking for work. Schools of the time once again allowed males to participate in sports and athletics, while female students were discouraged from doing so. “During the 1950s, all female athletes and physical educators operated under the cloud of sexual suspicion” (Cahn, 1994, p. 11). Owners of female semi-pro teams attempted to promote the femininity of their teams by hosting beauty contest for their players. Female teams developed and enforced dress codes and placed restrictions on haircuts. This did nothing to combat the stigma of being a female athlete (Cahn, 1994). As society progressed through the 1950s and 1960s, advances in technology empowered females. The development of effective birth control methods, for one, led to females having a choice of bearing children or not (Gerber et al., 1974). Even though there was a stigma attached to the female athlete, the fact that women were in the work place during the world wars and were participating in athletics in greater numbers was the beginning of athletics dominated by man. Bell (2008) stated that it was not until

the advent of the equal rights movements and Title IX that women truly found a place as participants in the world of sport and in the public arena. With the women's rights movement and the Title IX legislation of the 1970s, women were given equal legal footing with men.

Period Four: Title IX to the present day (1972 – present)

As stated in the previous sections, females living in the U.S. struggled to be treated as equals. Although women in the U.S. gained the right to vote in the 1920s, females struggled to be accepted into different aspects of American society, particularly in regards to equality. "Women progressively obtained the right to vote from the beginning of the century, they entered the labor market in large numbers in the 1960s, and there was, subsequently, a liberation of attitudes towards gender roles" (Poeschl, 2008, p. 70). Even though females made multiple strides throughout history, getting the right to vote and entering the job market did not mean females were equal to males. "However, it cannot be said that these changes have succeeded in re-establishing equality between the sexes" (Poeschl, 2008, p. 70). Title IX was the government's attempt to equalize the genders in the educational setting. Title IX read as follows: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance" (Stevenson, 2007, p. 3). That statement, which did not make mention of athletics, changed the way females were treated in the world of sport.

A Brief History of Title IX Legislation

Title IX was a small part of a piece of legislation known as the Education Amendments of 1972. This legislation was signed into law on June 23rd, 1972, by President Nixon. The Education Amendments of 1972 were amendments, or additions to the Civil Rights Act of 1963, signed into law by President Johnson. “Since its enactment, perhaps no other federal statute has had a greater impact on the operation of athletics, especially at the collegiate levels” (Anderson & Osbourne, 2008, p. 127). Prior to this legislation, there was a series of presidential orders signed in the 1960s, which set the stage for Title IX and the Education Amendments of 1972 to be signed into law. “Title IX’s origin lies in the 1965 Presidential Executive Order 11246 prohibiting federal contractors from discrimination in the employment on the basis of race, color, religion, or national origin” (Valentin, 1997, p. 1). This executive order was the first step in recognizing there was an issue within our federal government in terms of discrimination. Although Executive Order 11246 did not specifically mention gender, it was amended by Executive Order 111375, signed in 1967, and effective October 13th, 1968. Executive Order 11375 included discrimination based on Executive Order 11246 (1965) as amended by Executive Order 11357 (1967) (Valentin, 1997). It was important to remember that although the legislation was groundbreaking, the women in America who fought for equal rights should be credited with bringing the topic to the forefront. The Civil Rights movement of the 1960s brought attention to inequality in other areas, which included women’s rights. It was also important to note that the feminist movement, which gained traction in the 1940s and 1950s also played a role in the Title IX Legislation.

The executive orders set the stage for what was commonly referred to as Title IX legislation. Sandler was one of the first to make the connection between the executive order and how it would affect the future for women in America (Ladda, 2012). While working at the University of Maryland, Sandler volunteered at the Women's Equity Action League (WEAL). According to Ladda (2012), the goal of this organization was to fight against sexual discrimination within any organization that received federal funds. The organization also worked to enforce the order issued by President Johnson which forbade sexual discrimination in any organization which had federal contacts. "These sexual discrimination complaints led to the passage of Title IX, prohibiting sexual discrimination in all educational institutions kindergarten through college" (Ladda, 2012, p. 12). Sadler reasoned that universities and colleges received federal funds. They also had various contacts with the federal government. Since they received those funds and had those contacts, they legally could not discriminate their employment based on sex.

In 1970, Michigan Representative Griffiths presented the issue of sexual discrimination of women to the U.S. Congress. Another representative, Green of Ohio, started hearings that summer within the subcommittee that addressed higher education. "The hearings that Rep. Green held were the first legislative step toward the enactment of Title IX" (Valentin, 1997, p. 2). The main focus of Green's legislation prohibited sexual discrimination in the workplace. Green gained approval from the House of Representatives, while Senators Bayh and McGovern sponsored the bill in the United States Senate (Valentin, 1997).

The joint committee that reviewed the legislation took several months to construct a bill suitable for both houses. Initially, the legislation was going to amend Title VI

(prohibiting discrimination on the basis of race, color, or national origin in any program receiving federal assistance) and Title VII (prohibiting discrimination in employment on the basis of race, color, religion, sex, or nation origin) of the 1964 Civil Rights Act (Valentin, 1997). Concern mounted on the part of African-Americans, who were concerned that legislation added to Title VI and Title VII of the Civil Rights Act of 1964 would hurt their cause. “Honoring the requests of African American leaders and their supporters, who feared that the process of amending Title VI could weaken its coverage, Rep. Green proposed a separate and new title, which became the now famous Title IX” (Valentin, 1997, p. 2). The legislation regarding the discrimination of women in education stood on its own.

The Title IX legislation was passed by Congress on June 8th, 1972. President Nixon signed Title IX into law on June 23rd, 1972 (Stevenson, 2008). It became effective on July 1st, 1972. Title IX became the law of the land. Historically, many educators were unaware of both the immediate and future impact of the legislation. Furthermore, those who supported the bill did not actively lobby for the bill. Higher education institutions of the time did not take a stand on the legislation. Elementary and secondary schools remained on the sidelines, as the battle to legislate Title IX was waged. According to Stevenson (2007), there was a concern that revenue-producing sports would be impacted by Title IX. Opponents of Title IX were concerned that schools would lose money if the legislation passed. “Indeed, history reports that one of the architects of the legislation, Green, purposefully failed to raise athletics in the debate as she feared that it might sabotage the entire legislation” (Suggs, 2005, p. 67). This train of thought was also followed by Sandler, as well. While watching the legislation’s construction, there were

not many people who were aware of the impact Title IX would have on athletics.

“Individuals originally involved in getting Title IX onto the agenda had no idea the impact Title IX would have on athletics” (Edwards, 2010, p. 303). The sports participation debate did not occur until after the legislation was ratified.

Two different trains of thought existed on how to allow females to participate in athletics. One was to fully integrate females into male athletics. The second, which held the most support and eventually was the path that was chosen, was to institute a separate, but equal philosophy; in other words, males and females would participate separately but have equal access to the same equipment, playing conditions, and the same number of opportunities for participation. Due to the technical wording of the legislation, applying Title IX to athletics required time and deliberation. “The law’s application to athletics has come through various regulations, interpretations, and clarifications as well as numerous lawsuits brought by individuals and groups who have felt excluded, denied, or discriminated against within these educational programs and activities” (Anderson & Osbourne, 2008, p. 127). Since there was difficulty enforcing and interpreting the new Title IX legislation, Congress passed the Javits Amendment in August 1974. With this amendment, the task of interpreting the legislation and developing a realistic way of enforcing it fell to the Department of Health, Education, and Welfare. In 1975, a series of 10 factors were developed, which were used by schools to determine if they were in compliance with Title IX:

- 1) Whether the selection of sports and levels of competition effectively accommodate the interests and abilities of both sexes;
- 2) The provision of equipment and supplies;
- 3) Scheduling of games and practice;
- 4) Travel and per

diem allowance; 5) Opportunity to receive coaching and academic tutoring; 6) Assignment and competition of coaches and tutors; 7) Provision of locker rooms, practice, and competitive facilities; 8) Provision medical and training facilities and services; 9) Provision of housing and dining facilities and services; and 10) Publicity. (Anderson, 2012, p. 331)

Although it took three years after the passing of Title IX for this list to be constructed, the list was the first attempt by the federal government to ensure a fair and level playing field. Federal law required Universities, colleges, and high schools to follow the regulations of the 10 factors listed and ensure that males and females were provided the same opportunity to participate in athletics. If an institution was not providing an equal opportunity to females in any of these areas, it was not compliant with federal law.

As Title IX evolved, the regulations developed which determined if a school was in compliance with the law were replaced by a three-pronged test still in place at the time of this writing. Stevenson (2007) discussed the three-prong test, stating that the test focused on an institution's obligation to provide equal opportunity. This test did not rely on a single compliance standard. The three-prong test survived multiple legal challenges and was commonly used to determine if a school was in compliance with Title IX. A brief summary of each of the three prongs follows:

- 1) Males and females participate in athletics in numbers substantially proportional to their enrollment numbers; or
- 2) The school has a history and continuing practice of program expansion which is demonstrably to the developing interests and abilities of members of the underrepresented sex; or

- 3) The institution's existing programs fully and effectively accommodate the interests and abilities of the underrepresented sex. (Buchanan, 2012, p. 92)

Since a large majority of the institutions were not in compliance when the Title IX legislation was passed in 1972, the three-prong test gave those institutions the opportunity to get into compliance. As long as an institution was in compliance, or making an honest attempt to get into compliance, they were safe from any legal issues.

The Office of Civil Rights, which fell under the jurisdiction of the U.S. Department of Health and Human Services was created in 1964 to enforce the racial discrimination laws developed in the 1960s (as cited in Valentin, 1997). This office's role in American society grew since the 1960s. At first, its purpose was to enforce regulations concerning African-Americans. Title IX also fell under the jurisdiction of the Office of Civil Rights. The process to first interpret and then enforce Title IX took some time (Valentin, 1997). Buzuvis and Newhall (2012) wrote that the evidence of commitment to the equal treatment of females was reflected in the multiple versions of regulations and guidelines during the 1970s. The authors gave the 1975 implementation regulations and the 1979 Policy Interpretation as examples.

While Title IX proved that both genders would be treated equally, the Women's Educational Equity Act of 1974 (WEEA) was meant to assist and reward schools for promoting gender equity. Whereas Title IX created policies and tests to ensure equality among genders, the WEEA rewarded compliance with Title IX (Valentin, 1997). The goal of this piece of legislation was to provide both guidance and incentives to schools that treated both genders equally. Title IX, on the other hand, issued sanctions and warnings for non-compliance. "WEEA represents the supportive component: providing

funding at all levels of education for programs of national, statewide, of general significance to overcome sex stereotyping and achieve educational equity for girls and women” (Valentin, 1997, p. 4). This legislation put the exclamation point on the Title IX legislation. Our nation moved from the Theory of Separate Spheres to federal legislation rewarding equality of females in education and athletics.

Female Athletics Organizes

With the passage of the Title IX legislation in 1972, legal barriers were removed for females in their struggle to be accepted into the organized world of athletics. Prior to the passage of Title IX, the Division for Girls and Women in Sports (DGWS) advocated for the introduction of athletics at the collegiate level. They began advocating for collegiate female athletics in 1957 (Suggs, 2005). The DGWS implemented the Commission on Intercollegiate Sports for Women (CIAW) in 1967. The commission’s goal was to begin organizing and holding intercollegiate championship competitions for female athletics. The CIAW was successful in organizing national championship competitions for females (Suggs, 2005). Multiple championships in female athletics were organized. Gymnastics and track and field were among the first sports to have a female national championship. Eventually, basketball, swimming, badminton, and volleyball were added. By 1971, the CIAW was replaced by the Association for Intercollegiate Athletics for Women (AIAW). Membership in the AIAW grew throughout the 1970s. “In 1981, the AIAW provided 41 national championships and 120,000 athletes were involved in athletics, while the NCAA provided 17 championship tournaments and involved 72,000 athletes” (Ladda, 2012, p. 16). The National Colligate Athletics Association (NCAA), which organized inter-collegiate competitions for males,

did not initially concern itself with female athletics. Prior to Title IX, there was no reason for the NCAA to be involved in female athletics.

With the passage of Title IX, the NCAA chose to become involved with female athletics. When it became obvious female athletics at the colligate level were permanent and federally mandated, the NCAA formed the NCAA Women's Committee. In the fall of 1974, the NCAA agreed to meet with the AIAW to discuss female intercollegiate athletics (Festle, 1996). The meeting did not go well. Politics and power clashed at this point. "The NCAA rep's were unwilling to give women substantial power and the AIWA's reps were unwilling to trade power in their rapidly growing organization for subordinate status in a new one" (Festle, 1996, p. 168). Once it was determined that the two sides would be unable to compromise, the NCAA in January 1975 made two declarations which led to the end of the AIAW. "One authorized the initiation of NCAA 'pilot championships' for women in a couple of sports. The other required NCAA members to place their women's teams under the NCAA's jurisdiction if the NCAA held championships in those particular sports" (Festle, 1996, p. 169). The NCAA waived the fees for member schools who added female athletic programs and implemented rules which mirrored male programs in areas of eligibility, recruiting, and financial aid. As part of those declarations, the NCAA also paid expenses for any team competing for a national championship and provided television coverage for female championship competitions (Festle, 1996). The AIAW was not in shape financially to compete with the propositions created by the NCAA. Universities that were trying to decide whether to stay with the AIAW or switch to the NCAA eventually followed the money. "There would be defections because AIAW could not come close to matching the \$3 million in

benefits that the NCAA could afford to offer” (Festle, 1996, p. 209). By the middle of 1982, the AIAW was unable to continue its role within female colligate athletics due to financial limitations. At this point the NCAA took the lead with regard to female athletics (Festle, 1996). With Title IX and the growth of females athletics at the collegiate level, female participation in high school athletics began to grow. The NCAA, with a push started by the AIAW, legitimized females in sports. With Title IX, there was more opportunity for female athletes.

Social Barriers to Female Participation in Athletics

The conflict facing females who chose to participate in sports was written about by numerous authors. Metheny, a noted physical education teacher and advocate of females participating in athletics, was one of the first to begin writing about gender stereotypes. “Metheny (1965) was among the first to identify gender stereotypes that influenced the social acceptability of various sports” (Ross & Shinew, 2008, p. 43). These stereotypes were long woven into American society. Educators and physicians of the early 1890s did support female participation in athletics, but with restrictions that allowed for females to participate in a feminine manner. Ross and Shinew (2008) wrote at length about the early beginnings of female participation in athletics. If a female was to participate in a sport in the late 1800s or early 1900s, accommodations such as barriers separating one female competitor from another and lighter sporting equipment were implemented. Furthermore, sports that required force to overcome an opponent or physical contact with an opponent were not acceptable for females. Historically speaking, females were expected to behave in a certain manner. “Once the ideal was accepted (females in athletics) - promulgated in endless tracts and pulpits - extreme

pressure was brought to bear on women to behave in accordance within its framework. To defy it was to be unwomanly” (Gerber et al., 1974, p. 10). In other words, once there was an acceptance of females in sport, they were still expected to behave within the social rules of what was acceptable, at the time. At no time during this time period were female athletes on equal footing with male athletes.

As time progressed, females increased their participation in sport. Unfortunately, there were still strong opinions about which sports were considered appropriate for females and which were not. There were multiple sports deemed feminine enough for females to participate in without having to cross the gender line from feminine to masculine, while others were considered too masculine. Snyder and Spreitzer (1983) surveyed adults and found that basketball, track, and softball were perceived to detract from feminine qualities, while sports such as swimming, gymnastics, and tennis were perceived to enhance feminine qualities. Colley, Nash, O’Donnell, and Restorick (1987) took this a step further, developing a ranking system that determined that individual sports (tennis, figure skating, golf, and gymnastics) were more appropriate for females than team sports. Females also had to balance society’s opinion of what a female body should look like, in comparison to the body type needed to be a successful athlete. “Ideally, sportswomen have toned bodies, yet they must avoid excess, masculine-perceived bodies. Successful athletes must be powerful and strong, yet obvious signs of this power are constructed negatively, as contradicting hegemonic femininity” (Krane, Choi, Baird, Aimar, & Kauer, 2004, p. 317). Female athletes, whether they realized it or not, were in the unenviable position of balancing the social and physical gender stereotypes of society when choosing to compete in high school athletics (Krane et al.,

2004). Finding the balance between being an athlete and considered feminine was difficult. “It is hypothesized that there may be a tendency for the female athlete to espouse more traditional or conventional sex-role attributes about the women’s role in society, in effect to apologize for her participation in a non-traditional activity” (Melnick, Vanfossem, & Sabo, 1988, p. 24).

Although the passage of Title IX lifted the political and legal barriers facing females who wished to participate in athletics, social barriers remained. Steinfeldt, Zakrajsek, and Carter (2011) gave their opinion of the social barriers facing females who wished to participate in athletics. They felt women already faced plenty of pressure about their body image. Athletes, in order to have success in their sport(s), were also supposed to have a certain body type. These two body types came into conflict, mainly because a female was supposed to have a feminine appearance. Krane et al. (2004) also wrote on the conflict facing females who wished to become athletes. His concern was that western culture emphasized a certain female demeanor and body type. Females were expected to act and look feminine, yet at the same time be an athlete, which required a female to have masculine characteristics. Sports were always perceived as masculine. Females who wished to compete in athletics, therefore, were faced with role conflict. Many believed that for women to be successful in athletics, they must exhibit masculine qualities, which in turn made a female appear less ladylike. Steinfeldt, et al. (2011) were concerned that women attempted to develop their athletic identities by using the traditional male athleticism as the guide. At the same time, female athletes tried to manage the expectations (relationships, attractiveness, heterosexuality) that went along with being a female. This conflict continued for the better part of the 20th century and

into the 21st century. Nelson, a former female basketball player, made the following statement cited by Ross and Shinew (2008), which summarized the plight of the female athlete:

How can you win if you are a female? Can you just do it? No. You have to play the femininity game. Femininity by definition is not large, not imposing, not competitive. Feminine women are not ruthless, not aggressive, and not victorious. It's not feminine to have a killer instinct, to want with all your heart and soul to win - neither tennis matches nor elected office nor feminist victories such as abortion rights. It's not feminine to know exactly what you want, then go for it. Femininity is about appearing beautiful and vulnerable and small. It's about winning male approval. (p. 43)

Females not only must battle the stereotype of how a female should look and act, but they must also do so while under the shadow of the male. With this type of struggle, it was likely difficult for a female to choose to be an athlete.

Yet another challenge was simply getting females to participate in athletics. The U.S. Department of Health and Human Services (2008) published its Physical Activity Guidelines for all Americans. In these guidelines, it was suggested that adolescent girls get 60 minutes (or more) of physical activity per week. Anything that strengthens muscle, bone, or yields aerobic benefits was positive. According to the report that accompanied the 2008 Physical Activity Guidelines, 43.7% of males and only 25.6% of females reached that goal (as cited by Women's Sport Foundation, 2009, p. 59). In other words, males were almost twice as active as females. The gender gap in physical activity widened when activity levels were traced across grade levels. According to the Women's

Sports Foundation (2009), as girls get older, they were less likely to engage in high rates of physical activity (five days or more a week), while boys remained highly involved with physical activity from childhood through high school.

Females who wished to participate in athletics faced multiple challenges. The conflict between being an athlete and being a female was chief among those challenges. Fighting the perception of how a female should behave on an athletic field was a struggle for females since the turn of the 20th century. Body image, in particular how a female should look, was yet another conflict. With many social barriers facing females, it was no wonder that males participated at a higher rate than females in athletics.

