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The University of San Francisco

THE IMPACT OF PARTICIPATION IN COLLEGIATE ATHLETICS ON WOMEN ATHLETES' ACADEMIC EXPERIENCE AT SELECT JESUIT UNIVERSITIES

A Dissertation Presented to
The Faculty of the School of Education Department of Leadership Studies
Catholic Educational Leadership Program

In Partial Fulfillment of the Requirements for the Degree Doctor of Education

> by Hillary D. McKinney San Francisco December 2007

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodologies represent the work of the candidate alone.

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CHAPTER I

THE RESEARCH PROBLEM

Statement of the Problem

For women student athletes, participation in collegiate athletics distinguishes their experience on campus from other students on campus. Their experience is different because of the time demands of participation, the physical rigor of training, and the emotional pressures of athletic competition. Women student athletes spend time practicing, training, and traveling for their respective sports. Their rigorous training schedules can exceed more than 30 hours a week during competition season. The demands of participation in high level collegiate athletics can include time away from the university, missed classes, and scheduling conflicts (Duderstadt, 2003; Knorr, 2004).

Participation in collegiate athletics also includes physical and emotional demands. Women athletes spend time physically preparing for their specific sport and often crosstrain outside their sport. This cross-training can include weight-lifting, running, agility exercises, swimming, and biking. Many women student athletes sustain physical injuries related to their training and competition (Bailey & Littleton, 1991). These injuries typically include stress-fractures, torn ligaments, pulled muscles, and back injuries. There are also emotional pressures associated with participation in women's collegiate athletics. Many women athletes experience the psychological pressure of competition. Women athletes may feel intense pressure to win, and some women athletes have scholarship dollars attached to their competition performance. This means that a woman athlete may gain or lose scholarship money the following year, based on her athletic results. Overall, the stress of competition alone can create emotional pressures for women athletes.

On both the positive and the negative sides, participation in high level collegiate athletics has the potential to impact women collegiate athletes' academic experience. To help balance the demands of athletic training, women athletes may have access to specialized academic counseling, preferential class registration, academic tutoring, and computer hardware or software. These services may assist women student athletes in their academic pursuits. For some athletes, specialized academic counseling helps navigate the collegiate experience. Preferential class registration enables athletes to enroll in desirable classes that do not conflict with their practice schedule. Academic tutoring and access to computer technology can help athletes meet the demands of challenging academic courses.

The impact of participation in women college athletics on academics is a complicated issue. There are many avenues for exploration. This study intended to investigate the impact of participation in athletics on academic experience at select Jesuit colleges and universities with National Collegiate Athletic Association (NCAA) Division I programs. Thus far, limited research exists that focuses specifically on the experiences of women collegiate athletes in Jesuit colleges and universities with NCAA Division I athletic programs.

Division I athletic programs are the highest level of competition within the NCAA. Examination of women Division I athletes is important, because these athletes devote a significant amount of time, energy, and effort to athletics while enrolled as students. In comparison to athletes at the Division II and III levels, athletes at the Division I level generally have a more rigorous training regimen, longer seasons, and more extensive travel schedules (NCAA, 2006). Division I athletes are, overall, the highest caliber collegiate athletes and compete at the highest levels. These athletes must

balance the demands of athletics and academics during their college tenure. This tension makes their experience unique and has the potential to affect their scholastic experience.

It was also valuable to examine the issue of academic experience within Jesuit colleges and universities, because Jesuit institutions have a philosophy of caring for the whole person. Colleges and universities in the Jesuit tradition share a mission to develop individuals in all aspects of student life (Duminuco, 2000). The mission of Jesuit institutions extends into all areas of student experience, including athletics and academics.

For women student athletes at the selected Jesuit colleges and universities, the participation in athletics has the potential to impact their academic experience in their respective institutions. For the purposes of this study, academic experience included how athletes select, attend, and participate in academic classes. Academic experience also involved how athletes experience course registration, selection of major, and access to academic assistance and technology. In addition, student experience consisted of athletes' reported perceptions of the care they receive from coaches, staff, faculty, and athletic administrators.

Participation in athletics may have influenced their access to academic support, choice of courses, and time that they can devote to academics. In addition, the fact that these women were attending Jesuit universities may have affected their experience in the academic realm. Their experience may have been different, because Jesuit institutions have a unique caring approach and seek to develop the whole person. The mission of Jesuit institutions is to develop and care for the whole person in a variety of realms, including academic and athletic areas. For the purposes of this study, the question was whether that care was actualized and perceived by student athletes. It was important to

examine these issues, because a better understanding of the experience of women student athletes may help inform how these women athletes are supported in their academic endeavors.

Purpose of the Study

The purpose of this study was to examine women athletes' academic experience at select Jesuit colleges and universities with NCAA Division I athletic programs. It explored the perceptions of women student athletes in the areas of academic choices, access to support, availability of technology, and perception of care. This study was conducted exclusively in Jesuit institutions, which have an educational philosophy of cura personalis or care for the person. Specifically, women student athletes were asked whether they had access to preferential course registration, tutoring, computer technology, and academic support. For example, the study asked whether these student athletes had access to additional or diminished academic services. The study further explored whether participation in athletics influenced course selection, class attendance, participation in academic classes, and choice of academic major. In addition, the research assessed to what degree women student athletes felt the presence of cura personalis. Women student athletes were asked whether they felt care from coaches, athletic staff, faculty, and athletic administrators. Women athletes also were queried about perceived expressions of care via academic support.

Background and Need

To appreciate women's intercollegiate athletics today, it is useful first to examine the historical context of athletic development. Acosta and Carpenter (1985) concurred, "In order to fully understand the role sport plays in women's lives, one must first look to the past" (p. 313). The historical growth of women's collegiate athletics provides an

important background for discussing current issues. Therefore, a historical perspective will first be considered, followed by a summary of current women's programs in collegiate athletics.

Historical Perspective on Women's Athletics

Women's collegiate athletics today involve well-developed programs and feature highly trained athletes who spend immeasurable amounts of time training, traveling, and competing for their particular sport. Universities spend significant economic resources to sustain and promote women's athletic programs. This high level of development for collegiate women's athletics was not always the case. Collegiate athletics had very humble beginnings and did not include women at first. In the 1850s, male college students began organizing athletic competitions on campus as recreation. Originally, only students organized intercollegiate competition and the university had no formal involvement (Davenport, 1985). Betterton (1988) stated that the first intercollegiate athletic competition was a crew race between Harvard and Yale in 1852. In 1859, the first intercollegiate baseball game, which was played with modified rules in comparison to the modern game, was played between Fordham, a Jesuit university, and Francis Xavier College of New York (Betterton, 1988). Football, however, was destined to become the major collegiate sport in the late 1800s and early 1900s. In 1869, the first game of football was held between Rutgers University and Princeton University (Davenport, 1985).

During the late 1800s, there was no organized intercollegiate athletic competition for women. However, in the 1870s and 1880s, American colleges did hire female physical education instructors to teach gymnastics and exercises to female students (Hult,

1994). The prevailing attitude at the time was that women were not well-suited to the rigors of high-level athletic competition (Acosta & Carpenter, 1985).

In the 1890s, basketball was the most popular team sport for women in American colleges and universities. In 1896, the first officially recognized varsity game for women took place between the University of California and Stanford University (Hult, 1994). The philosophy of women's athletics in the early 1900s remained the same as it had been in the late 1800s. The emphasis was on inclusion, participation, and health. In colleges and universities, physical education programs for women adhered to this philosophy and expanded in number and size.

For both men and women, intercollegiate athletics began to gain participants at the turn of the 19th century (Cohen, 1998). Football was the flagship sport of intercollegiate competition for men. At the time, serious injuries were common in intercollegiate football. As a result of these injuries, the precursor to the NCAA was first formed in 1905. The primary purpose of this governing organization was to respond to the injuries in football and men's intercollegiate athletics as a whole (Davenport, 1985). "No governance organization for women similar to the NCAA existed until the creation of the Commission on Intercollegiate Athletics for Women (CIAW) in 1971, the forerunner of the Association for Intercollegiate Athletics for Women (AIAW)" (Acosta & Carpenter, 1985, p. 314).