Inequity in Athletics

Statistics proved there was inequity in high school athletics prior to the 1970s. Stevenson (2007, 2008) wrote about female athletic participation numbers before and after the passage of Title IX. According to Stevenson (2007), prior to Title IX, millions of boys participated in high school sports, while fewer than 300,000 girls were participants (p. 1). With the passage of Title IX, Stevenson (2008) stated that female participation rates climbed from 1 in 27 girls participating in 1972 to 1 in 4 girls participating in 1978 (p. 2). Stevenson (2007) also reported that in 2005-2006, 53.5% of all students participated in high school athletics (p. 2). Three million females participated in sports that school year, compared to 4.2 million males (2007, p. 2). Female participation numbers definitely increased over the 40 years prior to this writing, but they were still not at the same level as male participation.

The Women's Sports Foundation (2009) studied high school participation numbers of females. The study incorporated information from the National Federation of

State High School Associations (NFSHSA). The report indicated in the 1971-1972 school year, 294,015 girls participated in athletics (cited by Women's Sports Foundation, 2009, p. 48). That number increased to 3,075,266 by the 2007-2008 school year (p. 48). The Women's Sports Foundation (2009) went on to report that even though 50% of the high school population participated in athletics, females only had access to 41.1% of athletic opportunities in that school year, while males had access to 58.8% of athletic opportunities that school year (p. 58). This information once again showed that although there were great strides in female participation rates since the passage of Title IX, it was far from equal.

The NFSSHSA (2015) monitored the participation of males and females in high school sports across the nation. They reported in the 2013-2014 school year that 4,527,994 males and 3,267,664 females participated in athletics at the high school level (p. 55). All told, 7,795,658 individuals participated in high school athletics that school year (p. 55). Looking specifically at the 2013-2014 school year, 41.4% of participants were female and 58.6% of participants were male (p. 55).

Incorporated into this section were three separate sources of information. As the information in this section indicates, males participated in high school athletics at a higher rate than females. The numbers and participation rates did not answer whether there were equal opportunities for high-school-aged females. Although there was a substantial increase in female participation numbers, they were still not equal to male participation rates. Why the participation rates were not equal, even with the Title IX legislation being enacted since 1972 was the question that needed further research.

Why Athletics are Beneficial to all High School Students

Many individuals believed high school athletics had a positive impact on both genders. “ One of the several reasons to offer sport in school is to teach young people values, skills, and habits that will make them more active, engaged, and responsible citizens” (Lopez, 2006, p. 1). The lessons high school athletics taught goes way beyond competition. Skills males and females learned while on athletic teams prepared them to be quality citizens when they became adults. Furthermore, according to Lopez (2006), those who competed in athletics became productive members of society. To summarize, students all across the nation benefited from participation in high school athletics.

The Center for Information and Research on Civic Learning and Engagement (CIRCLE) funded a study titled *Participation in Sports and Civic Engagement*, authored by Lopez (2006). This study reinforced the idea that athletic participants were more likely than their non-participating counterparts to participate in society after high school. Lopez (2006) summarized the benefits of athletics by writing “we find that on some dimensions of civic engagement, such as voting, volunteering, and news attentiveness, youth who are involved in sports report higher levels of civic engagement than their counterparts who do not participate” (Lopez, 2006, p. 1). However, a negative aspect of the study involved female athletic participation. The surveys showed only 35% of females in 2002 as compared to 49% of males being involved in athletics while in high school (p. 1). Students who participated in high school athletics were also likely to be more successful in the areas of education, the job market, and health, than their non-participating counterparts. The National Center for Educational Statistics published a report in September 2005, authored by Carlson, Scott, Planty, and Thompson, which

showed this to be true. In this study, high school students who graduated in 1992 were tracked eight years later. Three major findings were reported within the study. High school athletes were more than likely to have a post-secondary education, earn more money, and be employed full time, and more likely to participate in physical fitness activities than those who did not participate in athletics. Participating in athletics increased the chance of having a successful life. This was supported in research over the several years prior to Carlson et al.'s writing. "Consistent with previous research, this report generally found positive relationships between high school athletic participation and educational, labor market, and health outcomes" (Carlson et al., 2005, p. 13).

Being a collegiate athlete could also impact how well an individual did in the future. A study completed by Sauer, Desmond, and Heintselman (2013) concluded that those who competed in college athletics scored higher on measures of mentoring reception, mentoring ability, and emotional intelligence and earned higher salaries than their non-athletic counterparts, through the first ten years of their post-collegiate careers. Both studies by Carlson et al. (2005) and Sauer et al. supported the idea that athletes performed better than non-athletes economically after their formal education concluded.

A report by Hartman (2008), to the FLA84 Foundation, operating under an endowment from 1984 Los Angeles Olympics funds, presented several findings concerning the benefits of athletics in the life of children. Among the findings in this report was his discovery of a positive correlation between academic achievement and participation in high school athletics. Hartman (2008) also found that students who participated in athletics tended to outperform non-athletes academically. Hartman found the research in this arena "has time and time again demonstrated a strong and positive

correlation between high school participation and academic achievement” (p. 3). This research supported the bond between athletic participation and success in the classroom.

Videon (2002) discovered the same conclusion as Hartman, but provided a different explanation. “These findings indicate that some of the association between athletics and positive academic outcomes is due to the tendency for better students to pursue athletics and are not a consequence of participation” (Videon, 2002, p. 431). For students to participate in athletics, many schools had a minimum set of requirements that must be met for eligibility. These requirements included maintaining a certain grade point average, being enrolled in a certain number of classes, being in attendance the day of practice or an athletic contest, and maintaining good school citizenship.

“Requirements to maintain a minimum grade point average to play on sports teams are believed to provide an incentive for student athletes to succeed academically” (Cohen, Taylor, Zonta, Vestal, & Schuster, 2007, p. 81). In other words, if a student wished to participate in athletics, he or she was required to be a good school citizen, have good attendance, and pass classes. High school athletics provided a positive channel for adolescents to meet and participate in an activity with positive role models and students.

“Participation in sports, which has important direct benefits, is one socially sanctioned arena in which adolescents’ energies can be positively channeled” (American Psychological Association [APA], 2002, p. 8). Although being physically active did not necessarily mean that a high-school-aged student was involved in athletics, there was a high likelihood that those who participated in sports got more exercise and were healthier than those who did not.

Metzl (2002) was a nationally recognized sports medicine physician at New York City's Hospital for Special Surgery. He wrote numerous books about participation in athletics, including a 2002 work titled *The Young Athlete: A Sports Doctor's Complete Guide for Parents*. In this book, he identified the following reasons for youth to be involved in athletics: physical benefits, personal benefits, and social benefits. Among the physical benefits of athletics, he listed fitness, stress release, and developing healthy habits. Metzl (2002) also described the benefits of participation in athletics. Athletics were a way for students to develop general fitness, as well as establish lifelong habits for good health. Participating in athletics could go a long way toward recognizing and releasing stress. Young males and females, while participating in athletics, could clear their minds of outside pressures, such as academics or social stressors. As athletes participated in athletics, they learned healthy habits, such as proper nutrition and how to properly exercise. Participants in athletics also gained an increased sense of awareness of their bodies and how they responded to various physical stress, mental stress, and environmental stress (Metzl, 2002).

Personal benefits for youngsters was another positive benefit that athletes received. Metzl (2002) listed several personal benefits, including the following: valuing preparation, resilience, attitude control, leadership opportunities, identity and balance, time management, and long term thinking ability. Learning social skills was also identified by Metzl (2002) as another benefit of athletic participation. While participating in athletics, athletes developed relationships with teammates, as well as learned team work. Athletes also learned diversity; they learned how to have positive relationships with adults, and they learned how to participate in their communities. All of

these skills played into the advantages athletes had over non-athletes both in school and after graduation.

A study conducted by Seefeldt, Ewing, and Walk (1992) surveyed thousands of individuals ages 10 to 18 and asked them why they participated in sports. The reasons included 'to have fun,' 'to do something they are good at,' 'to stay in shape,' 'to learn new or improve skills,' and 'to play as part of a team.' Numerous individuals who were surveyed selected more than one of those reasons. It is important to note that winning was not very high on the list of responses chosen by participants of the study. To 'win' was rated eighth by students who participated in school sponsored athletics and was not even listed by non-school sport participants (Seefeldt et al., 1992). The results of this survey showed youths were more concerned with the social and physical benefits of sports than they were with winning.

As the multiple sources provided in this section showed, there were several advantages to participating in high school athletics. An individual's physical and mental well-being was positively impacted by being a high school athlete. There was a positive correlation between academics and being a participant in athletics. Economically, athletes were more successful than non-athletes. Being a high school athlete put a person in positive situations with positive peer interaction and role models.

Why Athletics are Good for Females

Sources summarized in this section, came to the same basic conclusion concerning females and sports: participation in athletics and sports benefits females. Hanson (2007) studied young women's access to sport and science, areas traditionally dominated by males. "Even though women have often been regulated to second-hand

citizenship in the sports arena, women who do participate in sports most likely benefit from the same socialization, integration, status, and recognition that benefit male athletes” (Hanson, 2007, p. 156). Hanson (2007) also stated, “Women athletes have been found to be more achievement oriented and self-confident than other women” (p. 156). In conclusion, Hanson (2007) felt that “the domain of sports, still male dominated, encourages independence, competition, and aggression—the same traits that tend to be associated with women’s success” (Hanson, 2007, p. 159).

The Women’s Sports Foundation (2009) was founded in 1974 by King. The foundation’s most recent report at the time of this writing, titled *Her Life Depends on It II*, was an in-depth look into the relationship between the female and physical activity. “*Her Life Depends on It II* provides an updated, and even more comprehensive, review of the existing research on the links between sports and physical activity and the health and well-being of American girls and women” (Women’s Sports Foundation, 2009, p. 2). The Women’ Sports Foundation was at the forefront of researching female participation in sports, including its benefits and risks. The foundation also worked to ensure that females had the same rights and opportunities as male did in the world of athletics. In the executive summary of the 2009 report, there were multiple finding listed. The findings in this report mentioned items such as female athletes being less likely to smoke, use drugs, have unprotected sex or sex with multiple partners, or consider, plan or attempt suicide than female non-athletes (Women’s Sports Foundation, 2009). .

Females who participate in athletics were also presented with an opportunity that non-athletes were not. They were given a chance to exercise, compete, and learn how to work with others. “Moreover, along with developing new skills, students may learn the

value of teamwork as well as experience healthy competition and improve physical strength and ability” (Ebie, 2005, p. 2). There were also social benefits to physical fitness, which were not related to the physical aspect of athletics. “Involvement in these activities allows adolescents to broaden their social networks and develop new peer relations; practice their social skills, physical, interpersonal skills; learn how to communicate effectively; and learn vital skills” (Hoffman, 2006, p. 276). All athletes, according to these studies, could benefit from participation, including females. Lopez (2006) discovered through surveys that individuals who participated in high school athletics were more prone to be active in society as adults. Yet another reason to encourage participation in athletics included the values taught in most sports. Being involved in athletics had positive effects on both genders in the civic arena according to the study, but there was a profound effect on females. Lopez (2006) stated in her study that females participating in athletics were more likely to volunteer, register to vote, follow current events, and feel more comfortable making a public statement than those who did not participate in sports. The conclusion of this study was clear; females who participated in athletics were more self-confident, had more social skills, and could communicate more effectively than those who did not participate in athletics.

When studies delved deeper into the subject of females and their participation in athletics, several interesting items were discovered. According to a study completed by Monaco and Gaier (1992), females in mixed-sex groups were less likely to be group leaders regardless of their leadership style or dominance level. Monaco and Gaier continued, saying females relied on outside support to achieve success and they tended to have lower confidence and self-regard. Furthermore, females in mixed-sex groups found

less opportunity to exhibit leadership skills. The authors concluded that females may be just as competent as males in leadership, but cultural forces hindered females from demonstrating leadership skills in social contexts. In other words, females did not get the chance to exhibit leadership skills if they were in mixed-gender groups. This was where female athletic teams come into play. Female athletics provided the arena for females to grow as individuals, practice, and grow all types of skills. “Sports opportunities for girls have expanded in recent years, and gender stereotypes have loosened, leading us to believe that the benefits of participating in sports for girls may be stronger now than they were a decade or two ago” (Videon, 2002, p. 423). As athletics became more available to females, there was hope that the positives of athletic participation would have an impact on the females who chose to participate.

Reasons Males and Females were not Participating in Athletics

An abundance of research existed regarding the benefits of athletic participation for both males and females. Likewise, there was ample research, which appears later in this review of literature, to show the negative aspects of both participation and non-participation in athletics. What was not studied in depth was why students chose not to participate in athletics or why they began participating in athletics but discontinued participation as they grew older. The Hedstrom and Gould (2004) discussed and investigated several aspects of youth sports. Among the topics researched included an involvement, participation, and dropout. There were several reasons young people became disenchanted with athletics. One of the main reasons students stopped participating in athletics was related to confidence, or lack of confidence. “Children who do not have that sense of competence are more likely to not become involved or to

discontinue involvement” (Hedstrom & Gould, 2004, p. 21). Simply stated, students would not compete in or would stop competing in sports if they did not have confidence in their abilities. Students who felt competent would participate or continue to participate in athletics. “Children who feel competent about their physical abilities have been found to more often participate and persist in physical activities” (Hedstrom & Gould, 2004, p. 21). Confidence, according to Hedstrom and Gould (2004), played a big factor when it came to participating, or not participating, in athletics. Hedstrom and Gould (2004) added this that personal issues (self-esteem and skill competence) and social factors (coach-athlete interactions and peer relations) could also lead to young people discontinuing athletics.

One of the more well-known studies of adolescents and the various aspects of participation in sports was published by Seefeldt and Ewing (1996). In this study, the authors paid close attention to why children aged 10 to 16 chose not to participate. They also looked at why adolescents chose to drop out of sports. Seefeldt and Ewing (1996) discovered that both males and females in this age group listed ‘not having fun’ and ‘no longer interested’ as the two biggest reasons for dropping out of athletics. Students between the ages of 17 and 18 also selected ‘not having fun’ and ‘no longer interested’ as reasons for not participating, but these students selected wanting to get a job as the main reason for quitting. This study researched specifically why females chose to not participate (Seefeldt & Ewing, 1996). Females rated items such as ‘coaches placing too much pressure on me,’ ‘there are too many practices,’ ‘games were scheduled at times I could not attend,’ ‘I did not feel I belonged with the team,’ ‘I was embarrassed by how I looked in my uniform,’ and ‘I could not afford the equipment’ higher than males did, as

reasons they did not participate. Reasons specific to male non-participation was also touched on. Males selected reasons such as pressure, injuries, physical stress, and sports conflicting with other areas of interest as reasons for not participating. Both genders in this study selected 'I was no longer interested' as their first reason for not participating and 'it was no longer fun' as their second reason (Seefeldt & Ewing 1996).

Based on the research in this section, it is clear that there were multiple reasons that male and female students chose to quit sports. Students must have confidence in order to be successful in athletics. Coaching, in some cases, also had a negative impact on participation rates. A variety of other items, such as pressure, not being interested, and not having fun also impacted a student's decision to quit sports. The studies conducted by Hedstrom and Gould (2004), and Seefeldt and Ewing (1996) concluded that there were various reasons individuals chose to quit sports.

Negative Aspects of Participating in Athletics

Although participation in high school athletics had benefits for both males and females, some literature suggested there were also negative aspects of athletic participation. Some researchers suggested that athletes were forced to deal with additional stressors that non-athletes simply did not experience. Those stressors included time management, dealing with teammates, and the pressure of competition. The concern among researchers was that those stressors led athletes to seek ways, positive and negative, to relieve stress. "High school students involved in athletics may face additional stressors and engage in more problematic behaviors, such as drinking, dieting, and gambling, than non-athletes, especially as they near the end of their high school

experience” (Geisner, Grossbard, Tollison, & Larimer, 2012, p. 156). In particular, alcohol use was a major concern identified by the studies listed in this section.

Experts contended that high-school-aged students who participated in athletics were more likely to consume alcohol than those who did not. “The research on athletics and alcohol use among adolescents, while limited, suggests that there is an association between sports participation and drinking behaviors in this population” (Zamboanga, Olthuis, & Grossbard, Martens, Grossbard, & Van Tyne, 2012, p. 141). A study conducted by Wechsler, Lee, Nelson, and Lee (2001) concluded college-aged students who competed as high school athletes not only drank more often than non-athletes, but also drank higher quantities than non-athletes and engaged in high risk behavior associated with alcohol, such as driving when impaired and sexual intercourse. Denham (2011), of Clemson University, also studied this topic. The results of his study showed that students who participated in sports were more likely to consume alcohol more frequently than non-athletes. According to this study, female athletes were also more susceptible and more likely to use marijuana than male athletes.

A study funded by the Iowa Girl’s High School Athletic Union, authored by Lutz, Cornish, Gonnerman, Ralston, and Baker (2009) also discovered some alarming trends concerning alcohol consumption in both males and females. “Regarding the use of alcohol, a larger proportion of men than women in the total sample reported any alcohol use in the past 30 days (81% compared to 62%)” (Lutz et al., 2009, p. 130). The study also concluded that both males and females who reported sports as their top priority used alcohol more often than those who did not consider sports a top priority. Factor into that the number of students who participated in athletics and a relationship between the two

could be made. “It is interesting to note that the percentage of high school seniors who report alcohol use is similar to the percentage who participate in extracurricular school activities” (Hoffman, 2006, p. 275). Alcohol was obviously a concern to researchers who studied the subject of negative influences in athletic participation.

These studies all correlate with one another. Unfortunately, one common conclusion can be made from these studies: researchers felt that athletes, both male and female, consumed alcohol at a greater risk than their non-athletic peers. Although there were positive benefits of athletic participation, it is important to note there was concern among researchers that there was a link between being an athlete and a higher level of alcohol consumption. While reviewing the studies, alcohol consumption was at the top of the negative aspects of athletic participation.

Health Risks for Female Athletes

As participation in athletics becomes more important for females, they become at-risk for what has been named the Female Athlete Triad. “In 1992, the Task Force on Women’s Issues of The American College of Sports Medicine coined the term Female Athlete Triad to describe these interrelated pathologies” (Curry & Matzkin, 2103, p. 18). All athletes, male and female, young and old, place stress on their bodies as they train and compete in a wide variety of sports. For females the stress, both physical and psychological, of athletics may lead to the development of characteristics of the Female Athlete Triad within their bodies. Psychological stress happens in the form of school work, social factors, and time management. Relationships with friends, family members, as well as romantic relationships can also cause psychological stress. The physical aspect of stress may occur when a female becomes a participant in athletics or has issues with

her body image. This type of stress leads females into making changes in eating habits. Most often females who are athletes struggle to consume the proper amount of nutrients. This leads to what is called an energy deficiency. According to Atkins (2011), energy deficiency was the primary cause of females suffering from the Female Athlete Triad. “Simply put, the amount the female eats is not enough to meet the caloric, or energy, demands of her daily exercise regime, resulting in increased demands on the body’s systems” (Atkins, 2011, p. 3). There were many factors that contributed to the Female Athlete Triad, both psychological and physical, that coaches and female athletes needed to be aware of.

As females begin their participation in athletics, they risk having trouble with their health. Athletics, according to the studies cited earlier, could be a benefit to female athletes. There were concerns about the health of female athletes that were specific to their gender. “Female athletes have also developed their own unique set of medical problems, with the Female Athlete Triad (FAT) being one of the most relevant” (Marquez & Molinero, 2013, p. 1011). As females became more serious about their performance, there was the potential for females to have negative things happen physically. Multiple experts weighed in on this topic. Korsten-Reck (2011) was concerned that the demands facing a female athlete, along with a society’s opinion of what an attractive female’s body should look like, led to serious health risks in younger females. Females needed to be careful when training to compete in high school athletics. Although all humans can benefit from exercise and eating right, there was always the potential to do more harm than good. Needless to say, females needed to be very careful with the amount of exercise they participated in, as well as their food consumption.