By 1915, men's college football was a significant and popular form of entertainment in the United States. Athletic programs, including football and baseball, began to generate a profit for universities, especially for the private Ivy League schools. In late 1914, the annual Harvard-Yale football game "brought in almost one-third as much as the school's entire tuition revenue" (Schulman & Bowen, 2001, p. 18).

By 1920, athletic departments at most institutions of higher learning were established and had their own budgets (Cohen, 1998). Colleges and universities officially recognized intercollegiate athletics and designated these programs as part of the physical education departments. As formal parts of the institution, athletic departments began to receive funds, staffing, and university support. This financial backing helped develop athletic programs even further (Davenport, 1985). During this time, facilities for athletic competition were built on collegiate campuses, including large stadiums. The public also showed a strong interest in intercollegiate athletic competition. Fans could follow scores in the newspapers and many collegiate games were broadcast on "the newly popular radio" (Cohen, 1998, p. 122).

During the 1920s, women students had limited participation in athletic endeavors. For women, the emphasis was not on competition, but rather on inclusion and involvement (Acosta & Carpenter, 1985). Instead of intercollegiate athletic competition like the men, women participated in non-competitive "play-days or sports-days" (p. 313). For example, each school would participate in a tournament in which the emphasis was on recreation and participation. "The rationale for this structure was to avoid the corruption and over-emphasis on competition found in men's sports" (p. 314). The view at the time was that women needed protection. This caring approach for women's participation was later called the "participation first, competition second" attitude (p. 316).

While the 1920s was a prosperous time for the United States and intercollegiate athletics, the 1930s brought the Great Depression. Economic forces of the Depression affected all areas of American life, including colleges and universities. While intercollegiate athletics enjoyed great growth during the previous decade, Davenport

(1985) maintained that the development of intercollegiate athletics stagnated with the onset of the Depression.

The advent of World War II in 1939 in Europe slowly helped to improve the American economy. During the years of 1941 to 1945, the nation was focused on the war effort, and collegiate athletic programs operated at reduced levels. This essentially created a hiatus for intercollegiate athletics. Universities and colleges could not afford programs such as athletics, and the enrollment of students also declined with the war effort (Davenport, 1985). When World War II ended in 1945, enrollment increased with the GI Bill, American institutions of higher learning began to develop again, and intercollegiate athletics started "anew" (Acosta & Carpenter, 1985, p. 316).

The late 1940s and the decade of the 1950s witnessed the steady development of intercollegiate athletic programs. Competitive opportunities were still mostly reserved for men, while the emphasis for women was mainly on participation. By the late 1960s and early 1970s, the "participation first and competition second" philosophy was beginning to lose favor (Acosta & Carpenter, 1985, p. 316). "Society was beginning to accept women as skillful competitors" (p. 316). Gender stereotyping still existed, but small changes in the way women were viewed as competitive athletes were beginning.

In the 1950s and 1960s, American collegiate athletics became increasingly commercialized. The exposure of collegiate athletic competition increased dramatically with the increasing popularity of television in the early 1950s. As public interest and revenue increased, collegiate athletics became commercialized into a product (Lapchick & Slaughter, 1994). With the rise in commercialism, the level of corruption and scandals also increased. In 1952, the NCAA placed players on the University of Kentucky and Bradley University men's basketball teams on probation for "point-shaving, gambling,"

and accepting illegal payments" (Lapchick & Slaughter, 1994, p. 10).

Commercialization, and, in some cases, corruption of athletic programs, had become a facet of men's American collegiate athletics.

In the 1960s, some women physical education leaders had a vision of an expanded women's intercollegiate athletic presence, without the commercialization present in the men's sports. Toward this outcome, several governing organizations were formed during the 1960s with the exclusive goal of managing women's collegiate athletic competition (Hult, 1994).

One the most significant developments in women's athletics during the 20th century was the passage of Title IX in 1972. An addendum to the 1964 Civil Rights Act, Title IX of the Education Amendment Act of 1972 was enacted to effectively prohibit discrimination on the basis of sex in higher education (Bonnette, 1996). Title IX stated that "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving federal financial assistance" (Hult, 1994, p. 95). Colleges and universities, including private institutions that received federal financial aid, were required to provide equal opportunities for women in educational programs, including athletics.

This federal legislation achieved success on many levels, including a variety of positive effects on women's collegiate athletics. Before Title IX, varsity women athletes were a rarity on college campuses, but Title IX spurred the growth of women's athletic programs. By 1978, participation in women's collegiate sports had doubled in comparison to participation levels in 1971 (Bonnette, 1996). Title IX also had a positive impact on the amount of monetary support women athletes received. "The effect of Title

IX on female athletes was an incredible increase in competitive opportunities and support" (Hult, 1994, pp. 95-96). This meant that colleges and universities were required to provide separate athletic programs with financial aid proportional to the men's programs. The decade during the enactment of Title IX was a period during which women's collegiate athletic opportunities grew more than at any other time (Acosta & Carpenter, 1985).

After Title IX, collegiate athletics, for both men and women, continued to expand. Participation in women's athletics increased, while the number of women administrators and coaches decreased with athletic departments restructuring in the late 1970s and early 1980s (Acosta & Carpenter, 1985). In the 1980s, public interest in women's collegiate athletic programs strengthened. Women's sports, such as basketball, began to generate small revenues at some collegiate institutions. Men's revenue sports, including football, basketball, and baseball, began to produce even more money from "ticket sales, television contracts, and product sales" (Lapchick & Slaughter, 1994, p. 12).

With the growth of women's college athletics, the NCAA began to offer women's championships in all three NCAA divisions during the 1981-1982 season (Hult, 1994). In 1983, the women's governing body, the Association for Intercollegiate Athletics for Women (AIAW) relinquished control to the NCAA. This change in control of women's athletics marked the beginning of the true combination of men's and women's athletic programs under NCAA control (Acosta & Carpenter, 1985).

Under the NCAA in the mid-1980s, women's athletics continued to grow at a steady pace. During the 1981-1982 seasons, the NCAA also began to promote and market women's national championships. The most notable example of this today is the

NCAA Division I Women's Basketball Final Four, which is televised nationally and generates millions of revenue dollars (National Collegiate Athletic Association, 2006).

The 1980s was also marked by corruption in NCAA Men's athletics. The most notable example was the scandal in the Southern Methodist University men's football program, which included illegal payoffs to athletes. The NCAA suspended the Southern Methodist University football program, setting the tone that such violations would have consequences (NCAA, 2006).

On the women's side, the growth, commercialization, and success also carried some controversy. Some critics have wondered whether women athletic participants were more semi-pro athletes than students (Knorr, 2004). Knorr asserted that the "outcomes of college athletics programs are far removed from the academic values often espoused" (p. 1). In 1989, the Knight Foundation reported that "abuses in athletics had reached proportions threatening the very integrity of higher education" (NCAA, 2006, p. 5). The subsequent Knight Foundation Report, released in 1991, urged university presidents and athletic administrators to consider significant reform in collegiate athletics.

Current Perspective on Women's Athletics

As of September 1, 2007, there were 329 colleges and universities with active NCAA Division I athletic programs in the United States (NCAA, 2007). Of this number, there were 17 of the total 28 Jesuit colleges and universities that participated in NCAA Division I competition. During the 2007-2008 academic year, Seattle University intends to apply for NCAA Division I status, which could bring the total number of NCAA Division I Jesuit institutions to 18 by the fall of 2008. Within the 326 active Division I colleges and universities in 2006, there were approximately 62,800 women student

athletes that participated in NCAA Division I athletic programs (NCAA, 2006). The average number of women athletes per institution in Division I schools was 193 for the year 2006. In Division I institutions, the majority of these women were scholarship athletes. This designation as a scholarship athlete means that these women student athletes received partial or full compensation in the form of tuition, books, room, board, and fees. In 2003, the average annual cost for a full scholarship grant for women athletes was \$17,306 (NCAA, 2005).

Universities devote economic resources for athletic training, sports medicine, athletic equipment, and competition expenses. From the perspective of the female athlete, participation in NCAA Division I athletics entails a large time commitment and focus on athletic endeavors. Both scholarship athletes and non-scholarship athletes devote extensive amounts of time to train, travel, and compete for their particular sport.