Female athletes can fall into either one or several categories of the Female Athlete Triad. According to Curry and Matzkin (2013), athletes who had one or two of the components of the Female Athlete Triad were more common than those who had all three components. The first category female athletes may fall into is disordered eating. The second category of the Female Athlete Triad is amenorrhea (absence of a menstrual cycle). The third and final category of the Female Athlete Triad is osteoporosis. All three of these categories are impacted by a female's diet and are also considered related to one another. "Low energy availability—total dietary energy in (calories in) minus total exercise energy expended (calories out)-is considered the key cause" (Payne & Kirchner, 2014, p. 187). A young girl not eating properly, then exerting herself with physical activity, is prone to multiple health issues. This is why a young female who is not taking care of her body may suffer from the Female Athlete Triad.

The first category of the Female Athlete Triad is disordered eating. Several different eating disorders, such as Anorexia Nervosa and Bulimia Nervosa, can negatively impact female athletes. "Disordered eating ranges from poor eating habits such as skipping meals to psychiatric conditions such as anorexia nervosa, bulimia, or binge eating disorder" (Payne & Kirchner, 2014, p. 188). Individuals who suffer from one of these two forms of disordered eating suffer from one extreme of food consumption or the other. Those who suffer from Anorexia Nervosa eat far too little food. Bulimia Nervosa involves too much food consumption, followed by the individual purging of their system by vomiting. Both of these forms of disordered eating are defined:

"Anorexia Nervosa is an eating disorder characterized by extensive fear of gaining weight and one's feeling of being obese" (Pavlidou & Doganis, 2007, p. 126).

People who suffer from this disorder have a very unhealthy view of what an ideal body looks like. These individuals then go through extreme measures, such as ignoring their appetite yet exercising excessively. Sufferers of Anorexia Nervosa are always attempting to lose weight. Individuals who are impacted by this particular disorder tend to be extremely thin, although some have the disorder but would not be considered extremely thin (Pavlidou & Doganis, 2007).

“Bulimia is a disorder characterized by extreme food consumption and followed by self-caused vomiting” (Pavlidou & Doganis, 2007, p. 126). Much like Anorexia Nervosa, individuals with Bulimia Nervosa have an unhealthy view of what the ideal body looks like. Individuals who suffer from the disorder will eat an extremely large amount of food and then force themselves to vomit. When they vomit, a large majority of the time that is done in private, which makes this disorder harder to observe and notice (Pavlidou & Doganis 2007).

The National Collegiate Athletic Association (NCAA) published a coach’s handbook titled, *Managing the Female Athlete Triad* (NCAA Coaches Handbook, n. d.). This handbook assisted collegiate coaches of females in the identification and combating of the Female Athlete Triad. In this handbook, they listed the following items as signs and symptoms of disordered eating: 1) amenorrhea; 2) dehydration; 3) gastrointestinal problems; 4) hypothermia; 5) stress fractures; 6) significant weight loss; 7) muscle cramps, weakness, or fatigue; and 8) dental and gum problems (NCAA Coaches Handbook, n. d., p. 16). There are also psychological and behavior signs and symptoms of disordered eating. They are: 1) anxiety and/or depression; 2) claims of ‘feeling fat’ despite being thin; 3) excessive exercise; 4) excessive use of restroom; 5) unfocused,

difficulty concentrating; 6) preoccupation with weight and eating; 7) avoidance of eating and eating situations; and 8) use of laxatives, diet pills, etc. (NCAA Coaches Handbook, n. d., p. 16). Females, along with coaches and parents, need to be aware of the various characteristics of disordered eating when they are present and consult a doctor when needed. When a doctor screens a female, there are certain items they are looking for. Payne and Kirchner (2014) suggested looking for risk factors such as calorie restriction practices, vegetarianism, a history of injuries, extended exercise periods, or increased training, particularly sport-specific training when assessing a female athlete. Another way to combat the Female Athlete Triad is to monitor and make sure an athlete is eating properly. Depending upon the size and age of the athlete, it is imperative the female athlete in question eat a well-balanced diet. Calcium is an important part of that diet. Female athletes should also pay attention to their weight and menstrual cycle. It is suggested female athletes track their menstrual cycles using a calendar to ensure that their cycle is regular (Metzl, 2002).

According to the National Association of Anorexia and Associated Disorders (ANAD, 2011) website, eating disorders were most common among adolescent and young adult women. The ANAD reports that 86% of all cases reporting the onset of an eating disorder have been reported by the age of 20. 43% of all cases have been reported by females between the ages of 16 – 20 (ANAD, 2011, p. 1). Female athletes were at an increased risk for experiencing an eating disorder, especially certain types of female athletes. According to Donaldson (2003), female athletes who participated in endurance sports were at the absolute highest risk to suffer from an eating disorder. Examples provided by Donaldson included gymnasts, ballet dancers, figure skaters, athletes who

trained at a young age, and highly competitive athletes. Female athletes, more so than their non-participating counterparts, needed to intake the proper amount of calories. If they failed to do this, they could fall into any of the categories listed earlier in this section. In a study by Neumark-Sztainer et al. (2007), as cited by the Women's Sports Foundation (2009), it was discovered that half of all adolescent girls used health-compromising weight control techniques such as skipping meals, fasting, smoking cigarettes, vomiting, and taking laxatives. According to this research, overweight females were more likely to use these strategies to lose weight. According to the CDC (2008), as cited by the Women's Sports Foundation (2009), more than twice as many girls as boys used pathogenic weight control techniques. Girls were more likely than boys to fast for 24 hours or longer (19% to 8%), use diet pills, powders, or liquids without a doctor's advice (13% to 5.5%), or vomit and take laxatives (8% to 3%) to lose or avoid gaining weight (as cited in Women's Sports Foundation, 2009, p. 46). Female athletes were more likely to fall within the Female Athletic Triad than non-athletes. As stated by Pernick et al. (2006) and cited in the Women's Sports Foundation (2009), pathogenic weight control also occurred in younger female athletes, with 19.6% of female high school athletes reporting disordered eating in the past month (as cited in Women's Sports Foundation, 2009, p. 47).

The second category of the Female Athletic Triad is Amenorrhea. Experts such as Donaldson (2003), Metzler (2002), and Payne and Kirchner (2014) agreed that Amenorrhea could affect females in two different ways: primary and secondary amenorrhea. A young female would be suffering from primary amenorrhea if she had not started her menstrual cycle (menses) by the age of 16. A female would be suffering from

secondary Amenorrhea if her menstrual cycle began, but then was absent for a period of six months or a female missed her last three cycles. There were several causes of Amenorrhea. If a young woman were to get pregnant, she would not menstruate. There were other causes of Amenorrhea that could affect a female, including pituitary dysfunction and premature ovarian failure. Metzl (2002) felt that when a female's body fat drops below 16 to 17%, she could start to develop Amenorrhea. "When girls are amenorrheic, their ovaries don't make an egg and their estrogen level begins to drop, since egg production stimulates estrogen production" (Metzl, 2002, p. 122). When looking at a female athlete, the most common cause of Amenorrhea was related to the calorie intake and body fat on the female in question. If disordered eating occurs, this may result in a female's menstrual cycle being affected.

Osteoporosis is the third category of the Female Athlete Triad. Osteoporosis is a condition in which bones in a person become weak. Individuals who suffer from osteoporosis are more likely to suffer from broken bones and fractures than those who have fully developed bones. Metzl (2002) described the two types of bone cells: Osteoblasts (which makes bone) and osteoclasts (which breaks down bone). These two types of bone cells work in balance and are constantly working to upgrade and strengthen bones. If a young lady had low estrogen, according to Metzl, these bone cells fall out of balance and the bones start to break down. Female athletes who burn more calories than they take in are at risk for producing lower levels of estrogen. Lower levels of estrogen lead to an over-abundance of osteoclasts cells, which in turn leads to bones being broken down more quickly than they are being upgraded. In a study by Borer (2005) and cited by the Women's Sports Foundation (2009) it was determined that girls have 83% of their

bone mass by the age of 12 (as cited in Women's Sports Foundation, 2009, p. 21).

Furthermore, in a study by Beaudoin and Blum (2005) and cited by the Women's Sports Foundation (2009), it was concluded that women have attained 98% of their skeletal mass by age 20 (as cited in Women's Sports Foundation, 2009, p. 21). Donaldson (2003) stated that from 60% to 70% of peak bone mass in women is acquired before the age of 20 (p. 323). Women build bone to a maximum age of 34 and then start losing bone at 0.3% to 0.5% a year after age 35 (Donaldson, 2003, p. 323) If a young female athlete does not lay down a normal amount of bone during her adolescence, she will always have decreased bone mass for the remainder of her life.

The experts (Beaudoin & Blum, 2005; Donaldson, 2003; Gueldner et al., 2008; Metzl, 2002) agreed that a large amount of bone mass was developed before the age of 20. It was extremely important that all young females, athletes or not, take in the proper amounts of calories to ensure that bone was being formed in the correct manner. Females who participated in sports at a young age, and used more calories than their non-athletic counterparts, were at a higher risk of suffering from Osteoporosis. Although the research may slightly vary, it could be concluded that young females attained a large percentage of their skeletal mass in their younger years. In a study by Gueldner et al. (2008) and cited by the Women's Sports Foundation (2009), it was discovered that 25% of women in suburban U.S. areas had a low bone mass (as cited in Women's Sports Foundation, 2009, p. 20). When taking all of this information about Osteoporosis together as a whole, it was determined that the younger years of development were key in preventing bone breaks as a female ages.

A female is suffering from the Female Athlete Triad if one of these described characteristics items are occurring. Simply put, if a female athlete burns more calories than she consumes on a regular basis, she is putting herself at risk of suffering the Female Athlete Triad. This can occur because a female is not eating properly or because she is exercising to the extreme. The more a female struggles with calorie intake, the more likely she is experiencing issues within the Female Athlete Triad. As explained in detail, the more a female struggles with weight (either physically or mentally), the more likely she is to suffer from an eating disorder. When a female struggles with calorie intake, she is also prone suffer from osteoporosis. Osteoporosis leads to a likely loss of bone density, leaving females prone to suffer from bone breaks as they progress through life. According to Curry and Matzkin (2013), a stress fracture, which is a sign of Osteoporosis, was the most common manifestation of the Female Athlete Triad. The lower a female's body fat index goes, the more likely she is to suffer from either primary or secondary Amenorrhea, depending on her age. All of the above health items are related to calorie intake, or a lack of calorie intake.

It is imperative for all females to monitor all aspects of their health to make sure they do not fall victim to any aspect of the Female Athlete Triad. Females who are physically active are the ones who are most likely to experience symptoms. Payne and Kirchner (2014) and Marquez and Molinero (2013) concluded that low energy availability was the underlying cause of the Female Athlete Triad. Hobart and Smucker (2000) concluded that a female with a history of Amenorrhea was the easiest way to detect the Female Athlete Triad in its earliest stages. The female's menstrual history was linked to bone density. Consistent patterns of Amenorrhea, according to Hobart and

Smucker, were found to have a linear correlation with measures of bone density. Metz (2002) suggested that parents ask the following four questions about their daughter's health: 1) Has my daughter started her period by age 15; 2) Has my daughter had a stress fracture; 3) Is my daughter taking in enough calcium; and 4) Does my daughter look too thin? If the answer to any of these questions was yes, or even maybe, then it was suggested a parent take their daughter to the doctor for further tests. If a parent is concerned about even one of these issues, their daughter runs the risk of suffering from the Female Athlete Triad. All of these issues are ultimately related to one another.

Although the Female Athlete Triad was a threat to the safety of the female athlete, there were several other health issues that could negatively affect females. Females who are overweight or obese can suffer from numerous health issues. The CDC (2015) reported that 10.8% of all young females were considered obese (p. 39) and 36.3% described themselves as overweight (p. 157). An article written by Wyatt, Winters, and Dubbert (2006) concluded that over the 30 years previous to his writing, obesity reached epidemic proportions worldwide, contributing to an estimated 300,000 – 400,000 premature deaths in the U.S annually and creating tremendous medical and health-care costs (cited by Women's Sports Foundation, 2009, p. 16). Ogden, Carroll, Kit, and Flegal, (2012) stated that over 78 million Americans were considered obese (p. 2), which included 35.3% of all women and 33.3% of all men in the country (p. 1). In the same study, Ogden et al. (2012) indicated there were a substantial number of overweight girls (15.0%) between the ages of 2 to 19 (p. 2). In 1999, 13.8% of females in this age group were considered obese; that number increased to 15.0% in 2010 (p. 5) Not only was

obesity a problem throughout the world, but its impact on the U.S. was potentially devastating.

The mental health of female children was also at risk. Our young female children were engaged in a constant struggle to maintain a positive outlook on life. Parents of females needed to be aware of issues such as depression and body image. In a study conducted by Clark and Tiggeman (2006), 49% of surveyed nine to 12 year-old-girls rated their body as too heavy (as cited in Women's Sports Foundation, 2009, p. 43). According to the Mental Health America (2015) website, 12 million women in the U.S. suffered from clinical depression, with females between the ages of 14 and 18 suffering from higher rates of depression than males (p. 1). Studies by Devane, Chiao, Franklin, and Kruep (2005) and Kessler et al. (2003), both cited by the Women's Sports Foundation (2009), showed that depression in women often co-existed with other seriousness illnesses, such as eating disorders or post-traumatic stress disorder.

The health of the female athlete was obviously very important and should be monitored. Since female athletes put more stress on their bodies than their non-athletic counterparts, they were more at-risk of falling into unhealthy habits. Although athletics promotes a healthy life style and diet, dangers still exist. It is essential all athletes eat the proper amount of calories. For females, not only should they eat the proper amount of calories, but they also need to monitor their menstrual cycle to make sure they are healthy in that regard. All of the literature reviewed also showed that females were at a higher risk for Osteoporosis than males, leading to a higher likelihood that a female may suffer from Osteoporosis. Females who competed in athletics were less likely to suffer from being overweight or obese, but many did not take in the proper amount of calories to

maintain good health. To summarize, females who participated in athletics were likely to lead healthy lives, but they needed to closely monitor their health.

The Current Reality of High School Aged Student

Both male and female children face tremendous pressures as they navigate through their adolescent and teen-age years. Young females face many pressures as well. The American Psychological Association (APA, 2002) listed peer relationships, dating and sexual behavior, family relationships, school, work and community as issues that impacted adolescents. As children become young adults, they encounter numerous social and peer pressures. On top of this, young adults are under tremendous pressure to perform well in school, contribute to the family unit, and fit in with a peer group. This section presents a summary of three separate studies that illustrated what high-school-aged students deal with in the areas of alcohol use, marijuana use, and sexual behavior. The three studies are the 2013 Youth Risk Behavior Surveillances (Eaton et al., 2013) conducted by the Center for Disease Control and Prevention, a 2002 study presented by the APA, and a report issued by the Women's Sports Foundation in 2009. All three of these studies reached a similar conclusion: children, adolescents, and teenage males and females were engaging in behaviors that put them at-risk.

The Centers for Disease Control and Prevention, under the umbrella of the U.S. Department of Health and Human Services Department, conducted Youth Risk Behavior Surveillances annually. Information in this review of literature is from the 2012 student surveys, published in June 2013 (Eaton et al., 2013). This surveillance investigated, through the use of surveys nationwide, six areas of concern among America's youth in its introduction. They were 1) behaviors that lead to unintentional injuries and violence; 2)

tobacco use; 3) alcohol and other drug use; 4) sexual behavior that leads to unwanted pregnancy and sexually transmitted diseases (STD's), including human immunodeficiency (HIV) infection; 5) unhealthy dietary behavior; and 6) physical inactivity (Eaton et al., 2013, p. 1). Exactly 13,633 total surveys, from 148 schools, were included in the 2013 report (Eaton et al., 2013, p. 3). This report also concluded that 30 days prior to taking the survey, 39.4% of respondents had drunk alcohol, 23.4% had used marijuana, 15.7% had smoked, and 8.8% had used smokeless tobacco. In the three months leading up to the survey, 46.8% of respondents reported having sexual intercourse, 34% reported having sexual intercourse in the three months leading up to the survey, and 15% reported having four or more sexual partners in their lifetime (Eaton et al. 2013, p. 1).

Unfortunately, the statistics listed from the 2013 Youth Risk Behavior Surveillances were trends identified prior to that study. The APA (2002) published a study, *Developing Adolescents: A Reference for Professionals*, which detailed the risk taking behavior of adolescents. This study, which defined an adolescent as anyone who fell between the ages of 10 to 18, illustrated multiple issues that plagued out nation's young adults for the last several decades prior to this writing. This study included information from a report from the 1999 CDC Youth Behavior Survey (as cited in APA, 2002). Eighty-one percent of all high school aged students have tried alcohol, 47% have tried marijuana, 32% of individuals tried alcohol before the age of 13, and 11% have tried marijuana by that same age (as cited in APA, 2002, p. 29). It was also reported that half of high school aged students have had sexual intercourse, with 36% of these individual reporting having intercourse during the three months leading up to this survey (as cited in

APA, 2002, p. 30), with 8% of these individuals having sexual intercourse before the age of 13 (as cited in APA, 2002, p. 30). Although this information was over a decade older than the 2013 Youth Risk Behavior Surveillances, the same concerns with alcohol, marijuana, and sexual intercourse were still present at the time.

The Women's Sports Foundation (2009) report, *Her Life Depends on it II, Sport, Physical Activity, and the Well-Being of American Girls and Women*, focused specifically on females and their well-being. The foundation gathered all types of information related to their health and athletic participation. While the first two reports mentioned in this section of the review of literature focused on the well-being of both genders, this report focused specifically on females. The results of this study were powerful and showed that young females were impacted by a variety of factors, such as alcohol, marijuana, and the pressure to have sexual intercourse. It was reported by the Women's Sports Foundation (2009) that 76% of all females have reported trying a drink, with 45% of them having a drink within the last month (p. 31). Illicit drug use (including marijuana), happened at least once in 1 of 5 eighth grade girls, 1 of 3 10th grade girls, and 4 of 10 12th grade girls (Women's Sports Foundation, 2009, p. 32). In 2007, 46% of females reported having sexual intercourse at least once (Women's Sports Foundation, 2009, p. 36).

These three reports all came to the same conclusion. Young students struggle with alcohol, marijuana use, and they were having sexual intercourse at far too young of an age. The studies did not go into great detail as to the reasons why this was happening or how to prevent it. If our students participated in athletics at a higher rate than they do, it could be argued that the positive aspects of athletics could lead to these numbers decreasing.

Summary

It has only been within the 40 years prior to this writing that females gained the right to participate in high school athletics. Prior to the passage of the Title IX legislation, females were not allowed the same access to athletics as their male counterparts. With the passage of the Title IX legislation, it took some time to integrate females into the world of high school athletics. Females had to combat numerous stereotypes concerning their alleged inability or desire to compete in the same sports as males. The role conflict a female struggled through, trying to keep her female characteristics while competing in athletics, which supposedly required male characteristics, was a challenge.

This review of literature provided multiple studies that concluded that high school athletics had positive benefits for those who chose to participate. The skills and lessons taught by high school athletics could impact all participants in a positive manner. In regard to females, participation in athletics could teach them self-confidence, which could then transfer to other aspects of their life. Females who participated in athletics tended to have better grades and attendance than those who did not participate. The overall health benefits that came with athletics were yet another reason to participate in athletics. Positive habits were learned during athletic participation which could then transfer into their future lives.

Females who participated in athletics did need to monitor their health to ensure that they remained healthy. The Female Athlete Triad could present a real danger to a young female's life, if left unchecked. The female body undergoes numerous changes during the adolescent years. The female's menstrual cycle begins during that part of their

life. Bone development and overall growth occur at a high rate at this time. Female athletes need to make sure that they are taking in the necessary amount of calories to remain healthy while participating in a sport. There are also studies, included in this review of literature, which showed a link between athletic participation and alcohol consumption.

This review of literature touched on multiple aspects of female participation in athletics. Females had a long journey in their struggle to gain equality in the athletic arena. The struggle was discussed in the first part of this review. The reality of high school aged students current at the time of this writing showed the struggles facing young people as they journey through their adolescent years. Positive aspects of athletics were touched upon, with an emphasis on positive aspects of participation on females. Negative aspects of athletic participation, along with health factors specific to females, were also touched upon.

Chapter Three will explain the research aspect of this study. Surveys were distributed to ninth and 12th grade students within the high school of study to gauge their opinions on several aspects of athletic participation and non-participation. Focus groups were also conducted at a local university to further explore the topic. Athletic participation data from the high school of study were also gathered and reviewed to look for trends in participation in male and females. A more in depth explanation of this study begins in Chapter Three.

Chapter Three: Methodology

Each year, summer ends and teenagers across the nation, both male and female, start high school. Some of these individuals begin high school for the first time, while others are return for the sophomore, junior, or senior year. As these young males and females attend high school, they are faced with many choices. Among these choices are whether or not to participate in high school athletics. The participating high school in this study offered a variety of sports for students who wished to participate in athletics. This particular high school offered sports, such as tennis, golf, track and field, cross-country, volleyball, soccer, swimming, and basketball, providing participation teams for both males and females. For the purpose of this study, sports that provided both male and female opportunity for participation were referred to as related sports. Other sports, such as football, cheerleading, wrestling, and dance, which catered to one gender only were considered unrelated sports. Although the researcher believed that all extra-curricular activities had the potential to positively impact participants, for the sake of this study only related extra-curricular sports were researched.

The focus of this study was to investigate why females stopped participating in high school athletics as they grew older. Consideration was also given to why males decreased their participation, as well. Male and female students, enrolled in the ninth and 12th grades within the participating high school were surveyed, in an attempt to find out why they chose to participate, or not participate, in high school athletics. By surveying both genders and two different age groups, a comparison of athletic participation and non-participation was possible in the following categories: 1) male and female freshmen,

2) male and female seniors, 3) males freshmen and seniors, and 4) female freshmen and seniors.

An additional component of this study was provided by focus groups conducted at a local university. Male and female college students, who were recent high school graduates, fell into categories based on gender and level of participation in athletics while in high school and college. The opportunity to discuss the potential reason(s) for choosing or not choosing to participate in athletics with former high school students, recently graduated from high school, provided this study with additional information and data to analysis to answer the study research questions. The opinions of the focus group participants, combined with the survey results of the male and female high school freshmen and seniors, resulted in the gathering of meaningful data.

The final component of this study was the secondary athletic participation data gathered from the high school of study. The school's athletic director was required to gather and present eligibility rosters to the state, which provided the researcher participation data from the 2011-2012, 2012-2013, and 2013-2014 school years. Participation numbers from the high school of study, with no names, were provided. This data was helpful when exploring existing opportunities for female athletic participation. This information was also used, along with the survey data, to look for trends in participation.

Research Questions

The following research questions guided this study:

- 1) Do females have a lower participation rate in athletics than males in the high school of study?

- 2) Does the participation rate of females in athletics decrease from freshman to senior year at the high school of study?
- 3) Does the participation rate of females in athletics decrease at a greater rate than males within the high school of study?
- 4) What perceptions do males and females have about the factors for participating or not participating in athletics, challenges facing those who chose to participate, and participation by females in athletics?

For the purposes of organizing the multiple sub-studies that went into Research Question 4, the data and correlating discussion of findings were structured in the following manner:

- A) Factors for participation or non-participation in athletics
 - 1) Factors for participation - Gathered from ninth and 12th grade high school survey participants
 - 2) Factors for participation - Gathered from university focus group participants
 - 3) Factors for non-participation - Gathered from ninth and twelve grade high school survey participants
 - 4) Factors for non-participation - Gathered from university focus groups
- B) Challenges facing those who chose to participate - Gathered from university focus group
- C) Perception of female athletes - Gathered from university focus groups

- 5) How did female and male athletic participation numbers compare in related sports within the high school of study?

In the review of literature, this study also touched on the history of females as they journeyed from the Theory of Separate Spheres to Title IX. Special attention was paid to the struggle female athletes had as they competed in athletics, why athletics were good for all participants, and health risks specific to females. Based on all of the data gathered, recommendations were made to the high school of study, to parents of female athletes, and for future studies to contribute to the potential increase of female athletic participation. Results of this study may assist administrators as they look for ways to increase female athletic participation within the high school of study.

Research Methodology

The qualitative design chosen for this study utilized triangulation in the analysis, combining student participation data, student survey responses, and data gathered during college student focus groups. Triangulation strengthens results of the study, as it seeks the same conclusions from multiple data sources (Fraenkel & Wallen, 2006). In addition to collecting responses from high school students through use of surveys, the researcher chose to conduct focus groups over this topic with recently high-school-graduated students from a local university, to provide perspectives from a wider age-range of participants. The college students were free to give their opinions, with regard to this study. “In survey research, for example, it is common not only to prepare a closed-ended (e.g., multiple choice) questionnaire for people to answer in writing, but also to conduct open-ended personal interviews with a random sample of the respondents” (Fraenkel & Wallen, 2006, p. 442). By examining the survey data, focus group data, and the athletic

participation data, the researcher answered the research questions which guided this study.

Participants

The participating high school was located in a middle-class suburban area and was located in a district with four high schools and 18,625 K – 12 students during the 2013-2014 school year (Missouri Department of Elementary and Secondary Education, [MODESE], 2015, school demographics). Male and female students who attended the high school of study, and who were classified as either freshmen or seniors, were asked to complete a survey. Freshmen represented students at the beginning of the high school career, while seniors represented students at the end of the high school career. These two age groups were selected for comparison to identify similarities and differences in the trends of athletic participation. The survey, comprised of closed-ended questions, attempted to identify why students in the high school of study did or did not participate in athletics. Enrollment at the high school of study, was 2011 total students, as of October 25, 2013 (personal communication, study high school registrar, October 2013). Of the ninth-grade students, 127 females and 159 males completed the survey. Of the 12th grade students, 128 females and 114 males completed the survey. Athletic participation data in related sports for the 2011-2012, 2012-1013, and the 2013-2014 school years, from the participating high school, were also incorporated into the study.

Twelve females and nine males, enrolled at a local university near the high school of study participated in focus groups conducted by the researcher. These students provided insight as to why students did or did not participate in athletics in high school, why they participated in athletics at younger ages and subsequently ended participation or

left athletics, or why they chose to not participate at all. Having the ability to speak with students who were only one or two years removed from high school was, in the researcher's opinion, a powerful aspect of this study. The focus group responses, combined with the survey results, provided the researcher with additional information to contribute to answering the research questions.

Procedures

To begin this study, a letter (Appendix G) asking for permission was written and sent to the district superintendent who supervised the participating high school. The letter asked for permission to survey students, with parental permission, and analyze data on the ninth and 12th grade students at the high school of study. An Institutional Review Board (IRB) application (Appendix H) was completed, filed, and approved by the university attended by the researcher in June 2013. Once the IRB reviewed and approved the study, research began. The research tools included in this study were the anonymous survey of high school ninth and 12th graders, focus group discussion data generated by students from a local university, and collection of secondary athletic participation data from the high school of study.

The methodology and reasoning behind the study followed three separate procedural formats. One component of this study was the student surveys. The survey was constructed to determine the percentage of students who were participants or non-participants. The survey was also constructed to ascertain reason(s) students chose to participate or not participate in athletics. The question, which asked all individuals if they participated in athletics while in high school, was asked to determine if the demand for athletics was being met within the high school. Within the results of this survey,

multiple groups were formed from the demographic data. They were as follows: 1) participate or do not participate in high school athletics, 2) freshman and senior students, 3) male and female students, 4) freshman male, freshman female, senior male, and senior female, and 5) freshman male participants, freshman male non-participants, freshman female participants, freshman female non-participants, senior male participants, senior male non-participants, senior female participants, and senior female non-participants. The data gathered was then descriptively reviewed by the researcher to identify trends in the responses. Data were categorized into the various groups listed above to allow comparison of responses between the groups.

Another component of this study was the focus groups. The researcher felt it was important to speak with males and females who participated in high school athletics, did not participate in high school athletics, or who at one time participated in high school athletics, but quit. The feedback served to provide explanations and insight into the data compiled by the student surveys. Questions for the focus groups conducted are included in this study as appendix documents C, D, E, and F.

The final component of this research was an analysis of the participation data at the participating high school. Athletic participation data were from the 2011-2012, 2012-2013, and 2013-14 school years. Data were collected by the Athletic Director and his office and given to the researcher. This data was not student specific, but simply provided the number of each team's participants. There were no changes in the sports offered at the high school of study during the time of the study. This data provided the researcher a clear and accurate picture of the makeup of each team and the number of students participating on each team over the course of three years included in the study.

Instrumentation

This collaborative research project relied on three different types of instrumentation to collect and analyze data. An anonymous student survey (Appendix A) was presented to male and female freshmen at the participating high school. This was the first instrument used. The freshmen survey asked multiple questions. Basic questions, such as a participant's age, grade, and gender were asked first. Other questions included whether students had participated in sports prior to high school, if they planned to participate in sports as a freshman, or if they participated in athletics outside of high school.

A second anonymous survey (Appendix B) was presented to male and female seniors at the participating high school. This was the second instrument used. The two surveys were very similar. The senior survey asked one additional question; asking senior males and females if they had participated in any high school sports prior to their senior year. The surveys were presented to students at the high school of study during the schedule pick-up event, held prior to the first day of school. The researcher presented surveys on two separate days (freshman schedule pick-up and senior schedule pick-up) to students and their parents. At the participating high school's schedule pick up, the researcher was stop number four, out of the required nine stations. Examples of other stations included the school nurse, payment of school fines, yearbook pictures, and the cafeteria station. The researcher was set up at a table in the commons. As students and parents approached, the study was explained by the researcher. Those students wishing to participate were placed at a separate table, also in the commons. Students completed the survey at the separate table individually and without interruption. Once the surveys

were completed, students returned them to the researcher. The researcher then compiled the data, which is discussed in Chapter Four.

The questions on both surveys (Appendix A & B) were written in second person format. This allowed the survey questions to be presented in a format similar to an interview. Participants were asked to give their ages (question one), grade level (question two), and gender (question three) to begin the survey. Question four asked if they had participated in athletics prior to high school. Question five was different on the two surveys, with the freshman survey asking participants if they planned on participating in athletics and the senior survey asking if the students ever had participated in high school athletics. Students were also asked on this question to write which sport(s) they planned to play (freshmen), or which sports they had played (seniors). If students answered yes to this question, they were asked to mark the top three reasons for their participation, out of a list of provided answers. If the students answered no, that they were not planning to participate in sports (freshmen), or that they had participated in sports and then quit (seniors), they were asked to mark the top three reasons for not or no longer participating. Question six on the freshman survey asked individuals if they participated in athletics outside of high school and asked them to list the sport(s). Question six on the senior survey asked if the individual planned to participate in a sport their senior year and to list the sport(s). Question seven, which was only on the senior survey, concluded by asking students if they participated in athletics outside of high school.

The second form of instrumentation utilized in this study was focus groups. For the sake of this study, individuals participating in the focus groups, who attended a nearby university, were placed into one of the following groups: 1) males who currently

participated in athletics at the collegiate level; 2) males who participated at one time in high school athletics, but chose to quit; 3) males who never chose to participate in high school athletics; 4) females who participated in athletics, at the time of the study, at the collegiate level; 5) females who participated at one time in high school athletics, but chose to quit; and 6) females who never chose to participate in high school athletics. Four different lists of survey questions (Appendices C, D, E, & F) were developed. Participants in the focus groups were given a series of questions to answer based on their levels of participation. Appendix C was given to females who were participating in sports at the time of participation in the focus group, Appendix D was given to males who were participating in sports at the time of participation in the focus group, Appendix E was given to both males and females who participated in high school athletics, but chose to quit, and Appendix F was given to both males and females who chose not to participate in high school athletics. The focus groups were advertised on the college campus on the study-participant pool bulletin board, located near psychology and sociology classes. Students, who earned class credit for participation in focus groups, signed up at the bulletin board. The researcher checked the bulletin board weekly. Focus groups were conducted in the university library in a reserved room. Focus groups, which involved two-to-four individuals at a time, lasted approximately one hour. As college students arrived for their focus group, they were given a paper with questions to answer, based on the group for which they qualified. Categories represented on the paper were dependent on the group the student belong with and included looking at reasons individuals chose to participate or not participate in athletics, the challenges facing those who were participants in sports, and the perceptions of respondents (both male and

female), with regard to females participation in athletics. Once they completed the questions, the researcher read over the questions. Once all participants in a given session completed the questions, the researcher led a discussion concerning the topics represented in the questions. Follow-up questions, to ensure that the researcher understood the view point of each participant, were asked when needed.

The final form of instrumentation used was the gathering of secondary data from the high school of study. Athletic participation numbers from the 2011-2012, 2012-2013, and 2013-2014 school years were included in this study. This data were then categorized and compared to the same sport in different years, as well as different sports. Particular attention was paid to the male and female sports the genders had in common, such as basketball, swimming, golf, cross-country, track and field, soccer, and volleyball. For the sake of this study, baseball and softball were considered to be related sports. Sports such as football, wrestling, dance, and cheerleading were not included in this study and were considered unrelated sports.

Validity and Reliability

Validity is the degree to which correct deductions and inferences can be made, based on the instruments were used to gather data. “Validity is dependent not only on the instrument itself, but also on the instrumentation process and the characteristics of the group surveyed” (Fraenkel & Wallen, 2006, p. 151). For the sake of this study, validity was the “appropriateness, correctness, meaningfulness, and usefulness” (Fraenkel & Wallen, 2006, p. 151) of the surveys presented to ninth and 12th grade students, the conducting of the focus groups, and the gathering of the high school of study’s athletic participation data.

Surveys created for the ninth and 12th grade students in the participating high school were qualitative in nature. All instruments for this study were created by the researcher, under the guidance of several individuals. The student surveys were evaluated by a professor at a local university, the principal of the high school of study, and a veteran Communication Arts teacher for critique of content validity. It is important to note that the principal of the high school was a former Communication Arts teacher himself, while the Communication Arts teacher had over 20 years of experience and was viewed as an expert. The professor had multiple years of experience in both the high school and collegiate environment. All three individuals found the survey to be a valid and applicable assessment.

The questions, which guided the focus groups as they were conducted, were developed by the researcher. These questions were also evaluated for content validity by the experts previously noted. The questions were designed to gain additional insight into the responses gathered by the ninth and 12th grade surveys. Participants were able to respond to open ended questions and explain reasons for participating or not participating in athletics. Participants were also able to give perception of females who participate in athletics. In both cases, follow-up questions were asked when needed, to ensure that the researcher fully understood the perspective of those participating in the focus groups. Both females and males were asked to participate in the focus groups, so perspectives from both genders could be discovered.

The participation data for athletes in the high school of study were gathered and monitored by the athletic director at the high school of study. The names of participating athletes on each athletic team were gathered by the head coach of each program. The

coaches were then required, as a part of their regular school routines, to submit the names of all participants to the athletic director. It was then the responsibility of the athletic director to ensure that each athlete submitted was academically eligible, according to the state-regulated rules for high school sports. If an individual was not academically eligible, he or she was removed from the team roster. Athletes who were eligible and participating in a sport were then submitted to the state's high school athletic association. The athletic director provided the numbers of participation for each high school sport, with the permission of the district housing the high school of study. In conclusion, all instruments utilized in this study appeared to provide information relevant to the research questions included in the research design of this study.

Summary

In summary, this study explored the reasons high school athletes stopped participating in athletics, with an emphasis on female athletes and their reasons for discontinuing their involvement. By surveying females at the high school level, the researcher hoped to discover reasons females participated in athletics, as well as why they chose to quit athletics. Males were also surveyed, so responses between males and females could be compared. The purpose of the focus groups, conducted using male and female students who had recently graduated from high school and attended a local university at the time of the study, was to explore in-depth the reasons that females participated, do not participate in, or quit high school sports. Both genders were asked to participate so the researcher could look for similarities and differences in answers. Athletic participation data for the high school of study were gathered and reviewed to look for trends, and to see if there was opportunity for males and females to participate.

Chapter Four includes the results of the ninth and 12th grade student surveys, the focus groups, and the gathering of athletic participation data within the high school of study. This information was disaggregated in multiple ways. Survey results were compared in several ways, looking at the different grades and genders, as well as the various responses to the survey. The focus group data were also divided into multiple categories, all based on the gender and the then-current, prior, or non-participation in athletics. The gathering of data from athletic participation was also used to answer the research questions.

Chapter Four: Results

The purpose of this study was to compare the athletic participation rate of males and females within the high school of study. Freshmen and senior high school students were surveyed to gather data on the reasons students chose to participate or not participate in athletics. Focus groups were conducted at a local university to further explore why students participated in high school athletics and why some of these students discontinued their participation in athletics. Focus groups also explored challenges facing student athletes and student perceptions of female participation in athletics. Athletic participation data from the high school of study were also taken into consideration.

The results of this study were generated through three different methods of data collection: anonymous surveys given to ninth and 12th grade students at the participating high school, focus groups conducted at a local university, and the gathering of athletic participation data within the high school of study. The data gathered assisted the researcher in answering the research questions which guided this study. The five research questions, which were introduced in Chapter One, are listed below:

- 1) Do females have a lower participation rate in athletics than males in the high school of study?
- 2) Does the participation rate of females in athletics decrease from freshman to senior year at the high school of study?
- 3) Does the participation rate of females in athletics decrease at a greater rate than males within the high school of study?

- 4) What perceptions do males and females have about the factors for participating or not participating in athletics, challenges facing those who chose to participate, and participation by females in athletics?

For the purposes of organizing the multiple sub-studies that went into Research Question 4, the data and correlating discussion of findings were structured in the following manner:

- A) Factors for participation or non-participation in athletics
 - 1) Factors for Participation - Gathered from ninth and 12th grade high school survey participants
 - 2) Factors for participation - Gathered from university focus group participants
 - 3) Factors for non-participation - Gathered from ninth and twelve grade high school survey participants
 - 4) Factors for non-participation - Gathered from university focus groups
- B) Challenges facing those who chose to participate - Gathered from university focus group
- C) Perception of female athletes - Gathered from university focus groups
- 5) How did female and male athletic participation numbers compare in related sports within the high school of study?

Description of the Sample-High School Student Survey

Ninth and 12th grade students who attended the participating high school's schedule pick-up event held two weeks prior to the start of the 2013-14 school year were asked to take a survey about participation in athletics. Parent permission was required for students to take this survey and gained at the time the survey was taken. Students who completed the survey were asked to give their age, grade level, and gender. Students were asked if they participated in athletics before enrolment in high school. If the answer to that question was yes, they were asked to list the sport(s) in which they participated. Both ninth and 12th graders were asked if they planned to participate in athletics during the upcoming school year. Twelfth graders were asked if they had participated in high school athletics prior to the upcoming school year. When respondents answered yes, the students were prompted to list the top three reasons they chose to participate in sports. If 12th graders selected that they had participated in sports while in high school but chose to no longer compete, they were prompted to list the three main reasons they were no longer participating. Ninth graders who participated in athletics prior to high school but did not plan on joining a sport their freshman year were asked to select the three reasons why they chose to discontinue their involvement in sports. The number of surveys collected were: a) 128 female senior students, b) 114 male senior students, c) 127 female freshman students, and d) 159 male freshman students.