Current research has supported the construct that female student athletes spend a large amount of time training and competing in NCAA Division I institutions (Duderstadt, 2003; Knorr, 2004; Neenan, 2002). The current literature also provided some insight into the experiences of women student athletes. Several studies addressed the extent that participation in collegiate athletics impacts women student athletes' selection, attendance, and participation in academic classes (Einarson & Matier, 2002; Neenan, 2002; Loughran, 2002; Nolan & Franceschi, 2002; Shulman & Bowen, 2001).

In addition, select research investigated student athletes' experiences with registration for preferred classes, access to computer technology, and selection of a major (Einarson & Matier, 2002; Nolan & Franceschi, 2002; Pope & Miller, 1996; Shulman & Bowen, 2001). Because the area of student support for athletes is a growing professional field, a growing body of research has explored how participation in athletics affects

athletes' access to academic assistance, including tutoring and office hours (Hayes, 1993; Nolan & Franceschi, 2002; Pope & Miller, 1996). In the literature written from a Catholic perspective, authors have considered the extent to which women student athletes perceive that they are cared for by coaches, administrators, faculty, and athletic staff (Conway, 2002; Hayes, 2006; Loughran, 2002; Neenan, 2002).

In the area of selection, attendance, and participation in academic classes, the current research has indicated that participation in athletics can limit student athletes' selection of academic classes (Pascarella et al., 1995; Watt & Moore, 2001). Student athletes tended to elect classes that did not conflict with their established athletic commitments, including practice, competition, and training. Although student athletes often selected classes that did not conflict with their athletic schedules, some authors reported that student athletes had a reduced rate of attendance (Loughran, 2002; Pascarella et al., 1995; Watt & Moore, 2001). Other researchers did not find a link between athletic participation and limited class attendance (Jacobson, 2002; Nolan & Franceschi, 2002). With reference to class participation, most authors established that athletes had a lower level of class participation in comparison to non-athletes (Pascarella et al., 1995; Watt & Moore, 2001).

Academic experience also includes student athletes' experiences with registration for preferred classes, access to computer technology, and selection of a major. These topics have been explored to varying degrees in the current research literature. Little formal research exists on the topic of preferential registration for classes. One narrative research piece indicated that some female athletes had the privilege of registering for preferred classes (Bruening, Armstrong, & Pastore, 2005). On the topic of computer

technology access, the research has indicated that student athletes reported a high level of satisfaction in comparison to their non-athlete peers (Einarson & Matier, 2002).

In terms of academic experience, selection of major has generated a substantial amount of research. Select authors approached this issue from a Jesuit perspective.

These authors reported that women athletes apparently were not concerned about selecting majors in male-dominated fields and tended to choose majors freely (Nolan & Franceschi, 2002). Researchers writing from a general perspective generated varied results. Overall, authors agreed that student athletes required specialized advising services. When researchers examined the academic majors selected by female student athletes, some differences were found in reference to their non-athlete peers.

Specifically, several researchers reported that female student athletes were more likely to select the humanities as their major in comparison to non-athletes (Shulman & Bowen, 2001; Einarson & Matier, 2002).

A relatively large selection of the literature has focused on student athletes' access to academic assistance, including tutoring and office hours. Researchers have concurred that access to specialized academic assistance was critical for the student athlete population (Broughton, 2001; Pope & Miller, 1996; Watt & Moore, 2001). The majority of authors also asserted that access to such support was important for student athlete success. When researchers examined the academic support that was offered in selected institutions, their observations and opinions were widely varied. In one Jesuit institution, authors reported that access to assistance for women student athletes was adequate. In another secular institution, women student athletes reported similar opinions about student services and the availability of faculty outside of class in comparison to female non-athletes. One study focused on the experiences of African-American women student

athletes. This research indicated that this specific athlete population experienced more academic problems in comparison to White women athletes and African-American women non-athletes. Overall, researchers agreed that advising and academic assistance for student athletes was an important component for success, but disagreed about the adequacy of these services.

Select research focuses on the student athletes' perception of care from coaches, administrators, faculty, and athletic staff. Several authors have explored whether students at Jesuit institutions feel cared for or perceive the presence of care in their lives. In a Jesuit secondary school study, an author reported that students were cared for in some aspects and not in others (Conway, 2002). Evidence for care included a caring faculty, spiritual development, academics, and an inclusive extracurricular program. Some students experienced a lack of care and were marginalized or exposed to abusive language.

Several authors wrote about the perception of care from a Jesuit perspective in American colleges and universities. One author asserted that students are cared for through athletic programs, because these programs develop a sound body and mind (Neenan, 2002). Another author concentrated on the relationship between collegiate athletics and education in the context of the Jesuit mission (Loughran, 2002). This author asserted that one potential resource for serving students was the care of the faculty. In another study, researchers commented on the connection between women's athletics and the Jesuit ideal in higher education (Nolan & Franceschi, 2002). The authors reported that for the women athletes at one Jesuit university, compassion and caring was an integral part of their college existence.

Finally, one author considered the topic of care in one article and then wrote a follow-up article over 10 years later (Hayes, 1993). When the author first examined the presence of care for women in Jesuit higher education, she cited a lack of care for the person. In the subsequent article, the author observed that the learning environment and care for women students had improved extensively over time. Overall, authors that wrote about care in Jesuit educational institutions agreed that it was core to the mission. They disagreed about the extent of care present for students and women athletes.

Considering the concerns of some critics, one important element to consider is the impact of participation on women athletes' academic experiences. Women's athletic programs had humble beginnings, aimed at improving the physical health and well-being of women college students. Today, women's athletics has become increasingly commercialized and the pressure on women athletes to perform and devote their time to training is enormous. The participation in women's athletics may have ramifications for women's physical health, emotional health, and academic preparation. The aim of this study was be to examine the current impact of participation in women's athletics on women's academic experience at selected Jesuit institutions.

Theoretical Rationale

Jesuit education at all levels emphasizes the development of the whole person. Toward this goal, one of the hallmarks of Jesuit education is *cura personalis* or "concern for the individual person" (Duminuco, 2000, p. 181). This care of the whole person includes the development of every aspect of the individual's education. In practical terms, Jesuit education helps in the formation of students. This means "the fullest development of all talents: intellectual; imaginative, affective,...creative; effective communication skills; [and] physical" (p. 163). Intellectual and physical development

are both highly important and interactive facets of the educational process. In part, this development is achieved in Jesuit institutions through *cura personalis*. The hallmark of *cura personalis* is the development of personal relationships through caring for each student.

Cura personalis is also consistent with the mission of Jesuit educational institutions. "The objective of Jesuit education is to assist in the fullest possible development of all the God-given talents of each individual person as a member of the human community" (Duminuco, 2000, p. 176). Care of the person helps achieve this goal, because it is tailored to the talents and needs of each individual. Each of the aspects of the educational process, including academics, the arts, and athletics have the purpose of forming a balanced person. Athletics, in particular, can contribute to the strong development of character and a balanced sense of self. Basically, this is a specialized version of the classic Greek idea of sound body and sound mind.

Jesuit schools, in particular, have a philosophy of developing the physical aspect, as well as the academic and spiritual facets of the individual. According to Duminuco (2000), sports and physical education programs are integral parts of the educational process. At face value, sports and physical education programs promote physical health by strengthening the body. Such programs also have the potential to assist in character formation, to help build cooperative skills, and to demonstrate the value of teamwork. These are valuable outcomes, because one goal of Jesuit education is to develop the talents of each student, while simultaneously instilling an awareness and concern for others.

Jesuit educational leaders have echoed the call for *cura personalis* and the support of students in all aspects of the educational process. Jesuit leader Father General Peter-

Hans Kolvenbach, S.J (1984) asserted that caring for each student individually and maintaining personal contact were critical in Jesuit schools and colleges. Concern for the health and well-being of the individual person is a basic characteristic of Jesuit education. This philosophy extends well beyond the classroom. Duminuco (2000) wrote "*Cura personalis* is not limited to the relationship between teacher and student; it affects the curriculum and the entire life of the institution" (p. 182).

Cura personalis provided the theoretical rationale for this study on women's athletics for several reasons. This study aimed to examine the impact of participation in athletics on academic experience. This research was specifically geared towards Jesuit institutions, as one of the tenets of Jesuit education is care of the whole person. Cura personalis is an important component of Jesuit education that encompasses the entire educational experience. Athletic programs are an integral part of the complete education of the person. Thus, cura personalis was a foundational concept for this study, because women student athletes were ideally expected to experience care as part of their educational formation.

Research Questions

This study investigated the following research questions as they relate to women student athletes at select Division I Jesuit colleges and universities in the United States.

- 1. To what extent does participation in collegiate athletics impact women student athletes' selection, attendance, and participation in academic classes?
- 2. To what extent do women student athletes perceive that their participation in athletics affects registration for preferred classes, access to computer technology, and selection of a major?

- 3. To what extent do women student athletes perceive that their participation in athletics affects their access to academic assistance, including tutoring and office hours?
- 4. To what extent do women student athletes perceive that they are cared for by coaches, administrators, faculty, and athletic staff?

These questions were investigated using a survey approach with items designed to address each of these research questions.

Limitations

As with all research, limitations existed within this study. Delimitations of a study include the limitations that the researcher is imposing. In this case, the survey was only distributed to female athletes, and males and non-athletes were excluded from the population. The survey was only given to women enrolled in colleges or universities, which naturally restricted the age of the participants. Limitations were imposed on the selection of the three institutions. Only American Jesuit institutions were selected, and, of the 28 Jesuit colleges and universities, 17 met the criteria of fielding Division I NCAA institutions. Of the 17 institutions that qualified, the researcher non-randomly selected eight institutions to invite and three chose to participate.

In this study, a survey approach was used, and this type of research has limitations. Survey research uses a standardized procedure and limits the response choices. In this study, respondents were asked closed-ended questions. This prevented the submission of comments and naturally limited the range of responses. As with all survey research, respondents can have varied interpretation of the items, which has the potential to influence their choice selection. This survey research was also based on self-reported information, which has natural limitations. Specifically, no information was

used to validate responses. For example, respondents were asked about access to technology and use of tutoring services, but these responses were not verified. Therefore, the accuracy of the information was solely based on the integrity of the participant responses.

In this research, the length of the survey instrument was limited to one page by request of the administrators granting permission for the study. They were concerned with the time that the survey might take. Therefore, these administrators requested that the survey be short in length, easy to complete, and take less than 20 minutes to finish. Because of this length requirement, the number of questions in the survey was restricted. Therefore, the survey could not ask about all aspects of students' academic experience.

A non-response bias might have existed. As mentioned, three Jesuit institutions of higher learning were used. Within these three institutions, the respondents were randomly chosen female student athletes. It is possible that female student athletes who did not participate were significantly different from those women who did complete the survey. If non-participants were different, they may have responded in an alternative or divergent way.

Significance

Currently, limited research exists regarding the self-reported academic experience of women student athletes in Jesuit universities. This research study may help fill a gap in the research literature and may provide a valuable perspective on student experience. The information generated from this research indicated that participation in athletics sometimes impacted student experience with classes. The student athlete responses regarding academic classes could help form policy that guides how students choose, attend, and participate in academic courses. For example, when students were not able to

attend their classes on a regular basis, administrators might want to address this issue and offer accommodations.

The responses to this survey may also help inform support services offered to student athletes. For example, student athletes reported that they sometimes had limited access to technology, which might indicate that increased offerings could be useful. Student athletes also responded that participation in athletics sometimes affected their selection of a major. This potential issue could be addressed by the academic advisors during counseling sessions.

The data also revealed whether students perceived that their academic support needs were being met. The feedback to this question could help inform policy and programming for student athletes. Access to tutoring was an important component for student athletes requiring academic support. For those student athletes who stated that they had restricted access to tutoring, then a policy change might be required to provide or expand that service. In addition, programming to facilitate access to academic aid might be indicated. For example, for those student athletes who had difficulty attending office hours, programming could be offered to help students connect with their professors outside of office hours.

Finally, this study also asked whether women student athletes perceived that they were cared for by coaches, administrators, and athletic staff at Division I Jesuit colleges and universities. For Jesuit colleges and universities, *cura personalis* is at the core of the educational mission. In this study, student athletes responded that they did, in fact, feel cared for by university personnel, which this is evidence that the educational mission was upheld at these institutions. This actualization of the core philosophy of the institution

through athletic programming may be worthy of further study, so that best practices might be shared with other institutions.

In this chapter, the research problem and purpose of the study were explored. Four distinct research questions were presented and utilized to guide the examination of student athlete perceptions regarding their academic experience. In the next chapter, the literature review will lay the empirical and theoretical foundation for exploring these issues.

Definition of Terms

- The Society of Jesus: The Roman Catholic religious order, consisting mostly of priests, founded by Ignatius of Loyola in 1540 (Zwiren, 1995).
- Athletic Director: The university administrator who is assigned the primary leadership responsibility for the management of the institution's athletic program (NCAA, 2006).
- Academic Advisor: "The person responsible for monitoring the academic progress of all student athletes. The academic advisor ensures compliance with all college/university and NCAA academic eligibility rules and regulations" (Zwiren, 1995, p. 9).
- National Collegiate Athletic Association (NCAA): "The NCAA is the administrative governing body of all college sports in the United States. The NCAA adopts and enforces rules, regulations, eligibility, recruiting, and academic standards of all student athletes" (NCAA, 2006, p.1).
- Student Athlete: A student athlete is a student who was recruited by a member of the athletic staff or other representative of athletic interests to enroll at the institution and participate in the intercollegiate athletic program. A non-recruited student

becomes a student athlete when the student is included as an active member of an athletic team that is under the jurisdiction of the athletic department (NCAA, 2005).

- NCAA Division Classification: "The NCAA classifies member institutions into three major classifications based upon an individual school's philosophy." These classifications are NCAA Division I, II, and III. "This philosophy includes academic opportunity, regional and national recruitment of its student athletes, serving the dual objective in a university or college community of serving students, faculty/staff, and the general public; scheduling athletic contests against other division members; income generation; and cooperation with the other member institutions to comply with the programs and rules of the NCAA" (NCAA, 2006).
- Division I: "Division I member institutions have to sponsor at least seven sports for men and seven for women (or six for men and eight for women) with two team sports for each gender. Each playing season has to be represented by each gender as well. There are contest and participant minimums for each sport, as well as scheduling criteria" (NCAA, 2006).
- Division II: "Division II institutions have to sponsor at least five sports for men and five for women, (or four for men and six for women), with two team sports for each gender, and each playing season represented by each gender. There are contest and participant minimums for each sport, as well as scheduling criteria" (NCAA, 2006).

Division III: "Division III institutions have to sponsor at least five sports for men and

five for women, with two team sports for each gender, and each playing season represented by each gender. There are minimum contest and participant minimums for each sport. Division III athletics features student-athletes who receive no financial aid related to their athletic ability and athletic departments are staffed and funded like any other department in the university" (NCAA, 2006).

CHAPTER II

REVIEW OF THE LITERATURE

Restatement of the Problem

Women collegiate student athletes have a distinct experience on campus in comparison to other students on campus. These women student athletes have significant demands on their time, the physical stress of training, and the emotional pressures of athletic competition. The time constraints, physical training, and emotional stressors from participation in collegiate athletics are not similarly experienced by non-athletes (Byers, 1995; Ferrante, Etzel, & Lantz, 1996; Loughran, 2002; Shulman & Bowen, 2001; Watt & Moore, 2001).

In the United States, Jesuit universities are similar to their peer institutions in regard to support of intercollegiate athletics and participation of women student athletes (Neenan, 2002). There are 28 Jesuit colleges and universities in the United States, and all of these schools maintain at least 9 intercollegiate teams. At 12 of the Jesuit universities, student athletes comprise at least 10% of the student population. For all of the Jesuit institutions of higher learning, approximately 10,000 or 8% of all undergraduate students were student athletes in the year 2000-2001. These figures are comparable to other American colleges and universities (Neenan, 2002). In 2006, the figure for the number of student athletes in Jesuit institutions had grown to approximately 10,800 (NCAA, 2006)

On both the positive and the negative sides, participation in high level collegiate athletics has the potential to impact women collegiate athletes' academic experience (Broughton, 2001; Chu, 1989; Pascarella, Bohr, Nora, & Terenzini, 1995; Sellers, Kuperminc, & Damas, 1997; Shulman & Bowen, 2001). Unlike the rest of the student body, athletes may have access to preferential class registration, specialized advising,

academic tutoring, and technology resources. These services may assist women student athletes in their academic pursuits. Preferential class registration enables athletes to enroll in desirable classes that do not conflict with their practice schedule. Academic tutoring, advising, and access to computer technology can help athletes meet the demands of challenging university-level courses (Broughton & Neyer, 2001; Einarson & Matier, 2002; Nolan & Franceschi, 2002; Pope & Miller, 1996; Suggs, 1999; Watt & Moore, 2001).