Athletic participation data from the high school of study were also collected, as gathered by the athletic director during the 2011-2012, 2012-2013, and 2013-2014 school years. It was the athletic director's responsibility to pass the names of those participants on to the state's high school athletic association to determine eligibility. The athletic

participation numbers, with no student names, were given to the researcher by the athletic director. These numbers, along with the surveys assisted the researcher in developing an understanding of all aspects of participation and non-participation within the high school of study.

The focus groups were conducted throughout the 2013-2014 school year at a local university. Participants in the focus groups had recently graduated from high school. Focus groups were conducted at the university in the evening and were advertised using a bulletin board that invited student participation in various types of studies. Students at the university were signed up from a pre-existing participant pool of volunteers and received class credit in psychology or sociology class for participating in the focus group. The researcher was able to speak with each of the focus group participants, ask probing questions, and ask for clarification when needed. All questions were open ended. Respondents were allowed to answer in any way they wished. The goal was to have 15 male and 15 female participants. The study advertisement recruited 12 females and nine males for this aspect of the study.

Research Question 1

Do females have a lower participation rate in athletics than males in the high school of study?

Tables 1 and 2 summarize responses from ninth grade students from the participating high school. This data was used to compare the participation rates between males and females.

Table 1

Freshmen who Participated in Athletics Prior to High School

	Yes		No		Total
Males	119	74.8%	40	25.2%	159
Females	93	73.2%	34	26.8%	127

One-hundred fifty-nine freshman male participants completed the survey. Of those 159, 119 stated that they played athletics prior to attending high school. Those same 119 also stated they planned to participate in high school athletics. That is a participation rate of 74.8% of those males surveyed.

Table 2

Freshmen who Planned to Participate in High School Athletics

	Yes		No		Maybe		Total
Males	119	74.8%	40	25.2%	0	0%	159
Females	85	66.8%	31	24.4%	11	8.6%	127

Ninety-three freshman female respondents, out of 127, stated they participated in athletics prior to high school. That number dropped to 85 female respondents stating that they were going to participate in high school athletics with 11 who responded 'maybe.' The percentage of females who were positive they were going to participate in high school athletics was 66.8%. Since the 'maybes' did not commit to participating in a sport, they were not included with those choosing to participate.

Tables 3, 4, and 5 summarize responses from 12th grade students from the participating high school. This data was also used to compare the participation rates between males and females.

Table 3

Seniors who Participated in Sports Prior to High School

	Yes		No		Total
Males	93	81.6%	21	18.4%	114
Females	86	67.2%	42	32.8%	128

Table 4

Seniors who Participated in High School Athletics

	Yes		No		Total
Males	80	70.2%	34	29.8%	114
Females	86	67.2%	42	32.8%	128

One-hundred fourteen senior male participants completed the survey. Ninety-three of those surveyed (81.6%) participated in athletics prior to high school and 80 of those surveyed (70.2%) stated they had participated in a sport while in high school. As seniors, 60 responses (52.6%) stated they intended to participate in high school athletics during the upcoming school year. That was a decrease in participation in this pool of respondents of 17.6% from freshman year to senior year.

Table 5

Seniors who Planned to Participate in Athletics During Senior Year

	Yes		No		Total
Males	60	52.6%	54	47.3%	114
Females	49	38.3%	79	61.7%	128

A total of 128 senior female participants completed the survey and 86 of those surveyed (62.7%) stated they participated in athletics prior to high school and they participated while in high school. As seniors, 49 respondents (38.8%) stated that they intended to participate in high school athletics during the upcoming school year. That was a decrease in participation in this pool of female respondents of 23.9% from

freshman year to senior year. Females discontinued participation in athletics 6.3% more than males.

Discussion of Research Question 1. In each comparison made using data displayed in Tables 1 through 5, the data showed that males participated in high school athletics at a higher rate than females. Male participation rates were higher than female participation rates in all comparisons. In comparison of males to females, participation rates were closest in Table 1, which compared freshman respondents' participation in athletics prior to high school. Participation rates were compared in Table 5, which showed senior male and female respondents and their plans to participate in athletics as a senior. In disaggregating the data in the five different ways displayed in Tables 1 through 5, it was clear that in the high school of study, females participated in athletics at a lower rate than males.

Research Question 2

Does the participation rate of females in athletics decrease from freshman to senior year at the high school of study?

Tables 6 and 7 summarize the responses of ninth and 12th grade students within the high school of study. This data was used to determine if there were any comparable differences in regards to research question number two, which explored potential decrease in participation rates between freshman and senior year.

Table 6

Female Freshman and Seniors who Planned to Participate in Athletics: 2013-2014

	Yes		Maybe		No	
9th Grade Females	85	66.8%	11	8.6%	31	24.4%
12th Grade Females	49	38.3%	0	0%	79	61.7%

Table 7

Senior Female Participation: Freshman Year to Senior Year

	Yes		No	
9th grade	86	67.2%	42	32.8%
12th grade	49	38.3%	79	61.7%

Discussion of Research Question 2. This research question focused on the potentially declining participation rate of high school females in athletics in the high school of study. When comparing female ninth grade respondents to female 12th grade respondents, there was a decline in participation rate. A total of 66.8% of ninth grade respondents selected that they planned to participate in high school athletics. In comparison, only 38.3% of 12th grade females planned to participate in athletics during their senior year. This was a decline of 28.5%. When the participation rate of 12th grade females was compared to the same students' participation rates during their freshman year, data showed a 28.9% decline in participation over the course of those three years. In both cases, the data showed that the female participation rate in high school athletics declined within the high school of study, when looking at respondents in ninth grade to 12th grade year.

Research Question 3

Does the participation rate of females in athletics decrease at a greater rate than males within the high school of study?

Tables 8 and 9 summarize the responses of ninth and 12th grade students within the high school of study. This data was used to determine if there was any comparable difference in regards to the third research question, which investigated if the female participation rate declined at a greater rate than the male participation rate.

Table 8 allows comparison of the participation rates of ninth grade males to 12th grade males, as well as ninth grade females to 12th grade females. Table 9 allows comparison of the participation rates of 12th grade males to their participation rates prior to senior year, as well as 12th grade females to their participation rates prior to senior year.

Table 8

Participation Rates of Freshman-to-Senior Year: Males and Females

Participating in the upcoming year?	Yes		Maybe		No
9th grade males	119	74.8%	0	0%	40
		25.2%			
12th grade males	60	52.6%	0	0%	54
		47.3%			
Decrease in participation rate		22.2%			
9th grade females	85	66.8%	11	8.6%	31
		24.4%			
12th grade females	49	38.3%	0	0%	79
		61.7%			
Decrease in participation rate		28.5%			

Table 9

Participation Rates of Senior Year-to-Prior Participation: Males and Females

Participated prior to senior year?	Yes		No	
9th grade male	80	70.2%	34	29.8%
12th grade male	60	52.6%	54	47.3%
Decrease in participation rate		17.6%		
9th grade females	86	67.2%	42	32.8%
12th grade females	49	38.3%	79	61.7%
Decrease in participation rate		28.9%		

Discussion of Research Question 3. Research question 2 verified that participation in high school athletics declined from freshman to senior year. Research question 3 focused on the comparison between the declining male and female participation rates. When comparing ninth and 12th grade students against one another, there was a 22.2% percent decrease in the male participation rate compared to a 28.5% decrease in the female participation rate. When comparing senior student participation rates against their own participation rates as freshmen, there was a 17.6% decrease in the male participation rate from ninth to 12th grade and a 28.9% decrease in the female participation rate from their ninth to 12th grade year. In both cases, the female participation rate declined at a faster descent than the male participation rate.

Research Question 4

What perceptions do males and females have about the factors for participating or not participating in athletics, challenges facing those who chose to participate, and participation by females in athletics?

For the purposes of organizing the multiple sub-studies that went into Research Question 4, the data and correlating discussion of findings were structured to include factors contributing to the overall answer: A) Factors for participation or non-participation in athletics, A1) Factors for participation - gathered from ninth and twelve grade high school survey participants, A2) Factors for participation - gathered from university focus group participants, A3) Factors for non-participation - gathered from ninth and twelve grade high school survey participants, A4) Factors for non-participation - gathered from university focus groups, B) Challenges facing those who chose to

participate - gathered from university focus group, and C) Perception of female athletes - gathered from university focus groups.

4A1) Perceptions from high school survey participants concerning factors that led to participation in athletics.

Tables 10 and 11 summarize the responses from the ninth and 12th grade students from the participating high school. This data was used to determine if there was any comparable difference in regards to the first part of research question four, which explored why students participate in high school athletics.

Table 10

Top Five Reasons Freshman Females Chose to Participate in Athletics

Reason	Respondents	%
1) I enjoy participating in athletics	75	88%
2) I want to stay in shape	63	74%
3) I enjoy the excitement / challenge of competition	57	67%
4) I enjoy doing something I am good at	45	53%
5) I like to play as part of a team	36	42%

Table 11 represents the responses given by female seniors concerning the top reasons for participation in high school athletics.

Table 11

Top Five Reasons Senior Females Chose to Participate in Athletics

Reason	Respondents	%
1) I enjoy the excitement / challenge of competition	67	78%
2) I enjoy participating in athletics	61	71%
3) I want to stay in shape	50	58%
4) I enjoy doing something I am good at	36	42%
5) My friends participate in athletics	30	35%

Ninth and twelfth grade female respondents had similar reasons for their participation in athletics, although those reasons appeared in different orders, depending

on the grade level. Ninth grade females selected enjoyment of participation in athletics as the main reason for competing in athletics. Twelfth grade females selected enjoyment of the excitement /challenge of competition as the main reason for competing in athletics. Wanting to stay in shape and enjoying something they were good at also appeared in the top five as reasons for participating in both groups. Ninth grade females ranked 'I like to play as part as a team' as fifth, while 12th grade females ranked 'my friends participating in athletics' as their fifth-ranked response.

Tables 12 and 13 also summarize responses from the ninth and 12th grade students from the participating high school. Table 12 represents the responses given by male freshmen concerning the top reasons for participation in high school athletics.

Table 12

Top Five Reasons Freshman Males Chose to Participate in Athletics

Reason	Respondents	%
1) I enjoy participating in athletics	96	81%
2) I enjoy the excitement / challenge of competition	73	61%
3) I want to stay in shape	71	60%
4) I enjoy doing something I am good at	51	43%
5) My friends participate in athletics	34	29%

Table 13 represents the responses given by male seniors concerning the top reasons for participation in high school athletics. Unlike the female respondents, the male ninth and 12th grade respondents had identical reasons and ranks for participating in athletics. Enjoying their participation in athletics, the excitement/challenge of competition, and wanting to stay in shape were the ninth and 12th grade males top three reasons for high school athletics participation. Enjoying doing something that they were

good at and friends participating in athletics rounded out the top five reasons for athletic participation as selected by male respondents.

Table 13

Top Five Reasons Senior Males Chose to Participate in Athletics

Reason	Respondents	%
1) I enjoy participating in athletics	71	89%
2) I enjoy the excitement / challenge of competition	57	71%
3) I want to stay in shape	37	46%
4) I enjoy doing something I am good at	37	46%
5) My friends participate in athletics	27	34%

Table 14 provides the average top five reasons why all respondents chose to participate in high school athletics. Respondents were asked to rank their top three reasons for participating in athletics. This allows a comprehensive look at responses from ninth grade and 12th grade, as well as from males and females both, located in one table.

Table 14

Comparisons of Freshman and Senior Top Five Reasons for Athletic Participation

Reason	Rank	9th M	12th M	9th F	12th F	Mean
1) I enjoy participating in athletics	1	1		1	2	1.25
2) I enjoy the excitement / challenge of competition	2	2		3	1	2.00
3) I want to stay in shape	3	3		2	3	2.75
4) Doing something I am good at	4	4		4	4	4.00
5) My friends participate in athletics	5	5		7	5	5.50

Discussion of Sub Research Question 4A1. Table 14 is a compilation of the mean rankings of the top five reasons that all respondents selected for participating in athletics. The researcher took the ranks of the four sub groups, ninth grade females, ninth grade males, 12th grade females, and 12th grade males, and calculated the mean ranking of the reasons respondents chose to represent participation in athletics. For the most part,

reasons for participation were similar in all four groups. The top three reasons for participation in athletics were 1) I enjoy participating in athletics; 2) I enjoy the excitement / challenge of competition; and 3) I want to stay in shape. The only obvious outlier was within the ninth grade females, who ranked participating with friends lower than it was ranked by the other three sub groups.

4A2) Perceptions from university focus group participants concerning factors that led to participation in athletics.

Tables 15 and 16 summarize the responses received from the focus groups. Focus group participants were asked a series of questions about their participation in sports, with an emphasis placed on what they got out of athletics. All questions were open-ended. Respondents were allowed to answer any way they wished. There were seven females and nine males who met the prerequisite of participating in high school athletics and participated in the focus groups. Table 15 represents the responses given by female university students, recently graduated from high school, concerning the top reasons for participation in high school athletics.

Table 15

College Students: Reasons Former Female Athletes Participated in High School Athletics

	F6	F7	F8	F9	F10	F11	F12
Learning life skills			X	X	X	X	
Make new friends	X		X				
Playing the sport	X						X
Seeing different areas	X						
Fun		X					
Physical challenge / health	X						
Stress relief							X

Four out of seven female respondents stated that learning life skills was a reason they participated in high school athletics. Female respondent 8 (F8) stated, “Athletics taught me patience and cooperation.” F9 stated, “I gained determination, motivation, and achievement from athletics. I am a much stronger person since I participated in athletics.” Making new friends and enjoyment of playing the sport were both mentioned by two female respondents. F6 stated, “Making new friends, playing the sport, and being able to travel and see different areas,” were her reasons for participating. F10 stated that she learned “discipline, self-confidence, and resilience” from athletics. Seeing different areas, having fun, the physical challenge, and stress relief were each mentioned by one respondent.

Table 16 represents the responses given by male university students, recently graduated from high school, concerning the top reasons for participation in high school athletics.

Table 16

College Students: Reasons Former Male Athletes Participated in High School Athletics

	M1	M2	M3	M4	M5	M6	M7	M8	M9
Learning life skills	X	X	X	X			X	X	X
Make new friends			X		X		X		X
Playing the sport			X						
Physical challenge / health				X					
Stress relief						X			

Seven out of nine male respondents mentioned learning life skills as the main reason they participated in high school athletics. Male respondent 1 (M1) stated, “I learned how to live a healthy lifestyle, time management skills, and leadership skill [while playing baseball].” M3 said “physical wellness, social interaction, meeting new friends and growing old friendships, and learning leadership and teamwork skills” were among the reasons he participated in athletics. Making new friends was mentioned by four of nine male respondents. M9 responded, “I made multiple friends while an athlete and learned how to balance my time between friends, family, sports, and studies.” Playing the sport, the physical challenge, and stress relief were each mentioned by one respondent.

Discussion of Sub Research Question 4A2. Focus group respondents had an opportunity to answer a variety of questions related to different aspects of athletic participation. Any participant who participated in athletics while in high school was qualified to participate in this discussion. When asked about why they participated in athletics, a majority of male (7/9) and female (4/6) focus group respondents answered that they were learning life skills. Another common response was making new friends. That response was given by four of nine males and two of seven females. Differences in male and female responses were noticeable in playing the sport, where two female respondents mentioned that in their response, as opposed to one male.

4A3) Perceptions from high school participants concerning factors that led to non-participation in sports.

Tables 17 and 18 summarize the responses from the ninth and 12th grade female students from the participating high school, with regard to not participating in high school

athletics. This data was used to determine if there was comparable data in regards to the third part of research question four, which explored why students chose not to participate in high school athletics. Respondents were asked to rank their top three reasons for not participating in athletics. Table 17 summarizes the responses from the ninth grade female students from the participating high school.

Table 17

Top Five Reasons Freshman Females Chose to Not Participate in Athletics

Reason	Respondents	%
1) I lost interest / was tired of it	22	71%
2) Sports interferes with studies	15	48%
3) I wanted to do a non-sport activity	9	29%
4) Injury	7	23%
5) I was not having fun	7	23%

Table 18 summarizes the responses from the 12th grade female students from the participating high school.

Table 18

Top Five Reasons Senior Females Chose to Not Participate in Athletics

Reason	Respondents	%
1) I lost interest / was tired of it	28	67%
2) I wanted to do a non-sport activity	21	50%
I was not having fun	21	50%
3) Sports interferes with studies	19	45%
4) I did not like the coach	17	40%

Both freshman and senior females selected 'I lost interest' as their first reason for quitting athletics. Sports interfering with studies, wanting to do a non-sport activity, and not having fun, also made the top five reasons for not participating. Injury made the freshman female top five list for not participating, while 'I did not like the coach' made the senior female top-five list. Four out of the five reasons for not participating in high

school athletics were the same, when reviewing the ninth and 12th grade female responses.

Tables 19 and 20 summarize the responses from the ninth and 12th grade male students from the participating high school, with regard to not participating in high school athletics. Table 19 summarizes the responses from the ninth grade male students.

Table 19

Top Five Reasons Freshman Males Chose to Not Participate in Athletics

Reason	Respondents	%
1) I lost interest / was tired of it	21	53%
2) Sports interferes with studies	20	50%
3) I was not having fun	11	28%
4) Injury	9	23%
5) Sports interfered with social life	7	18%

Table 20 summarizes the responses from the 12th grade male students.

Table 20

Top Five Reasons Senior Males Chose to Not Participate in Athletics

Reason	Respondents	%
1) I lost interest / was tired of it	29	85%
2) Sports interferes with studies	17	50%
3) I was not having fun	17	50%
4) I did not like the coach	14	41%
5) Injury	8	24%
Sports interfered with social life	8	24%

The top five reasons freshman and senior males chose for not participating in high school athletics were identical. In both cases 'I lost interest/was tired of it' was the top reason for quitting. This reason was the overwhelming selection with senior males. Sports interfering with studies, not having fun, injury, and sports interfering with social life were on both lists, but in different orders.

Table 21 summarizes the responses from the ninth and 12th grades students, as well as both male and female student responses from the participating high school, with regard to not participating in high school athletics. This allows an easy comparison of the frequency of choice for the reasons given for not participating in high school athletics.

Table 21

Comparison of Freshman and Senior Top Five Reasons for Not Participating in Athletics

Reason	Rank:	9th M	12th M	9th F	12th F	Mean
1) I lost interest / was tired of it		1	1	1	1	1.00
2) Sports interferes with studies		2	2	2	3	2.25
3) I was not having fun		3	3	4	2	3.00
4) I wanted to do a non-sport activity		5	8	3	2	4.50
5) Injury		4	5	4	9	5.50

Discussion of Sub Research Question 4A3. Table 21 is a compilation of the mean ranking of the top five reasons that all respondents selected for not participating in athletics. The researcher took the ranks of the four sub groups, ninth grade females, ninth grade males, 12th grade females, and 12th grade males, and calculated the mean rankings for the reasons that respondents chose to represent why they chose not to participate in athletics. The overwhelming selection for not participating in athletics in all four sub groups was ‘I lost interest / was tired of it.’ Three of four sub groups selected ‘sports interferes with studies’ as their second selection, with senior females selecting that choice as third. ‘Not having fun’ ended up as the third-ranked reason for not participating in sports, with wanting to do a non-sport activity and injury rounding out the top five.

4A4) Perceptions from university focus group participants concerning factors that led to non-participation in athletics

Tables 22 and Table 23 summarize the responses received from the focus groups. Focus group participants were asked a series of questions about their non- participation in

sports, with an emphasis placed on why they were no longer participating. There were 10 females and four males who participated in the focus groups that met the prerequisite of participating in high school athletics. Their answers are summarized in Table 22.

Table 22

Reasons Former High School Female Athletes Chose for Not Participating in Athletics

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
Non-Sport Activity	X	X	X	X	X					
Injury	X					X	X	X		
Academics more Important			X	X	X	X				
Didn't like the Coach					X	X				
Grew tired of Sports							X			X
Social Life							X	X		
Not Good Enough		X								

Participating in a non-sport activity was selected by five of the 10 female respondents. Academics being more important and injury were selected by four of the 10 female respondents. F1 was injured while playing softball and ended up joining her high school band. F5 stated, "I didn't get enough sleep while doing sports and my studies suffered." F5 ended up participating in choir and theatre. F6 quit swimming because of injuries to her shoulders and knees, priorities changed, and her coach was difficult to get along with. "Didn't like the coach, grew tired of sports, and social life" were selected by two of the 10 female respondents. "Not good enough" was selected by one of the 10 respondents.

Table 23 summarizes the male respondents' reasons for non-participation in high school athletics.

Table 23

Reasons Former High School Male Athletes Chose for Not Participating in Athletics

	M1	M2	M3	M4
Grew tired of Sports		X	X	X
Social Life	X			
Injury	X			

Of the four male respondents who met the criteria for this category, three said they grew tired of sports. One of the four stated that injury led to quitting athletics. That same individual also said that wanting a social life led to him quitting, as well. M1 wondered while in high school “if students who played sports were missing out on the high school experience, or if student[s] who didn’t do sports were missing out on the high school experience by not participating in sports.” M2 grew tired of sports and quit football when he realized that he would not be playing as much as had during junior year.

Discussion of Sub Research Question 4A4. Male and female participants in the focus groups who had either never participated in athletics or stopped their participation in athletics met the criteria for this discussion. Females selected wanting to participate in a non-sport activity, injury, and the importance of academics as the main reasons for not participating in athletics. Injury and not feeling they were good enough also were stated as reasons for non-participation. Males stated that growing tired of the sport was the main reason for non-participation, with injury and wanting a social life also mentioned. With the exception of injury and not being good enough, a majority of both male and female respondents’ reasons for non-participation had to do with losing interest in the sport, making academics a priority, and wanting to do other things. None of the males mentioned items, such as not being good enough, academics being more important, not

liking the coach, and being burned out; but those items were mentioned by female respondents.

4B) Challenges facing those who chose to participate - gathered from university focus groups

Tables 24 and Table 25 summarize the responses received from the focus groups, with regard to challenges faced. Focus groups were asked a series of questions about the challenges they faced while participating in athletics. Any focus group participant, male or female, who had participated in, or still participated in, athletics qualified to participate in responding to this set of questions. There were five females and nine males who participated in the focus groups that met the prerequisite of participating in high school athletics. The responses for female participants are in Table 24.

Table 24

Challenges of Participating in Athletics Faced by Former Female High School Athletes

	F6	F7	F8	F9	F10
Time Management (Academics and Athletics)	X	X	X		
Social Life	X		X	X	
Injury			X	X	
Burn-Out		X			X
Competition for a spot on the team		X	X		

Five female focus group respondents qualified for this category, which considered the topic of challenges faced by former high school athletes. The challenges mentioned the most, by three of the five respondents, was managing time. Injury, burn-out, social life, and competition for a spot on the team were all mentioned by two of the five respondents. F7 said, "I did not like competing for a starting spot in soccer or waking up for practice." F8 was the most vocal, stating that she "did not have time for a social life

or to study.” F8 also spoke about the aches and pains of being a runner, and no matter how hard she tried, there were always people better than her at her sport. Table 25 displays the responses from male focus group participants.

Table 25

Challenges of Participating in Athletics Faced by Former Male High School Athletes

	M1	M2	M3	M4	M5	M6	M7	M8	M9
Time Management (Academics and Athletics)		X	X		X	X	X	X	
Competition for a spot on the team	X			X			X		X
Injury	X				X		X	X	
Burned Out			X	X	X				
Social Life						X			

Time management was selected by six of the nine male respondents as the top challenge while participating in sports. Injury and competition for a spot on the team both were selected by four of the nine male respondents. Burned out was selected by three of the nine respondents, while social life was selected by one of the nine respondents. M7 selected three challenges he faced while an athlete. He struggled with his schedule, constant nagging injuries, such as both ankles sprained at the same time, and the ultra-competitiveness of his teammates. M8 had similar concerns, saying, “I struggled with the various injuries I got through wrestling, managing my time, and making sure that I didn’t get burned out.”

Discussion of Research Question 4B. Male and female participants in the focus groups who then-currently participated in athletics, or at one time participated in athletics, met the criteria for this discussion. Both male, six out of the nine, and female, three out of the five, respondents stated that time management issues with academics and

athletics was a top challenge facing athletes. Three of the five females also stated that wanting a social life was also a challenge of participating in athletics. Other items mentioned by females focus group participants as challenges included injury, being burned out, and having to compete for a spot on the team. Injury, being burned out, and competing for a spot of the team were all mentioned by four out of the nine male respondents. Concerns about a social life was only mentioned by one male respondent. Challenges facing both male and female athletes seemed to be similar.

4C) Perceptions of female athletes - gathered from university focus groups.

Tables 26 and 27 summarize the responses received from the focus groups. Focus groups were asked a series of questions about their perception of those females who participated in athletics. All male and female respondents were able to give their opinion on this issue. Responses included all 12 female participants and nine male participants in the focus groups. Table 26 displays the responses from female participants.

Table 26

<i>Perceptions of Female College Students with Regard to Female Athletic Participation</i>												
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
Guys didn't act any differently	X				X	X	X	X	X	X	X	X
Wishes there were more opportunity for females		X										
No noticeable difference between the two				X								
Males have issues with females participating in athletics.					X							

When females were asked about their perceptions of females who participate in athletics, an overwhelming number of them, nine of the 12, felt that guys did not treat

them any differently. F6 felt, "Boys thought that girls who did sports were cool, but considered [them] one of the boys." F7 stated she never felt she was labeled in a negative way. F10 said, "I am glad that girls choose to play sports and I have never seen that as a problem for males or females." One female respondent wished there was more opportunity for females. Another female respondent did not observe a noticeable difference between the two genders. One female stated she observed males having issues with females participating in athletics. F4 stated males were more comfortable around female athletes as friends, but males "liked" feminine girls, and female athletes are not considered as such. Table 27 displays the responses from the male focus group participants.

Table 27

Perceptions of Male College Students with Regard to Female Athletic Participation

	M1	M2	M3	M4	M5	M6	M7	M8	M9
Guys didn't act any differently	X	X	X		X	X	X	X	X
I don't have concerns but I know Of people who do		X				X		X	X
No noticeable difference between the two	X								
Males have issues with females participating in athletics.				X					

Of the nine male respondents, eight stated guys did not act differently towards females who participated in athletics. M5 responded, "Girls who participate in sports or that are athletes are more attractive and have goals." M8 stated male athletes were likely to be "jocks, ignorant, competitive, or alpha males," while it depended on the sport and amount of success for a female to be stereotyped. One male respondent stated he had

issues with females participating in athletics. M4 said “boys play sports at a higher level than girls.” Of the eight male respondents who stated they personally did not have issues with female athletes, four respondents stated they knew of individuals who had an issue with females participating in athletics.

Discussion of Research Question 4C. The results for this question involving the focus groups showed a difference in perception of females who participate in athletics, with only one of the 12 females thinking there was a concern with their participation in athletics, but four of the nine male respondents felt there were those who had an issue. Only one of the nine male respondents actually admitted to thinking that males played sports at a higher level than females. It appeared that females did not see an issue with female participation in athletics, but males did perceive there being an issue.

Research Question 5

How do female and male athletic participation numbers compare in related sports within the high school of study?

Participation data were given to the researcher by the athletic director at the participating high school. This participation data was from the 2011-2012, 2012-2013, and 2013-2014 school years. Table 28 displays disaggregated data from all three of the school years. For the purpose of this study, data were disaggregated in related sports only. This allowed the researcher to compare the participation rates by gender. There was no change in related sports offered within the participating high school from the 2011-2012 through the 2013-2014 school year.

Table 28

Perceptions of Male College Students with Regard to Female Athletic Participation

Sport	Male Participation Numbers			Female Participation Numbers			+/-
	11-12	12-13	13-14	11-12	12-13	13-14	
Baseball/Softball	55	53	55	38	39	37	-49
Basketball	34	33	36	38	27	26	-12
Cross-Country	44	44	45	41	43	34	-15
Golf	14	12	15	8	10	12	-11
Soccer	58	54	50	54	54	51	-3
Swimming	22	26	24	32	25	23	+8
Tennis	37	32	27	32	47	35	+18
Track	70	67	61	73	76	49	0
Volleyball	28	31	30	32	32	30	+5
Overall Numbers	362	352	343	348	353	297	-59

When reviewing athletic participation data in related sports from the 2011-2012 school year, there were numerous sports for potential participants to choose from. There were nine sports that had a participation option for both males and females. When those sports were compared, there were 14 more male participants than female participants in the 2011-2012 school year. When looking at related sports in the 2012-2013 school year, there was only a one participant difference, with one additional female participating. When looking at similar sports in the 2013-2014 school year, male participation numbers were substantially higher than female participation numbers. There were 46 more males

than females participating in related sports. Over the course of the three years, 59 more males than females participated in related sports at the high school of study.

Discussion of Research Question 5. When looking at athletic participation within the high school of study, a number of conclusions were drawn. In two out of the three years reviewed, males participated in related sports at higher numbers than females. In the year females had a higher number of participants than males, there was a difference of one in the number of males compared to females. It appeared females had the same opportunity as males to participate in athletics. To take that a step further, in related sports, there was more room for females to participate. It did not appear that females took advantage of the opportunities offered in team sports, such as baseball/softball, cross-country, and golf, which were all available each of the three years of the study. In the 2013-2014 school year, there were 46 more males than females participating in related sports. There were some related sports, such as tennis and swimming, in which females consistently participated in greater numbers than males. By all indications, the participating high school provided equal and ample opportunity for females to participate in athletics.

Summary

Chapter Four offered a view of the disaggregation of data collected throughout this mixed method research study. For the purpose of this study, the researcher focused on gathering data from a student survey, conducting focus groups, and gathering athletic participation data from the high school of study. Results included why students chose to participate or not participate in athletics, challenges facing athletes, perceptions of female athletes, and if there were ample opportunities for females within the high school of

study. When looking at participation numbers within the high school of study, the researcher concluded that females had the same opportunities to participate as males. When comparing results of the survey and focus groups, a majority of male and female responses were similar. There was a greater decline in female participation rates than male participation rates in the high school of study. Student surveys and focus groups from both genders showed the reasons students participated in athletics included enjoying their participation, enjoying the excitement and challenge of competition, and wanting to stay in shape. These same participants stated that losing interest, sports interfering with studies, and not having fun were primary reasons for quitting. Focus groups echoed these conclusions, with only one major discrepancy. Females felt they were accepted within athletics, while five of the nine male focus group participants stated they either knew of someone, or they themselves had issues with females in athletics.

The goal of this study was to obtain and incorporate opinions from varied points of view. By including ninth graders, 12th graders, and recent high school graduates into the same study, this research goal was accomplished. Data included in this chapter showed that freshmen students participated in sports at a greater rate than seniors. Ninth graders had four years of participation or non-participation in front of them. They had not yet been impacted by the pressures facing older students. Twelfth graders, on the other hand, had experience in the high school setting and were impacted by various types of pressures. In some cases, these pressures led them to quit high school athletics. Comparing freshman responses with senior responses showed why students chose to participate or not participate in athletics. The participation data gathered assisted the researcher in understanding how many students participated in athletics, as well as the

numbers of males and females. The focus groups were conducted to gain a better understanding of why students participated, did not participate, or stopped participating in high school athletics while in high school.

In Chapter Five, the results of this study will be reviewed and the five research questions will be answered. In addition, conclusions to the mixed method study will be presented. Chapter Five will offer recommendations for future studies.

Recommendations to the high school of study will also be touched on in Chapter Five.

Chapter Five: Conclusion

Introduction

The purpose of this study was to compare the athletic participation rate of males and females within the high school of study. Consideration was also given to why males decreased their participation rates as they grew older. The researcher gathered information by surveying freshmen and seniors in the 2013 – 2014 school year at the participating high school, by conducting focus groups at a local university in the fall of 2013, and by reviewing athletic participation data from the 2011-2012, 2012-2013, and 2013-2014 school years. Freshmen and senior students were surveyed to gather data on the reasons students chose to participate or not participate in athletics. Focus groups were conducted at a local university to further explore why high school students participated in athletics and why some of these students discontinued their participation in athletics. Focus groups also explored challenges facing athletes and student perceptions of female participation in athletics. Athletic participation data from the high school of study were also taken into consideration.

Research Questions

Five research questions guided this study:

- 1) Do females have a lower participation rate in athletics than males in the high school of study?
- 2) Does the participation rate of females in athletics decrease from freshman to senior year at the high school of study?
- 3) Does the participation rate of females in athletics decrease at a greater rate than males within the high school of study?

- 4) What perceptions do males and females have about the factors for participating or not participating in athletics, challenges facing those who chose to participate, and participation by females in athletics?
- 5) How did female and male athletic participation numbers compare in related sports within the high school of study?

This study also touched on the history of females as they journeyed from the Theory of Separate Spheres to Title IX. Special attention was paid to the struggle female athletes had as they competed in athletics, why athletics were good for all participants, and health risks specific to females. Based on all of the data gathered, Chapter Five includes recommendations to the high school of study, to parents of female athletes, and for future studies to increase female athletic participation. Results of this study may assist administrators as they look for ways to increase female athletic participation within the high school of study.

Limitations

There were several limitations identified in this study. Many of the limitations were related to the surveys distributed to students within the high school of study. Surveys were distributed to freshmen and seniors at the participating high school's schedule pick-up event. Schedule pick-up was often an exciting time for students. They were finding out what classes they had for the upcoming year, and were often seeing friends for the first time since school let out for the summer. It was possible that students rushed through the survey to socialize with friends and to get their schedule of classes for the upcoming school year. There was also the possibility that students interpreted questions or the directions improperly, leading to skewed results. Since the survey was

voluntary, some students and parents opted to not participate. Out of 466 total freshmen, 242 completed the survey. That means 51.9 % of the freshman class participated in the survey. Out of 465 seniors, 286 of them completed the survey, which means a total of 61.5% of the senior class took the survey. Athletic practices had already begun at this time of the year for fall sports, so athletes were in town and more likely to attend the schedule pick-up than non-athletes. The researcher had no prior experience creating surveys, which may have impacted data gathered in the study.

Other limitations included the characteristics of coaches within the high school of study and the focus groups. Each sport had a coach who may have been viewed by athletes in either a positive or negative way. These coaches impacted participation in athletics within the high school of study and the university. Some coaches were popular and well-respected by athletes. Others were considered to be difficult to work with. Athletes were more prone to discontinue participation in sports in which the coach was considered a negative influence.

Another limitation was that focus groups participants met as late as 7:00 in the evening. The university students had been in class all day, and in some cases were also participating on university athletic teams. These factors might have led to focus group participants not being mentally present, as well as wanting to complete the focus group questions and conversation quickly. Focus group participants were also not gathered randomly. They received credit from professors in the Psychology and Sociology department for participating. The researcher had never written questions for or conducted focus groups, which may also be a limitation of this study.

Delimitations

For the purpose of this study, only freshmen and seniors were asked to complete surveys at the high school of study. Students classified as sophomores or juniors were not asked to participate in the survey. The survey was conducted two weeks prior to the start of school, at a voluntary schedule pick-up event that not all students chose to attend. District policy did not allow for loss of instructional time for research projects of this nature, so students who did not attend schedule pick-up were not included in this study. In regards to the focus groups conducted at the collegiate level, students were volunteer-based and not randomly selected.

Summary of Findings for Research Question 1

Do females have a lower participation rate than males at the high school of study?

To answer this question, the researcher investigated the responses on surveys given to incoming freshmen and seniors at the high school of study. When surveying incoming freshmen, 74.8% of males and 73.2% of females participated in some sort of sport prior to entering high school. When the same freshman students were asked if they planned to participate in athletics in the high school of study, the same 74.8% of males stated yes. Freshman female data had a change in participation percentage from sports participation prior to high school to participation during their freshman year. Although 73.2% of surveyed freshman females answered that they had participated in sports prior to entering high school, the percentage of these students who stated they intended to participate in high school sports dropped to 66.6%. Eleven of the students, 8.6%, stated they might participate. For the sake of this study, they were counted as non-participants, since they did not commit to a sport at the time the survey was given. This was the only

time there was a change in athletic participation rate from students who had participated in a sport prior to entering high school and participation during the freshman year. There were a variety of reasons this could have occurred. The high school of question had a strong fine arts department, with students offered band, choir, orchestra, and drama as an option for freshman year enrollment. Each of these programs required an extensive amount of time to for participation. Incoming female freshman students, like students who discontinued participation from freshman to senior year, could have lost interest in the sport they previously participated in, wanted to take studies seriously as they entered high school, or simply were no longer having fun in athletics. These were reasons athletes in high school listed in responding to Research Question 3, as reasons for non-participation. It was also possible that burn-out, which was an underlying factor in relation to most reasons for discontinuing participation, occurred.

Senior students who completed the survey were asked the same questions. Of these students, 81.6% of males and 67.2% of females answered that they participated in athletics prior to entering high school. Those percentages remained the same when the students were asked if they participated in athletics during high school. An additional question of seniors asked if they planned on participating in athletics during their senior year. Of those surveyed, 52.6% of males and 38.3% of females stated they intended to participate in athletics during senior year.

In each case, males participated in athletics at a higher rate than females. Incoming freshman males surveyed planned to participate at a higher rate than females surveyed. Senior male students surveyed participated in athletics at a higher rate than females, as represented by both freshman and senior years. The results of the survey

showed males had a higher participation rate than females within the high school of study. As athletes progressed through high school, the level of competition, which generally started with freshman-level athletics teams then increased all the way to varsity teams, increased as they grew older. This goes a long way toward explaining the decrease in participation measured in the study. Athletics, for many students became very high pressured, often times with the athletes placing the pressure on themselves. This then explains why students in the research questions addressed in this chapter referred to athletics no longer being fun or keeping their interest. As students continued their way from freshman to senior year, the academic aspect of high school also became more demanding. As students grew older, they were able to see shortcomings and weaknesses they may have in athletics and grew to a point where they realized they had reached the end of the road, in terms of how they compared to other athletes.

Summary of Findings for Research Question 2

Does the participation rate of females in athletics decrease from freshman to senior year at the high school of study?

This research question addressed the decline in participation rates as female students progressed through high school. When comparing freshman females who took the survey to senior females, it was discovered that 66.8% of those freshman females surveyed intended to participate in athletics, compared to 38.3% of senior females who intended to participate. That was a decrease in participation rate of 28.5%. When comparing senior females and their participation rates to their freshman year, the participation rate dropped from 67.2% for freshman year to 38.3% for senior year. That was a decrease of 28.9%. In all comparisons, the researcher discovered that the female

participation rate within the high school of study decreased as female students journeyed through high school. This research question specifically addressed the female athletic participation rate within the high school of study. As mentioned in the summary of Research Question 2, as students continued through high school, there were a variety of reasons stated by students discontinuing involvement in high school athletics. Females were pulled in different directions while in high school. It was reasonable to conclude that female athletes lost interest in sports, no longer found them fun, or wanted to focus on academics.