For women collegiate athletes, the impact of participation in athletics on academics is a complicated issue. There are many avenues for exploration. This study investigated the academic experience of women participating in National Collegiate

Athletic Association (NCAA) Division I athletics at select Jesuit colleges and universities

It was valuable to examine the issue of academic experience within Jesuit colleges and universities, because Jesuit institutions have a philosophy of caring for each student and for developing the whole person (Duminuco, 2000). The mission of Jesuit institutions extends into all areas of student life, including athletics and academics.

Athletic programs and other extracurricular activities are viewed as an extension of the curriculum, with integral educational value.

As stated, women student athletes' participation in athletics has the potential to impact their academic experience in their respective Jesuit institutions. For the purposes of this research study, academic experience included how athletes select, attend, and participate in academic classes. Academic experience also involved how athletes experience course registration, selection of major, and access to technology. This inquiry was also concerned with student support. For the purposes of this research, student

support consisted of student athletes' access to advising and academic assistance, including tutoring and office hours. Finally, this study examined the reported presence of *cura personalis*, or care of the person, which relates to the sound body and sound mind philosophy. Specifically, women student athletes were asked about their perceptions of the care they receive from coaches and administrators.

This review of the literature shall examine the related works regarding student athlete experience in colleges and universities in the United States. To provide a foundation for this study, the review of the literature will include several components. These components include academic experience, student support, and a consideration of a foundational Jesuit idea called *cura personalis*, or care of the person.

For the purposes of this review, the academic experience component is subdivided into two separate sections. In the first section of the literature review, academic experience includes student athletes' class selection, attendance, and participation in academic classes. In the second section of the literature review, academic experience includes class registration, access to computer technology, and selection of major. Only literature that pertained to these specific facets of academic experience were selected.

In the third section, literature regarding student support is included. In this review, student support consists of student athletes' access to advising and academic experience. Some of the literature regarding academic experience and student support was written from a Jesuit perspective, which is included at the beginning of each section. Each of the three sections is followed by a separate summary piece.

The final component in the literature review is a discussion of the *Ratio Studiorum*, *cura personalis*, and the idea of "sound body and sound mind" as it relates to collegiate athletics. The *Ratio Studiorum* is a foundational document, which describes

the Jesuit educational system. A core tenet in Jesuit education is *cura personalis*, which translates into "care of the person". The *Ratio Studiorum* and *cura personalis*, along with the idea of "sound body and sound mind," are explored in this final section of the review of the literature. This component concludes with a separate summary.

In the current literature, there is an extensive selection of writings concerning the academic experience of student athletes in American colleges and universities. These writings have varied and diverse foci. The purpose of this section of the literature review

Academic Experience: Class Selection, Attendance, and Participation

This will be specifically defined as three components: student athletes' selection of academic classes, attendance, and participation in academic classes.

is to present the research that addressed a particular piece of the academic experience.

In Jesuit universities and colleges, student athletes make decisions about the selection, attendance, and participation in academic classes. In a discussion of sports and Jesuit universities, Neenan (2002) asked, "...do athletes pursue their studies in a manner similar to other students and graduate with their classmates?" (p. 5). The answer to this question is "...probably yes" (p. 5). Although athletes are admitted to Jesuit colleges and universities under different criteria than their classmates, Neenan speculated that athletes probably have a comparable academic path.

In a similar article written from a Jesuit perspective, Loughran (2002) asserted that student athletes are not able to take full advantage of the college educational experience. The anti-academic values of NCAA-run college athletics are a problem in Jesuit higher education. According to the author, the NCAA attempts to conceal cheating and neglect of academic values within its member institutions. "The Athletic Department manages to keep its players eligible, but these students are missing out on the real values

of the college experience, of liberal arts education. In their own minds, they are athletes first, students second" (p. 15). Specifically, the author expresses concern regarding classes missed and plagiarized assignments. The author also states that athletic contests are scheduled without regard to the academic calendar. Laughran concludes by offering suggestions for improvement with the goal of restoring academic integrity.

Nolan and Franceschi (2002) also wrote from a Jesuit perspective, but expressed a more positive perspective on women athletes' selection, attendance, and participation in academic classes. Interviewing a prominent athletic coach at Fairfield University, they found that athletic practices were arranged to accommodate academic schedules. The coach stated, "...we practice two and a half to three hours a day, yet every class must be attended and all assignments must be in on time" (p. 20). At this university, all women athletes were held accountable for their time management and submitted weekly academic reports. The authors explained, however, that there were some scheduling conflicts, missed classes, and debates over the ability of athletes to balance their academic loads.

While the previous articles focused on Jesuit student athletes, the larger body of literature reported on the general population of student athletes in the United States. In the influential book *The Game of Life*, Shulman and Bowen (2001) examined the experiences and academic achievement of student athletes. Their study was extensive, utilizing data from five types of higher education institutions, including Division I public and private universities, Ivy League institutions, Division III liberal arts colleges, and Division III women's colleges. They asked a wide variety of questions and accessed data from three decades.

One small piece of their research investigated women student athletes' attitudes toward academic classes. According to their study, there was evidence of an "athlete culture" for both male and female athletes (Shulman & Bowen, 2001, p. 260). One component they tested was reported interest in making original contributions to the sciences and arts. The results showed that, in comparison to non-athletes, male and female athletes were less interested in making such contributions to these fields. Shulman and Bowen asserted that this difference between athletes and non-athletes had increased over time.

Modeled after Shulman and Bowen's research, Einarson and Matier (2002) examined the experiences of student athletes in an elite NCAA Division I private research university. One segment of their research related to women athletes' selection and opinion of academic classes. Specifically, Einarson and Matier surveyed athletes and non-athletes about their experience with the availability and quality of courses. In their analysis, they found that female athletes and non-athletes did not differ significantly in their satisfaction with the availability and quality of academic instruction.

Using a case study approach, Suggs (1999) offered a commentary concerning student athletes and academic experience. He examined an incident from the University of Minnesota-Twin Cities to provide an example of corruption related to student athletes' selection, attendance, and participation in academic classes. According to Suggs, the academic advisor to the basketball team directed a secretary to write papers for the players. During the 1990s, this secretary apparently completed more than 400 assignments for players during a five year period. The academic advisor "also got players into easy classes and even scouted out professors ahead of time to make sure they were 'friendly' to the basketball program, the report says' (p. 2). These allegations

exemplify that participation in athletics can have a negative impact on academic experience.

In a similar commentary, Jacobson (2002) outlined another case regarding student athletes' selection, attendance, and participation in classes. Following the publication of Shulman and Bowen's (2001) book, *The Game of Life*, Ivy League presidents attempted to increase athletes' time devoted to academics. With this aim, these Ivy League administrators decided to designate an additional seven weeks off from athletic practice. Jacobson interviewed and captured women student athletes' reactions to the policy change. One senior and co-captain of a women's Division I swimming team claimed, "The new policy discriminates against athletes, on the mistaken assumption that 'athletics interferes with academics'" (p. 3). Another female athlete emphasized that athletes would not attend an Ivy League school if academics were not important. Overall, the women student athletes and coaches who were interviewed asserted that their athletic schedule did not prevent them from attending and participating in classes.

However, other research indicated that there is a conflict between the academic and athletic worlds of the student athlete (Ferrante, Etzel, & Lantz, 1996; Pascarella et al., 1995; Watt & Moore, 2001). Ferrante, Etzel, and Lantz (1996) stated that student athletes had similar academic concerns as their non-athlete counterparts and had to cope with additional pressures. These additional stressors, associated with athletic participation, had the potential to affect student athletes' educational and personal development. Therefore, the authors recommended that specialized counseling and support services be made available to athletes to accommodate their unique needs and schedules.

Watt and Moore (2001) specifically addressed the scheduling, selection, and attendance of academic classes by athletes. Student athletes' schedules are usually "inflexible and demanding, including classes in the morning, sports-related activities in the afternoon, and homework in the evening" (p. 13). According to the authors, athletes' schedules prevented them from selecting certain classes that conflicted with their athletic commitments. Non-athletes, however, managed their own academic lives and were free to select courses and study at times of their own choosing.

Watt and Moore (2001) also noted that student athletes "often take the same courses at the same times to accommodate practice and game travel schedules" (p. 14). Athletes also tended to separate themselves from non-athletes and avoided participation in class discussions. Pascarella et al. (1995) contended that student athlete isolation can result in avoidance and neglect of academic responsibilities. Watt and Moore (2001) pointed out that student athlete separation could have a positive effect, however. When isolated, these athletes may provide support to each other as they attempt to balance their complex schedules.

Summary

Overall, the reviewed literature concerning student athletes' selection, attendance, and participation in academic classes was varied. With one exception, authors and researchers agreed that athletic commitments tended to limit student athletes' selection of academic classes. Practice schedules, competition times, and training were established, and student athletes typically scheduled their academic classes around these events. With regard to athletes' attendance of classes, the literature was more mixed. Some authors stated that student athletes had a reduced rate of attendance. Other authors asserted that athletic participation was not connected with limited class attendance. In regard to

participation in class, most authors maintained that athletes had a lower level of class participation in comparison to non-athletes.

Academic Experience: Class Registration, Access to Computer Technology, and Selection of a Major

For the purpose of this review, academic experience for student athletes included the selection, attendance, and participation in collegiate classes. Another key component of academic experience included registration for classes, access to computer technology, and selection of a major. The first two elements, class registration and technology access, have generated limited research. Student athlete selection of a major, however, was a topic within numerous studies.

In an article focused on how women's sports fit into the Jesuit ideal, Nolan and Franceschi (2002) considered how women athletes select their majors. "The women chose what academic majors they want to pursue with no thought of a specific major or field being dominated by men" (p. 22). The authors attributed this trend directly to the implementation of Title IX. This legislation mandated equality in athletics and had an enormous impact on higher education.

An addendum to the 1964 Civil Rights Act, Title IX of the Education Amendment Act of 1972 was enacted to prohibit discrimination on the basis of sex in higher education (Bonnette, 1996). Colleges and universities, including Catholic and private institutions that received federal financial aid, were required to provide equal opportunities for women in range of educational programs, including athletics.

This piece of legislation had positive effects on women's collegiate athletics and on formal admissions processes. Before Title IX, athletic programs for women were uncommon on college campuses, but adoption of this law facilitated rapid growth of

these programs. By 1978, participation by women in collegiate sports doubled to 64,000 compared to participation levels of approximately 32,000 in 1971 (Bonnette, 1996). Title IX also had a favorable effect on formal admissions processes in higher education. Prior to 1972, approximately 40% of full-time students in higher education were women. By 1975, that percentage had increased to approximately 47%, which was linked to the compliance of admissions committees with Title IX (Touchton & Davis, 1991). In the years following its inception, Title IX lead to a larger, more equitable enrollment level of women in higher education.

For women athletes, Title IX required equality in scholarships, financial support, equipment, and practice time. The authors Nolan and Franceschi (2002) asserted that these stipulations transferred over to other aspects of women athletes' lives. Collegiate women athletes today expect equality in number of scholarships, practice time, and equipment. Women student athletes tend to chose academic majors more freely, without considering whether the major or field is male dominated.

Writing from a secular perspective, Pope and Miller (1996) examined the selection of an academic major by college student athletes. Their article included a review of the literature associated with support services for student athletes. The authors reported that the college experience of student athletes has been described as closed to exploratory opportunities. These opportunities include investigating personal interests, considering vocational alternatives, and selecting majors. Research indicated that this closure is related to identification with the privileges of being an athlete. As a result, the authors recommended that academic advisors help athletes explore options and select majors early in their academic careers.

In addition, Pope and Miller (1996) suggested that beneficial support for student athletes may also be derived from alternative sources. "Supportive faculty, for example, may play a key role in assisting student athletes in selecting a major or planning a career path" (p. 14). Overall, the authors suggested that student athletes may not consider all options for their academic majors and may require support with this important decision.

In their prominent research study, *The Game of Life*, Shulman and Bowen (2001) considered a wide variety of questions, including how athletes compared with non-athletes in their selection of an academic major. The authors utilized a restricted-access quantitative database developed by the Andrew W. Mellon Foundation. Using this database and statistics compiled by the College Board, the authors examined three entering classes at thirty institutions of higher learning in the United States. The academically selective institutions included Division I public and private universities, Ivy League institutions, Division III liberal arts colleges, and Division III women's colleges. Shulman and Bowen included both male and female athletes in their broad study and made comparisons to the general student population.

The authors reported that male athletes were concentrated in specific majors, primarily the social sciences. In the most recent cohorts studied, female athletes were also clustered in particular majors. In comparison to women non-athletes, women athletes were less likely to major in the humanities. The authors found no difference in the tendency of athletes and non-athletes to major in math, science, or engineering. In the most recent cohort studied, women athletes were more likely to major in psychology, which falls into the category of social sciences. The authors concluded that, over time, female athletes have replicated the patterns found in male athletes.

Following the research model used by Shulman and Bowen (2001), researchers Einarson and Matier (2002) compared athletes and non-athletes' choices of academic majors. The authors categorized majors into five general categories: humanities, social sciences, natural sciences, engineering, and other professional fields. Einarson and Matier found no statistically significant differences in the chosen academic majors of female athletes versus female non-athletes. The majority of women student athletes, however, did major in the social sciences and the other professional fields categories. For the 1989 cohort, 23.1% of female athletes majored in the social sciences and 46.2% majored in other professional fields, for a total of 69.3%. These percentages for the 1994 cohorts were similar. The percentage of female athletes majoring in the social sciences was 21.6% and 44.3% for the other professional fields categories, with a total of 65.9%.

In addition, the total percentage of female athletes in the social sciences and professional fields was greater than non-athletes in those academic major groups. In 1989, the total percentage of female athletes majoring in the social sciences and other professional fields was 69.3%, compared to 64.7% for non-athletes. In 1994, that same percentage for athletes was 65.9% compared to 60.0% for non-athletes.

In the area of computer technology access, limited research exists regarding student athletes' reported experience. However, Einarson and Matier (2002) did ask athletes and non-athletes about their experiences with technology. Specifically, the authors queried students about their satisfaction with computer services and facilities. To examine this issue, they used a survey with a 4-point Likert-type scale with 1=very dissatisfied and 4=very satisfied. Compared to non-athletes, a larger percentage of women athletes reported being "very satisfied" with computer facilities.

Summary

Registration for classes, access to computer technology, and selection of a major are each important components of the student athletes' academic experience. In terms of these three facets, selection of a major has generated the greatest amount of research. Writing from a Jesuit perspective, authors reported that women athletes chose majors freely, without consideration of whether those fields were dominated by men. Research on this topic written from a general perspective generated varied results. Several publications contained recommendations regarding advising services for athletes. These authors suggested that academic advisors should assist student athletes with major selection early in their college careers, so that all options would be available. Additional research investigated the academic majors selected by female student athletes and found some differences from non-athlete peers. Female athletes were less likely to major in the humanities, and the most recent cohort of female athletes were more likely to major in psychology. When research was performed more recently, investigators found no statistically significant difference in major selection between athletes and non-athletes. Interestingly, the authors also studied student athletes' satisfaction with computer services and facilities. In regard to these computer services, student athletes reported high levels of satisfaction.

Student Support: Access to Advising and Academic Assistance

While academic experience is one component of student athletes' time on

campus, access to student support is also important. For the purposes of this study,

student support included athletes' access to advising and access to academic assistance,

including tutoring and office hours with faculty. Each of these facets of student support

was well-represented in the research literature.