Summary of Findings for Research Question 3

Does the participation rate of females in athletics decrease at a greater rate than males within the high school of study?

The third research question was a comparison between male and female participation rates, as the students progressed through high school. When the freshman male, 74.8%, and senior male, 52.6%, participation rates were compared, the researcher discovered there was a 22.2% difference between participation rates between the two groups. When comparing freshman female, 66.8%, and senior, 38.3%, participation rates, there was a 28.5% difference between participation rates between the two groups.

When senior students were compared to themselves through an observation of participation rates from their freshman year, the female participation rate still decreased at a higher rate than the male participation rate. Senior males participated in athletics at a rate of 70.2% as freshman and 52.6% as seniors. That was a decrease in the participation rate for males of 17.6%. Senior females participated in athletics at a rate of 67.2% as freshman and 38.3% as seniors. That was a decrease in the participation rate of females

of 28.9%. In both comparisons made, the female rate of participation decreased at a higher rate than the male rate of participation.

Summary of Findings for Research Question 4

What perceptions do males and females have about factors for participation and non-participation in athletics, challenges facing those who chose to participate, and females participating in athletics?

To answer this question, survey results from senior and freshman students within the high school of study were utilized. The results and opinions discovered by the researcher while conducting focus groups with students at a local university were also incorporated into answering this research question. Together these data painted a picture of why students chose to participate or not participate in athletics. The researcher's goal was to gain an understanding of reasons for participation, non-participation, challenges of participation, and perceptions of females participating in athletics so recommendations could be made to attempt an improvement in participation rates within the high school of study.

Reasons for participation in athletics. By combining the top five reasons senior and freshman males and females chose to support their participation in athletics, a main list of reasons for participation were developed. Those who participated in the survey had to select from a list of reasons they chose for participation. The first main reason in this survey that high school students selected for participation was 'I enjoy participating in athletics.' The second main reason was 'I enjoy the excitement / challenge of competition.' The third main reason for participation in high school athletics was 'I want to stay in shape,' followed by 'I enjoy doing something I am good at,' and 'my friends

participate in athletics'. When looking at the first two reasons for participation, it was clear those surveyed enjoyed both their participation in and the excitement / challenge of athletics. Wanting to stay in shape, the third main reason, was a common characteristic of athletes, both male and female, who embraced sports as a positive impact on their life. There was no major difference regarding the reasons for participation among male and female athletes who completed the survey.

When conducting the focus groups, the researcher began the evening by allowing participants a chance to answer on paper a series of questions. Each of the questions was open-ended, meaning that the participants could write whatever they wished as an answer. The researcher then facilitated a discussion with the focus group participants. Four out the seven female focus group participants and seven out of the nine male focus group participants wrote that they participated in athletics to learn life skills. That was the first overall selection for males and females. Two out of the seven females and four out of the nine males selected making new friends as a reason for participation. This was a difference in opinion between the male and female groups. It appeared that female focus group participants still competed in athletics for the life skills they learned, but not for social reasons, whereas males competed in athletics to gain life skills and for the social aspect of athletics. Other reasons stated by focus group participants were playing the sports, seeing different areas, fun, the physical challenge / health, and stress relief.

When looking at both the survey and focus group results, the researcher discovered several trends. High school students overwhelming selected their enjoyment of athletics, as well as the excitement and challenge of competing in athletics as the top reason for participation. This was mentioned by focus group participants, but was not

ranked at the top of the list of reasons. Other comparable results included friends, fun / enjoyment, and health / wanting to stay in shape. Learning life skills was selected overwhelmingly by focus group participants as the main reason for participation. It appeared, according to these data, high school aged students participated in athletics mainly for enjoyment, while older athletes from the focus groups viewed athletics as a way to learn life skills. Friends barely made the top five main reasons why high school students, both male and female, chose to participate in athletics. When conducting focus groups, making friends was the second-highest rated reason university athletes participated in athletics. A deduction the researcher made was that as high school students grew older, and the longer they participated in sports, the more likely they were to make friends and keep friends on the sport teams in which they participated. The more time they spent together and the more they had in common, they more likely they were to have friends on sporting teams on which they participated.

Reasons for non-participation in athletics. When combining the top five reasons senior and freshman males and females chose to discontinue their participation in athletics, a main list of reasons were developed. Those who participated in the survey had to select from a list of reasons they chose for not participating or discontinuing their participation. The first reason selected in the survey for non-participation was ‘I lost interest / was tired of it.’ The second reason selected was ‘sports interfered with studies.’ The third reason was ‘I was not having fun,’ followed by ‘I wanted to do a non-sport activity,’ and injury.

As mentioned, focus group members were allowed to answer open-ended questions prior to a discussion led by the researcher. Five of the 10 female focus group

participants selected a non-sport activity as their reason for discontinuing participation in athletics. No males in the focus groups listed that as a reason for non-participation, but three of the four male focus group participants mentioned growing tired of sports as the main reason for participation. In many of the responses given, it appeared that, over the course of time, focus group respondents lost interest in athletics. Items like social life, academics became important, growing tired, and growing tired of sports were all listed as reasons to discontinue or not participate in athletics.

When looking at reasons high school and university students did not participate or discontinued participation, the researcher formed a number of opinions. It appeared that high school students lost interest in athletics, wanted to focus more on studies, or no longer considered athletics fun. With participation rates declining as students grew older, this study illustrated that academics and non-sport activities took precedence over participation in athletics. Looking specifically at focus group females, participation in a non-sport activity was selected by five of the 10 respondents. Injury was also selected by high school survey participants and by both male and female focus groups members. It was possible that participants would rather do something else with their time than participate in athletics.

Challenges facing those who chose to participate in athletics. When investigating this aspect of Research Question 4, focus groups participants answered and then discussed challenges facing athletes. Both male, 6 of the 9, and female 3 of the 5, focus group respondents stated that time management was a challenge in athletic participation. Other reasons given by both male and female focus group members included social life, competition for a spot on the team, injury, and being burned-out.

When reviewing responses, the researcher felt the time management aspect an athlete must deal with impacted items such as burned-out and social life. Academics and studies also impacted the time management aspect of the challenges faced by an athlete. It was fair to conclude that all of these items were related. When looking at the difference between male and female responses, time management was the number one challenge facing both males and females. Social life was an area of difference between male and female focus group participants, with three of the five females selecting it as a challenge, but only one of the nine males selected it as a challenge. Four out of the nine male focus group participants selected making friends as a reason for participation, while only two of the seven females selected that reason. The researcher concluded that female athletes, in this study, did not view participation in athletics as a social encounter, nearly as much as males did.

Females participating in athletics. Male and female focus group participants were asked a questions about female athletic participation. Of the 12 females who participated in the focus groups, nine of the 12 felt that guys did not act differently towards them. One of the 12 wished there was more opportunity for females, one felt there was no noticeable difference between the two genders, and one felt that males did have an issue with females participating in athletics. Of the males who participated in the focus groups, eight of the nine stated that guys did not act differently towards girls who participated in athletics. Although a majority of males and females felt that males accepted females in athletics, there was a difference in perception between males and females in other areas. Four of the nine males stated they did not have concerns about

females participating in athletics, but they knew of people who did have concerns. One male focus group participant mentioned that boys played at a higher level than girls.

It was apparent that an issue still existed when it came to female and male perceptions regarding females participating in athletics. Females felt that there were no issues, while almost half of the males stated they knew someone who had an issue with females in athletics. Although female athletic participation increased since the passage of the Title IX legislation in 1972, female athletes still must fight the two clashing stereotypes of being an athlete female and being an athlete. As time progresses, the researcher hopes this conflict of stereotypes will eventually grow smaller, as it has throughout the past one hundred years. Females will continue to participate in athletics. If the current participation trend continues, female athletic participation numbers will continue to grow. The intention of the Title IX legislation was to level the playing field in multiple areas of society, specifically in any institution receiving federal funds. There was never an attempt to decrease opportunity for males, simply to increase opportunity for females. It is concluded that the reason for resentment or issues males might have with female participation in athletics must be tied to gender and societal stereotypes, not due to losing out on athletic opportunity.

Summary of Findings for Research Question 5

How did female and male athletic participation numbers compare in related sports within the high school of study?

Athletic participation data were given to the researcher by the high school of study's athletic director. The data covered three school years, from 2011-2012 to 2013-2014. While looking at this participation data, only sports for which both males and

females had the opportunity to participate were investigated. Although the researcher felt cheerleading, dance, football, and wrestling were indeed sports, for the purpose of this research question, they were not included in the numbers. These sports were termed unrelated sports. Sports that had both a male and female option, and could be compared to one another, were considered related sports and were used to answer this research questions.

Over the course of the three years of data provided by the participating high school, the researcher discovered that 59 more males participated in athletics in related sports than females. In two of the three school years, 2011-2012 and 2013-2014, more males than females participated in related sports than females. In one school year, 2012-2013, one more female than male participated in a related sport. To answer Research Question 5, the participation data showed that males participated more than females in related sports by a small margin.

More research is needed to discover exactly what females do after they discontinue participation in athletics. The data from surveys showed that freshman females chose to not participate in athletics because they lost interest, 71%, sports interfered with studies, 48%, and they wanted to do a non-sport activity, 29%. Senior females stated they lost interest, 67%, wanted to do a non-sport activity, 50%, were not having fun, 50% and sports interfered with studies, 45%. This information showed that losing interest was the main reason for discontinuing participation in athletics. Losing interest could be related to any of the reasons listed throughout this chapter, including participation in a non-sport activity, getting a job, not feeling they were improving, or truly wanting to focus on academics.

Recommendations for the High School of Study

The researcher has several recommendations to for the high school of study. The researcher coached females, as well as being the parent of a young daughter who was very involved in athletics. The researcher should have been more knowledgeable of the Female Athlete Triad, since there are health issues that specifically impact females, such as eating disorders, amenorrhea, and osteoporosis. It is essential that coaches and parents are aware of the link between these three areas of concern and female athletes. It is recommended that the coaches of female athletes are educated on the Female Athlete Triad, warning signs, and ensuring that female athletes are taking in the proper number of calories and following a healthy diet.

It is also recommended that the high school of study monitor the male and female participation rates in related sports. Areas of concern in participation data included males participating in related sports, such as baseball/softball, basketball, cross-country, and golf at a higher number than females over the course of the three years studied. Encouraging participation in these sports to current high school students and future high school students is recommended. The most glaring area of discrepancy in participation in the participating high school was in the area of baseball/softball, where 49 more males than females participated over the course of three years. It is possible that there were more females playing select sports, such as basketball, softball, swimming, or volleyball than males. That information was not available to the researcher.

The researcher was curious to discuss why the discrepancy on baseball/softball accounted for 49 of the 59 more males than females participating within the high school of study. Looking at the summer camps offered to both baseball and softball players, the

baseball program within the high school of study offered summer camps to area students in starting in fourth grade. The softball program within the high school of study only offered camps to future athletes starting in seventh grade. This gave the baseball program a three year head start over the softball program in identifying and encouraging youngsters to participate at the high school. For boys and girls soccer within the high school of study, the girls' soccer program offered camps to youngsters starting in kindergarten, whereas the boys program started inviting children in sixth grade. There were only three more males than females who participated in soccer over the course of three years. In volleyball, five more females than males participated over the course of three years. The girls' volleyball program offered camps starting in first grade, whereas the boys' volleyball program offered camps starting in tenth grade. A recommendation would be to offer summer camps starting a younger age.

Recommendations for Parents

While planning and conducting this study, the researcher found several areas where recommendations for parents could be made. Encourage children to remain active and participate in athletics as they move into adulthood. The research clearly suggested extra-curricular activities are good for students. Participation with an athletic team or teams (Carlson et al., 2006; Cohen et al., 2007; Hartman, 2008; Lopez, 2006; Metzl, 2002; Videon, 2002) showed various positive results for children. Children should be supported in whatever sport they wish to participate. If a parent has a female athlete, it is essential to understand the characteristics and causes of the Female Athlete Triad.

Recommendations for Future Studies

There are certain areas the researcher feels future studies could focus on. There was information and data (Lopez, 2006; Seefeldt et al., 1992) that addressed the positive nature of athletics and the reasons why high school-aged individuals participated or discontinued participation in athletics. The researcher felt that additional and in-depth studies in regards to females and their reasons for participation and non-participation are needed. Much of the research reviewed in Chapter Two touched on participation in athletics in general and not on female participation in athletics.

After reviewing the various types of literature in the area of athletics and female participation (Gerber et al., 1974; Krane et al., 2004; Ross & Shinew; 2008; Steinfeldt; 2011), the researcher learned of the struggle that females had and continued to have on the conflicting stereotypes of being a female and being an athlete. In this study, it was concluded that females did not appear to have an issue with their participation in athletics, but some males did. It would be interesting to see a study conducted which investigated the difference of opinion between male and female focus group participants. The females in the focus groups appeared to be confident and strong individuals. Investigating high-school-aged females in the year 2015 and comparing their thoughts to those of females from 1972, the year the Title IX legislation was passed, would be very interesting.

Seefeldt and Ewing (1996) expressed concern regarding the student population of a school, noting that schools with smaller student populations had more opportunity to participate than larger schools. The explanation was restrictions in larger schools related to items such as rules, budget, space, and personnel. This study was limited to one school

and compared participation in one certain area. The participating high school was a school of over 2,000 students. A future study which investigated schools from similar socioeconomic areas that had different-sized student populations would be interesting.

This study focused on one high school and came to conclusions on a small scale, lacking wide generalizability. Although there were some minor discrepancies on the surveys of the high school students regarding the reasons why these students chose to participate or discontinue participation, the researcher felt that for the most part, within the high school of study, the opinions of those surveyed were clear. The focus group aspect of the study would be interesting to pursue on a larger scale. Talking to additional males and females, at either the high school or university level, to get their views on reasons for participation, non-participation, and challenges would add to the research currently available, at the time of this writing.

Conclusion

This study started as an area of interest for the researcher. The research was guided by the five research questions. Having been both a coach of female athletes, a school administrator, a former athlete, and the father of a young daughter who participated in athletics, the researcher felt this was an area that could be explored. It is important that all individuals, male and female, have the right to participate in athletics. It is the opinion of the researcher that participation in athletics is positive for all students. It always appeared to the researcher that the participation rate declined for both male and female students as they progressed through high school.

With the passage of the Title IX legislation in 1972, female athletic participation dramatically increased. More females than ever are participating in athletics, at the time

of this writing. The researcher had concerns that female athletic participants decrease their participation in athletics for reasons that could be prevented. This study investigated the various reasons why athletes participated in and discontinued their participation in athletics. Within the framework of this study, male and female high school students had the same reasons for their participation and non-participation.

The review of literature illustrated how far society, specifically females, have come over the course of a hundred plus years of history, in regards to equality in society. Unfortunately, this study brought to light some issues concerning female participation in athletics. Differences in opinion came to light when speaking to university focus group participants. The data showed that females did not feel there was an issue with female athletic participation, while males did perceive an issue. It appeared that there were some lingering issues when it comes to female athletic participation. This study showed that, although growth in female athletics has increased, there is still a discrepancy in participation rates. It is the hope of the researcher that the good representation of data in this study will assist current and future coaches, parents, and high school administration in encouraging female athletes to begin and continue participation in any sport of their choosing.

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Appendix A**Freshman Student Survey**

FRESHMAN SURVEY: PARTICIAPTION IN ATHLETICS AT THE HIGH SCHOOL LEVEL

- 1) Age _____
- 2) Grade _____
- 3) Gender _____
- 4) Did you participate in any athletics prior to high school? _____

If yes, please specify sport(s) and grade(s) of participation.

- 5) Do you plan on participating on any high school athletic team(s) this year? _____

If yes, please specify sport(s) you plan on participating in.

If yes, identify the three main reasons you chose to participate. (1 being the main reason)

_____ My parents make me participate in athletics

_____ My friends participate in athletics

_____ I enjoy participation in athletics

_____ Sports make me a better person

_____ I want to stay in shape

_____ I enjoy the excitement / challenge of competition

_____ I like to play as part of a team

_____ I enjoy doing something I am good at

_____ I want to learn new skills

_____ Other(s):

Please explain

If not, identify the three main reasons you chose not to participate. (1 being the main reason)

_____ Sports interfered with studies

_____ I lost interest / I was tired of it

_____ Injury

_____ I did not feel good enough

_____ I did not make the team

_____ Sports interfered with social life

_____ I was not having fun

_____ I did not like the coach

_____ There was too much pressure

_____ I wanted to do a non-sport activity

_____ Other:

Please explain

6) While in high school, do you plan on participating in a non-school sponsored sport outside of high school? _____

If yes, please specify sport(s)

Appendix B**Senior Student Survey**

SENIOR SURVEY: PARTICIPATION IN ATHLETICS AT THE HIGH SCHOOL LEVEL

- 1) Age _____
- 2) Grade _____
- 3) Gender _____
- 4) Did you participate in any athletics prior to high school? _____

If yes, please specify sport(s) and age(s) of participation.

- 5) Have you ever participated in high school athletics? _____

If yes, please specify sport(s) and grade(s) of participation.

If yes, identify the three main reasons you chose to participate. (1 being the main reason)

- _____ My parents make me participate in athletics
- _____ My friends participate in athletics
- _____ I enjoy participation in athletics
- _____ I feel strongly that sports make me a better person
- _____ I want to stay in shape
- _____ I enjoy the excitement / challenge of competition
- _____ I like to play as part of a team
- _____ I enjoy doing something I am good at
- _____ I want to learn new skills
- _____ Other(s):

Please explain _____

For those of you who participated in school sponsored athletics at some point in high school but no longer do, or if you have never participated in high school athletics, what are the primary reasons you chose not to participate? Please select three. (1 being the main reason)

- _____ Sports interfered with studies
- _____ I lost interest / I was tired of it
- _____ Injury
- _____ I did not feel good enough
- _____ I did not make the team
- _____ Sports interfered with social life
- _____ I was not having fun
- _____ I did not like the coach
- _____ There was too much pressure
- _____ I wanted to do a non-sport activity
- _____ Other(s):

Please explain _____

- 6) Did you, or do you plan to, participate in any school sponsored athletics this year? _____

If yes, please specify sport(s).

- 7) While in high school, have you participated in a non-school sponsored sport outside of high school? _____

If yes, please specify sport(s)

Appendix C**Females Who Play Sports Focus Group Questions****FOCUS GROUPS****FEMALES WHO CONTINUE TO PLAY SPORTS**

- 1) What sports and activities did you participate in during your high school “career”?
- 2) What sports and activities do you currently participate in as a college student?
- 3) What do you get out of it? Has that changed over time / through the years?
- 4) What are the challenges to playing?
- 5) How have you dealt with those challenges?
- 6) Do you have friends and former team mates who no longer play? Do you know why they stopped?
- 7) What are some things that you do not like about playing sports?
- 8) What do other kids think about girls who play sports?
- 9) What do other kids think about boys who play sports?
- 10) Where you labeled by other kids at your school?
- 11) How do guys act towards girls who play sports?
- 12) Are there any other questions I should be asking you?

Appendix D**Males Who Play Sports Focus Group Questions****FOCUS GROUPS****MALES WHO PLAY SPORTS**

- 1) What sports and activities did you participate in during your high school “career”?
- 2) What sports and activities do you currently participate in as a college student?
- 3) What do you get out of it? Has that changed over time / through the years?
- 4) What are the challenges to playing?
- 5) How have you dealt with those challenges?
- 6) Do you have friends and former team mates who no longer play?
- 7) What are some things that you do not like about playing sports?
- 8) What do other kids think about girls who play sports?
- 9) What do other kids think about boys who play sports?
- 10) Were you labeled by other kids at your school?
- 11) How do guys act towards girls who play sports?
- 12) Are there any other questions that I should be asking?