Writing from a Jesuit perspective, Nolan and Franceshi (2002) investigated the availability of student support and academic assistance for women athletes. The authors reported that at the Jesuit institution, Fairfield University, women athletes were provided with academic support and assistance. According to a prominent coach at the university, women athletes were given the resources they needed to succeed, including tutoring and study halls. The women were also required to submit weekly academic reports to aid in time management.

Hayes (1993) explored the topic of academic advising from a Jesuit perspective. The author posited that women have different expectations of their advisors and study differently in comparison to men. According to Hayes, "When comparing men and women students, the Harvard Assessment Seminars found that they have different expectations of their advisors and study differently, and that women are more self-critical and use different criteria for evaluating their college experience" (p. 12). The author also reiterated the importance of faculty-student relationships for academic progress. However, women in coed institutions reportedly had fewer contacts with faculty members than women in single-sex schools. The author contended that Jesuit institutions should be leaders in responding to these challenges. Hayes also asserted that Jesuit institutions should adapt their approach to serve each student and help students move forward intellectually.

In the research field, Pope and Miller (1996) presented a review of the literature regarding support services for college student athletes. For this article, the intended audience was advisors and administrators working with student athletes. The authors reported that the unique demands placed on college athletes created a need for specialized

counseling and advising. Academic advising approaches included academic monitoring, general academic advising, tutoring, and structured study time.

Because athletes were often academically under-prepared and had demanding schedules, Pope and Miller (1996) asserted that academic advising was critical.

Therefore, one key outcome of academic advising was to support student athletes in their efforts to balance academic and athletic demands. Specifically, the goals of such programs were to decrease academic difficulties, enhance study skills, and improve organizational ability. The authors maintained that specialized academic services for student athletes were necessary in all types of academic institutions and could be customized at each school.

Pope and Miller (1996) cited several examples of programs designed for student athletes which are tailored to meet the needs of athletes at specific universities. For example, athletes at the University of Florida had access to residential counselors and advisors, a personal development course, and a senior seminar. At the University of North Texas, freshman athletes, transfers, and athletes with low grade point averages attended daily study hall. All athletes had exposure to study skills training, individual advising, and personal encouragement. After the implementation of this program, the university reported a 50% increase in retention of freshman athletes.

Pope and Miller (1996) concluded that the institution had an obligation to support collegiate athletes academically. No single administrator within the institution should have the responsibility for student athlete academic development. Instead, the authors argued that a holistic approach was best for creating an environment for student learning, retention, and growth. Practically, this would include coordination between athletic divisions and the offices of student affairs and academic affairs.

Einarson and Matier (2002) researched the issues of student resources and access to academic assistance, including learning facilities and availability of faculty. The population included athletes and their classmates at a highly selective, private NCAA Division I university. Data was collected from three cohorts: 2,902 matriculants from the class of 1989; 2,832 matriculants from the class of 1994; and 3,054 matriculants from the class of 2004. The researchers obtained data from admissions information, registrar's data, and from the university's comprehensive program of institution-wide survey research of undergraduate students.

In their study, student athletes and non-athletes were asked to report their satisfaction regarding learning facilities and resources, student services, and contact with faculty and administrators. Specifically, students were queried regarding foreign language facilities, computer services and facilities, student services, and administrative responsiveness to student concerns. In comparison to females who were not athletes, female athletes were less satisfied with foreign language facilities and the responsiveness of the administration to student concerns. Specifically, 86.7% of female athletes were "generally satisfied" or "very satisfied" with foreign language facilities versus 94.9% of non-athletes. For administrative responsiveness, only 38.4% of female athletes reported being "generally satisfied" or "very satisfied" in comparison to 53.0% of non-athletes. According to Einarson and Matier (2002), female athletes did not differ significantly in their opinion of student services or the availability of faculty outside of class.

While Einarson and Matier (2002) examined the issue of student resources,
Broughton (2001) elected to focus on academic advising for collegiate student athletes.
The intended audience for this article was the advisors and counselors for collegiate athletes. This author reasoned that a comprehensive advising program was a crucial

factor for the success of student athletes. This advising program should begin with a campus orientation, study halls, and psychological services when necessary. The author emphasized that "providing only academic advising for the student athlete does not sufficiently meet the needs of the student athletes" (p. 4). Thus, Broughton maintained that athletes should be offered a range of academic, psychological, and remedial support services.

Broughton (2001) contended that student athletes are a unique population on college campuses with distinct needs. In addition to academic advising, athletes might require appropriate clinical counseling, performance enhancement, assistance during transitional periods, and career counseling. The author also suggested that student athletes could benefit from NCAA sanctioned life skills training, which included drug and alcohol education, time management, and career selection. Broughton re-iterated that a variety of these approaches were requisite for the effective support of athletes.

In an article pertaining to scandals and academic advisors, Suggs (1999) articulated a need to examine the role of advisors for athletes. The author noted that almost all NCAA Division I institutions provide academic advisors, tutors, and mentors to assist student athletes with their athletic and academic responsibilities. Suggs described a number of cases in which athletes were given inappropriate academic assistance. In one example, writing tutors for athletes were completing assignments for them and were not educated about appropriate levels of help. In another example, an advisor placed athletes into easy classes or into classes with professors known to favor high profile athletes.

Suggs (1999) contended that improprieties involving these advisors forced institutions to re-examine the roles and responsibilities of advisors. The author described

that advisors reported to superiors in the athletic department, not to academic departments within the university. This connection to the athletic department may have contributed to the perspective that athletes could receive inappropriate academic support. Suggs suggested that the academic counseling entities should not be disconnected from the university academic affairs offices or the provost. In addition, Suggs reported that accountability was important. In an interview with the director of academic affairs for athletes at The University of Virginia, Suggs reported that all support staff involved with athletes were held accountable. Ideally, administrators provided tutors and resources, tutors worked with faculty, and coaches reinforced the importance of academics to athletes. The director at The University of Virginia also indicated that athletes should have access to deans and faculty advisors. Overall, Suggs argued that student athletes should have the required support within a positive, ethical culture.

Watt and Moore (2001) examined academic advising for athletes and the specialized needs of NCAA Division I student athletes. "The evidence of pressure may be more clear, for example, on Division I student athletes who must both maintain high academic standards and perform at the top of their sport" (p. 12). The authors elaborated that all athletes need assistance with the internal and external pressures of being a student and an athlete. However, Division I student athletes may require more help. To provide for this special population, student affairs professionals must understand the tension between academics and athletics. With that understanding, advisors would be able to educate faculty and coaches, offer seminars to athletes, design programming, and create networks to support student athletes. Overall, Watt and Moore recommended that advisors must be prepared to meet the unique needs of student athletes with a variety of approaches.

Broughton and Neyer (2001) agreed with Watt and Moore's suggestion that athletes need a range of support methods to meet their needs. The intention of this article was to offer a model for advising student athletes. Like Watt and Moore, the authors observed that student athletes are a unique population requiring specialized assistance. Broughton and Neyer asserted that academic advising alone did not adequately serve the athlete population. Thus, student athletes should have access to academic advising, clinical counseling, life skills development, and performance enhancement. Unlike Suggs (1999), Broughton and Neyer argued that the needs of student athletes are best served *within* the athletic department. The authors indicated that both athletes and counselors believed that athletes might be reluctant to seek outside counseling. Outside counselors might be inadequately trained in athletic issues and needs of this population.

Broughton and Neyer (2001) also advocated for the need to link faculty and campus student affairs professionals with student athletes. The authors postulated that campus community members could offer their insight to student athletes and assist in meeting their needs. The access to faculty and campus student affairs professionals, in combination with a specialized advisor within the athletic department, was critical for student athlete success. Without a multi-faceted support approach, athletes' needs might be unmet, to the detriment of their academic and personal growth.

Zingg (1982) emphasized the importance of a personalized and multi-faceted approach in advising student athletes. The author observed that student athletes, including men and women, faced unique pressures from competition. Many institutions attempted to provide support to mitigate that pressure. Zingg argued that "...reduced courseloads during the sport season, tutors, special advisors, mandatory study halls, academic monitors – are meaningless, if not demeaning, if they are not accompanied with

an understanding of why they may be appropriate and what they are intended to accomplish" (p. 17).