Appendix E**Focus Group Males and Females who no Longer Participate in Sports****MALES / FEMALES WHO NO LONGER PARTICIAPTE IN SPORTS**

- 1) What sports and activities did you participate in during your high school “career”?
- 2) What sports and activities do you currently participate in as a college student?
- 3) What benefit (if any) have you received from athletics?
- 4) What were the challenges of playing athletics?
- 5) How have you dealt with those challenges?
- 6) Why did you stop playing athletics?
- 7) Were you ever labeled by other kids at your school?
- 8) What were some things that you did not like about playing sports?
- 9) How do guys act towards girls who play sports?
- 10) Are there any questions that I should be asking?

Appendix F

Focus Group Males and Females Who Never Participated in Sports

MALES / FEMALES WHO DID NOT PARTICIAPTE IN HIGH SCHOOL ATHLETICS

- 1) What activities did you participate in during your high school “career”?
- 2) What do you currently participate in as a college student?
- 3) What benefit (if any) have you received from athletics?
- 4) What were the challenges of playing athletics if and when you participated?
- 5) How have you dealt with those challenges?
- 6) Why did you stop playing athletics?
- 7) Were you ever labeled by other kids at your school?
- 8) What were some things that you did not like about playing sports?
- 9) How do guys act towards girls who play sports?
- 10) Are there any questions I should be asking?

Appendix G

Letter asking for permission to complete study

Dear Dr. DuBray:

I am currently enrolled in the doctoral program at Lindenwood University. I have completed all of the required course work and am in the beginning stages of writing my dissertation. After much thought, I have selected a topic which I hope will interest you and benefit the district. For my study, I am looking into the various perceptions that males and females have about participation in high school athletics.

It has been studied and suggested that participation in high school athletics has a positive impact on all students. I feel that our district provides both male and female athletes plenty of opportunities to participate. It is proven throughout numerous studies that males participate in athletics at a higher rate than females. Males are also much more likely to continue their participation in athletics than females. My hope is to identify why females participate in athletics at a lower rate than males, then present that information to our district.

In order to gather opinions and perceptions of our students, I would like to ask your permission to conduct an anonymous survey of all incoming freshman (male and female). The goal of this survey is to explore what percentage of incoming students are planning on participating in a sport, why they are or are not choosing to participate, and if they have participated in athletics prior to high school. I would also like to conduct a similar anonymous survey of senior students (male and female) to see what percentage participated in athletics, if they participated for their four years in high school, and why they chose to participate or not participate in athletics while in high school. This survey will be completely anonymous, with students only putting down their age, gender, and grade as identifying information. I would like to conduct this survey during schedule pick-up in August.

I hope that my exploration into this issue will be of benefit to all students, with an emphasis on females, within our district. If we can identify why students participate or do not participate in athletics, then we can make efforts to intervene, positively impacting the education of our female students. If you have any questions, please feel free to contact me. I look forward to discussing this with you further.

Thank you,

Ed Dreyer

Appendix H

IRB

LINDENWOOD

Application for IRB Review of Research Proposal Involving Human Subjects

If you have any questions about whether you need to complete a full or expedited application, please review the expedited application criteria at <http://www.lindenwood.edu/academics/irb/>.

Proposal #

1. Title of Project: A Comparison of the Perceptions of High School Males and Females Regarding Athletic Participation.

2. List the names of all primary investigators/faculty advisors and their contact information in the table below.

Name	Email	Phone Number	Department	Student/Faculty
Edward Dreyer	edreyer@fz.k12.mo.us	636-240-7964	FZSD	Ed.D. student
Graham Weir	GWeir@lindenwood.edu	636-949-2000	Lindenwood University	Dissertation Chair
Donna Towers	DTowers@lindenwood.edu	636-949-2000	Lindenwood University	Committee Member
Samantha Sutton	ssutton@fz.k12.mo.us	636-379-0300	FZSD	Committee Member

4. Anticipated starting date for this project: August 2013 **Anticipated ending date:** May 2014

(Collection of *primary* data – data you collect yourself - cannot begin without IRB approval. Completion/Amendment form required yearly, even if stated anticipated ending date is more than one year in the future.)

5. Please define any terms that may be unfamiliar to the reader.

*For the purpose of this study, definitions were created to be used solely for this project.

Athletics: Any sport sponsored by the high school of study (basketball, cheerleading, cross-country, dance, softball, swimming, tennis, track and field, and volleyball). Coaches of these sports are provided by the high school of study and are allowed to use school facilities for practice and contests.

Freshman student: Any student who is in their first year of high school, regardless of age.

Non-Participant: Any student who has not completed a full athletic or sport season.

Non-School Sponsored Sport: Any sport not sponsored by the high school of study (I.E.- bowling, figure skating, gymnastics, ice hockey, lacrosse, racket ball, etc.). Coaches of these sports are not provided by the high school of study. Facilities of the high school of study are not used by these sports.

Participant: Any student who has completed a full season of a school sponsored sport.

Senior Student: Any student who is in his or her fourth year of high school, regardless of age.

6. State the purpose of this proposed project (*what do you want to accomplish?*):

Athletics have shown to have a positive influence on adolescents both academically and behaviorally. “In contrast to prevailing ‘dumb –jock stereotypes, kids who play sports, on average, tend to perform better in school than kids who don’t” (Hartmann, 2008, p. 3). Numerous studies have shown that females, for a variety of reasons, participate in athletics at a lower rate than males. “In 2005-2006, fully 53.5% of students participated in high school athletics, and there were 3.0 million female high school athletes compared with 4.2 million male athletes” (Stevenson, 2007, p. 1). There is still a large difference between the two genders. “Despite the fact that 50% of the high school population is female, female athletes had access to only 41.1% of athletic opportunities in 2007-08, a gap of nearly nine points. In contrast, male athletes had access to 58.8% of playing opportunities” (Women’s Sports Foundation, 2009, p. 58).

The purpose of this study is to explore some of the reasons why that disparity occurs. “It is imperative for coaches, administrators, and parents to understand the child’s perspective for sport, which included the athletes’ rational for both participation and discontinuation, and any environmental variables which created conflicts for the player” (Stewart / Taylor, 2007, p. 170). Furthermore, “One study of high school girls revealed the main reason for quitting sports were injury (26%), time conflicts (18%), conflicts with coaches (16%), and boredom (14%)” (Women’s Sports Foundation, 2009, p. 56). This qualitative study will survey ninth and twelfth grade participants and nonparticipants to compare their perceptions regarding athletics. Focus groups will also be conducted with college aged students to explore their perceptions as well.

7. State the rationale for this proposed project (*why is this worth accomplishing?*):

Research supports that there is an uneven rate of participation between high school males and females in athletics. Furthermore, it is accepted that participation rates decrease as both genders progress through high school. However, female participation tends to decline at a more drastic rate. “The gender gap in physical activity widens when activity

levels are traced across grade levels. As girls get older, they are less likely to engage in high rates of physical activity (five days or more a week), while boys remain highly involved with physical activity from childhood through high school” (Women’s Sport Foundation, 2009, p. 57). The reason for this has not been studied in great detail. This study will attempt to ascertain why fewer females participate than their male counterparts. It is also important to determine why females continue to participate. “For female athletes to obtain the maximum benefits in sport in the physiological, sociological, and psychological domains, coaches and athletic directors must understand the variables which motivate these athletes to remain in sport after their initial exposure” (Stewart / Taylor, 2007, p. 170). Obtaining the opinion of approximately 1000 students (male and female) who all have the opportunity to participate in numerous athletic opportunities within the school of study will shed light on why this occurs. Four focus groups, each with five students, will also be conducted to gain insight as to the perceptions that males and females have about participation and nonparticipation in athletics.

8. State the hypothesis(es) or research question(s) of the proposed project:

MAIN RESEARCH QUESTION: Why do participation rates in high school athletics for females decline at a far greater rate than participation rates for males in one suburban high school?

GUIDING QUESTIONS (MALES/FEMALE): How do the perceptions of male and female ninth grade, twelfth grade, and college aged students differ about the following:

- *Factors that contribute to participation in athletics?
- *Factors that contribute to non-participation in athletics?
- *Motivations or interventions to increase participation in athletics for females?
- *Opportunities for females to participate in athletics?
- *Reasons female athletes quit athletics while in high school?

9. Has this research project been reviewed or is it currently being reviewed by an IRB at another institution?

- Yes, already approved Yes, pending LU IRB approval No

If yes, please state where the application has been/will be reviewed. Provide a copy of the disposition in the appendix if the application was approved.

10. What is the PI’s relationship with the participants in the study or research site? If you have no relationship, indicate that. Explain how any coercion will be reduced or how the identities of the participants will remain anonymous if the PI is a superior.

The researcher works as an assistant principal in the school of study. The researcher is not a direct supervisor of coaches or athletes in the school of study. This study will include approximately 500 males/females who are classified as seniors in the high school of study and approximately 500 incoming female/male freshman at the high school of study. The college students who will be selected to participate in one of the six focus groups will be volunteers who qualify. The researcher has no direct relationship with these students other than attending the same university

11. Participants involved in the study:

a. Indicate the minimum and maximum number of persons, of what type, will be recruited as participants in this study.

LU participants	X (25-35)	Undergraduate students (Lindenwood Participant Pool)* Graduate students* Faculty and/or staff*
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**Any survey of LU faculty, staff, or students requires approval by the Provost after IRB approval has been granted. Electronic surveys of LU faculty, staff, or students must use the University's Survey Monkey account, which must be created by an authorized administrator.*

Non-LU participants	X (900-1,100)	Children / Adolescents [need guardian's consent] Adults Persons with diminished autonomy (e.g., seniors, medical patients, persons in correctional facilities, etc.) Other (specify):
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Secondary Data		Population size Sample Size
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b. From what source(s) will the potential participants be recruited?

Students attending the high school of study, who are males and females in the 9th and 12th grades, will be asked to complete an anonymous survey at schedule pick-up. This survey will investigate the reasons that students chose to participate in athletics and why participation rates may decline. The college student focus groups will use the Lindenwood Participant Pool. These groups will be formed to investigate the same issues included in the survey.

c. Describe the process of participant recruitment.

Students at the high school in question will be asked to complete an anonymous survey. The only tracking questions will involve the student's grade, gender, and if they

participate in athletics. Students will be asked to complete the survey at schedule pick up, which occurs the first week of August before the school year begins. Parents will be present at schedule pick-up and will be asked to give their consent before their student takes the survey.

The researcher will ask for volunteers (from the Lindenwood participant pool) to participate in the focus group(s). Potential volunteers from Lindenwood will be presented a synopsis of the study to see if they would be interested in volunteering.

d. Will any participants be excluded?

Yes No

If yes, explain why and how.

Students who are in 10th and 11th grade will not be taking the survey. Within the focus groups, international students, who have not attended an American high school, will also be excluded from participating in the focus groups.

e. Where will the study take place?

On campus – Explain: Focus groups will take place at LU Off campus – Explain: Students will be surveyed at the high school of study

f. Briefly justify your sample size and selection criteria (probability sample or not, random, stratified random, purposive, etc.). Citations from statistics, research textbooks, or published studies in the field would be helpful.

High School of Study Population as of 5/29/13

GRADE	TOTAL	BOYS	GIRLS
9 th	516	237	279
10 th	522	257	265
11 th	499	259	240
12 th	462	234	228
TOTAL	1999	987	1012

With the population the size it is, the researcher should be able to find enough students to volunteer to complete the survey. “For experimental and causal comparative studies, we recommend a minimum of 30 individuals per group (Pg. 104, Fraenkel & Wallen, 2006).”

Six focus groups will also be formed using under-graduate students from Lindenwood University. The six groups will consist of the following characteristics:

- 1) 5 males who currently participate in athletics at the college level.
- 2) 5 males who participated at one time in athletics in high school but chose to quit.
- 3) 5 females who currently participate in athletics at the college level.
- 4) 5 females who participated at one time in athletics in high school but chose to quit.
- 5) 5 males who never chose to participate in high school athletics.
- 6) 5 females who never chose to participate in high school athletics.

The focus group(s) will be asked questions in an attempt to gain an understanding of why participation rates decline for females in athletics. The answers given by the focus group(s) will also provide an explanation of the surveys. “One purpose of interviewing the participants in a qualitative study is to find out how they think or feel about something. Another purpose is to provide a check on the researcher’s observations (Pg. 479, Fraenkel & Wallen, 2006).”

12. Methodology/procedures:

a. Provide a sequential description of the procedures to be used in this study.

- Freshman and senior students will be surveyed using a separate survey. The survey will be distributed to students at schedule pick-up by the researcher. The survey(s) will consist of questions which attempt to discover why participation rates decrease as female’s progress through high school. Surveys will be kept anonymous, with no identifying features except gender, grade, and if they participate in athletics or not.
- The results of the survey(s) will be disaggregated to gather quantitative data.
- Focus groups will be created using under-graduate students from Lindenwood University. The focus group discussions will center on why students chose to participate or not participate in athletics while in high school.

b. Which of the following data-gathering procedures will be used? Provide a copy of all materials to be used in this study with application.

- Observing participants (i.e., in a classroom, playground, school board meeting, etc.)

When?

Where?

For how long?

How often?

What data will be recorded?

- Survey / questionnaire:** **paper** **email or Web based**

Source of survey:

Survey created by researcher. Collaborated with high school of study's Athletic Director and Principal, as well as a Professor at Lindenwood University.

- Interview(s)** **(in person)** **(by telephone)**
- Focus group(s)**
- Audiotaping**
- Videotaping**
- Analysis of deidentified secondary data - specify source (who gathered data initially and for what purpose?):**
- Other (specify):**

13. Will the results of this research be made accessible to participants, institutions, or schools/district?

- Yes** **No**

If yes, explain how.

The survey will be presented to district office officials, as well as to the administration and staff of the high school of study. Based on trends discovered through this study, information could be made available to middle school students, incoming freshman, and their parents in an attempt to keep students, primarily females, participating in athletics.

14. Potential benefits and compensation from the study:

a. Identify and describe any known or anticipated benefits to the participants (perhaps academic, psychological, or social) from their involvement in the project.

The goal of the study is to identify why students, with an emphasis on females, stop participating in high school athletics. This research will pin point why students participate in high school athletics as well as why they choose to stop participating.

b. Identify and describe any known or anticipated benefits to society from this study.

Following this study, teachers, coaches, and administrators will be more knowledgeable in this area. Since it has been studied and accepted that participation in athletics positively influences a child's education both academically and behaviorally, this information should provide insight as to why students quit participating in athletics at the high school level. The high school of study, as well as other schools in the district, should be able to use this information to provide interventions in an attempt to keep athletes participating.

c. Describe any anticipated compensation to participants (money, grades, extra credit).

There will be no compensation given to high schools students who complete the survey. Participants in the focus groups will receive credit for work study hours through Lindenwood University.

15. Potential risks from the study:

a. Identify and describe any known or anticipated risks (i.e., physical, psychological, social, economic, legal, etc.) to participants involved in this study:

There are no known or anticipated risks for participants in this study.

b. Describe, in detail, how your research design addresses these potential risks:

c. **Will deception be used in this study? If so, explain the rationale.**

Deception will not be used in this study.

d. **Does this project involve gathering information about *sensitive topics*? No.**

[*Sensitive topics* are defined as political affiliations; psychological disorders of participants or their families; sexual behavior or attitudes; illegal, antisocial, self-incriminating, or demeaning behavior; critical appraisals of participants' families or employers; legally recognized privileged relationships (lawyers, doctors, ministers); income; religious beliefs and practices.]

If so, explain:

e. **Explain the procedures to be used to ensure anonymity of participants and confidentiality of data during the data-gathering phase of the research, in the storage of data, and in the release of the findings.**

All surveys will be anonymous. The only identifying factors on the survey will be the student's grade, age, and gender. Surveys will be kept for the duration of the study. Once the study is complete, the surveys will be destroyed.

Focus groups will also be conducted on an anonymous basis. For the duration of the study, participants in the focus groups will be identified with a number. The focus groups sessions will be recorded and stored in a safe location. Once the study is completed, these recordings will be destroyed.

f. **How will confidentiality be explained to participants?**

High school aged participants, who will be completing a survey on paper, will be told that the survey is anonymous and that they are not to put their name on it.

Focus group participants will have their responses recorded by the researcher. The researcher will explain to the focus group participants that their responses are attributed to the participants assigned number, not their name.

g. **Indicate the duration and location of secure data storage and the method to be used for final disposition of the data.**

All gathered information, from the surveys and focus groups, will be kept in the office of or on the computer of the researcher. Once the study is published, all gathered information will be destroyed. Surveys will be shredded. Information recorded from the focus groups will be destroyed.

Paper Records

- Data will be retained until completion of project and then destroyed.
 Data will be retained indefinitely in a secure location.
 Where?

Audio/Video Recordings

- Audio/video tapes will be erased after completion of project.
 Data will be retained indefinitely in a secure location.
 Where?

Electronic Data (computer files)

- Electronic data will be erased after completion of project.
 Data will be retained indefinitely in a secure location.
 Where?

16. Informed consent process:

- a. What process will be used to inform the potential participants about the study details and (if necessary) to obtain their written consent for participation?
- An information letter / written consent form for participants or their legally authorized agents will be used; include a copy with application.
- An information letter from director of institution involved will be provided; include a copy with application.
- Other (specify):
- If any copyrighted survey or instrument has been used, include a letter or email of permission to use it in this research.
- b. What special provisions have been made for providing information to those not fluent in English, mentally disabled persons, or other populations for whom it may be difficult to ensure that they can give informed consent?

No special provisions have been made. If there is any concern that an adult is unable to give informed consent, that student will be excluded from completing the survey.

17. All supporting materials/documentation for this application are to be uploaded to IRBNet and attached to the package with your protocol and your credentials. Please indicate which appendices are included with your application. Submission of

an incomplete application package will result in the application being returned to you unevaluated.

Recruitment materials: A copy of any posters, fliers, advertisements, letters, telephone, or other verbal scripts used to recruit/gain access to participants.

X Data gathering materials: A copy of all surveys, questionnaires, interview questions, focus group questions, or any standardized tests used to collect data.

Permission if using a copyrighted instrument

Information letter for participants

Informed Consent Form: Adult

X Informed Consent Form: guardian to sign consent for minor to participate

Informed Assent Form for minors

Information/Cover letters used in studies involving surveys or questionnaires

X Permission letter from research site

Certificate from NIH IRB training for all students and faculty

IRBNet electronic signature of faculty/student

Vitae

Edward Dreyer is currently as Assistant Principal at Fort Zumwalt West High School, located in O'Fallon, Missouri. In this role, Mr. Dreyer supervises the A+ Program, assists within the building and at the district level with the new teacher program, and works with the Athletic Booster Club and Graduation Night Committees to support students. Other administrative experience includes serving as an Assistant Principal at McCluer North High School and Francis Howell North High school. Teaching experience includes three years as a teacher at Francis Howell Union High School and six years at Francis Howell North High School, where he taught U.S History and U.S. Government. Mr. Dreyer also coached both Cross-Country and Track and Field while teaching, serving as both an assistant and head coach in both sports. Educational studies have resulted in the anticipation of an Educational Doctorate degree in fall 2015 from Lindenwood University. Both a Master's Degree in Educational Administration in 2004 and a Bachelor's Degree in 1996 were earned from Lindenwood University.