According to Zingg (1982), effective advising should focus on helping student athletes understand the collegiate experience and their own responsibilities. The author argued that the most important function of advising was to increase the student's awareness about the value of education. This outcome can be achieved through the advisor's encouragement, support, sensitivity, and compassion. Zingg advocated a positive advising approach combined with an understanding of the distinctive needs of the student athlete population.

Sellers, Kuperminc, and Damas (1997) considered the college life experiences of women athletes and specifically focused on the African-American population segment. To investigate this issue, they utilized quantitative data from a NCAA commissioned survey, which included over 5,000 full-time undergraduate students at 42 Division I institutions. In their study, the authors examined four areas of African-American women student athletes' college experience, including academic performance. In concordance with other researchers, Sellers, Kuperminc, and Damas acknowledged that student athletes have a unique collegiate experience in comparison to non-athletes (Broughton, 2001; Broughton and Neyer, 2001; Pope and Miller, 1996; Shulman & Bowen, 2001; Watt and Moore, 2001; Zingg, 1982). The authors reported that African-American women athletes had more academic problems than Caucasian women athletes and African-American women non-athletes. To improve academic performance, the authors recommended that university policy makers should focus on the college life experience of African-American women student athletes.

Bruening, Armstrong, and Pastore (2005) also focused on the experiences of African-American women student athletes. To research this issue, they utilized a qualitative approach. In structured interviews, they questioned these athletes about the treatment and support they received from the athletic administration. The authors reported that the African-American women athletes had conflicting opinions about the support received from athletic administration. Some of the African-American women athletes had strong positive views of the treatment and support received, and stated that they received the same academic and related support as other students. Other African-American women athletes stated that support services were lacking. The authors asserted that the descriptive responses conveyed a complete narrative and captured the complex opinions regarding support received.

Summary

According to the research reviewed, access to student support was an integral aspect of student athletes' experience on campus. This support for student athletes included access to advising and access to academic assistance, including tutoring and office hours with faculty. Several researchers and authors emphasized that student athletes were a unique population with specialized needs. Most authors expressed that access to advising and academic assistance was important for student athlete success. Overall, authors varied in their reported observations and opinions regarding advising and academic assistance for student athletes.

From a Jesuit perspective, authors reported that access to assistance for women student athletes at one selected institution met the needs of these athletes. One author also wrote about advising from a Jesuit viewpoint, but offered commentary instead of a case study approach. This author pointed out that Jesuit institutions should be leaders in

offering women access to faculty and academic support. Jesuit institutions should assist each student on a personal level with the development of intellectual capacities.

From a general perspective, several researchers offered ideas regarding targeted and coordinated academic assistance for student athletes. Access to academic assistance, including learning facilities and availability of faculty, was investigated using a quantitative approach. In comparison to women not involved in athletics, women athletes reported a similar opinion regarding student services and the availability of faculty outside of class.

One area of agreement among the majority of authors was the importance of comprehensive advising services for student athletes. According to the literature, student athletes needed a range of support methods to meet their needs. Authors disagreed about whether support services should be located inside or outside the athletic department. Several writers advocated for serving the needs of student athletes *within* the athletic department, while one author supported advising located *outside* the athletic department.

Filling a gap in the literature, several researchers focused on the unique experiences of African-American women student athletes. One study yielded data which indicated that this specific athlete population experienced more academic problems in comparison to White women athletes and African-American women non-athletes. To address this issue, the authors recommended that particular attention be paid to the college life experience of African-American women student athletes. Investigators used a qualitative approach to ask women student athletes about support from athletic administration. They noted that the African-American women student athletes had differing opinions about the academic support received from athletic administration.

Researchers overall articulated diverse perspectives about advising and academic assistance for student athletes.

The *Ratio Studiorum* and *Cura Personalis*

Academic experience and student support are two elements that make an impact on student athletes in institutions of higher education. For Jesuit institutions, which have a philosophy of caring, the presence of *cura personalis* is also an important component for examination. *Cura personalis*, or care of the individual person, traditionally has been a hallmark of Jesuit education (Kolvenbach, 1984). The educational system and philosophy of the Jesuits, including *cura personalis*, was first articulated in the the Jesuit *Ratio Studiorum* in 1599 (Duminuco, 2000). The purpose of this section of the literature review is to consider the *Ratio Studiorum*, *cura personalis*, and the idea of "sound body and sound mind" as it relates to collegiate athletics.

The *Ratio Studiorum* was written by the collective society of the Jesuit order of Catholic priests in the late 1500s, and the finalized version was approved in 1599. At the time it was written and approved, there were more than 200 Jesuit colleges in Europe, with the Jesuit order focused on teaching at the university level. The intention of the *Ratio Studiorum* was to describe, in detail, the educational system of the Jesuits. In English, it literally translated into "Method and System of the Studies of the Society of Jesus" (Padberg, 2000, p. 80).

Practically, it was an organized course of education for Jesuit institutions, with a foundation of "seeking to find God in all things" (Padberg, 2000, p. 97). Overall, the *Ratio Studiorum* espoused "an integrated, process-oriented approach" (Weidner, 1991, p. 160). The document contained rules and regulations for administrators, but was also intended to be flexible. The *Ratio Studiorum* was marked by a specified sequence of

study with active engagement of students that encouraged student and teacher relationships. At a time when teachers were often authoritarian or inexperienced, the document encouraged positive motivation of students and appreciation of individual characteristics (Shore, 1999). Practical aspects included specified academic courses, Jesuit pedagogy, and discipline guidelines for students (Maher, 2001). In addition to a formal course of educational study, the document included provisions for the physical welfare of students. The schedule for school and work hours was arranged to leave time for exercise and healthful pursuits (Padberg, 2002).

From the beginning, the philosophy of Jesuit education was intended to promote the total formation of the person. In the *Ratio Studiorum*, a great emphasis was placed on the development of the whole student (Shore, 1999). "The objective of Jesuit education is to assist in the fullest possible development of all the God-given talents of each individual person as a member of the human community" (Duminuco, 2000, p. 176). All of the separate aspects of the educational process have a unified goal of promoting this balanced character. Formation meant the full development of all capacities, including intellectual, creative, and physical aptitudes (Duminuco, 2000).

According to Duminuco (2000), physical development was viewed an integral component of a Jesuit education.

Education of the whole person implies physical development in harmony with other aspects of the educational process. Jesuit education, therefore, includes a well-developed program of sports and physical education. In addition to strengthening the body, sports programs help young men and women learn to accept both success and failure graciously; they become aware of the need to cooperate with others, using the best qualities of each individual to contribute to the greater advantage of the whole group. (pp. 177-178)

Physical education was articulated as a conduit for physical training, discipline, and character education.

The development of the whole person, including physical development, was based on a foundation of caring. In Jesuit education, *cura personalis* meant care and concern for the individual student (Duminuco, 2001). The idea of *cura personalis* was evident as a theme in early works related to Jesuit schools (Conway, 2002). This philosophy emphasized the development of personal relationships and personalized interest in student life. This approach was not restricted to the relationship between teacher and student (Duminuco, 2001). Education was achieved via the finest academic program in combination with character formation through a program of extra-curricular activities (Conway, 2002).

Cura personalis was integrated into the curriculum and the entire life of the institution. This concern for the individual person remains a tenet of Jesuit education.

This care for each student individually, as far as this is possible, remains and must remain the characteristic of our vocation...Above all, we need to maintain, in one way or another, this personal contact with each of the students in our schools and colleges. (Kolvenbach, 1984, p. 4)

Cura personalis, as a hallmark of Jesuit education, continued to guide both teachers and administrators. For these professionals in Jesuit schools, *cura personalis* served as a foundation for mission and identity (Conway, 2002).

In a recent study, Conway (2002) examined the presence of care in the lives of Jesuit secondary students. The author researched whether students in select Jesuit secondary institutions experienced *cura personalis*. Specifically the author asked, "Do these young men know in the core of their being that they are important, valuable, respected, <u>cared for</u>?" (p. 8). The author investigated what an ethic of care looked like and the specific ways student were cared for in Jesuit schools. If Jesuit secondary schools failed to care for their students, the author wanted to examine the ways this

failure occurred. Overall, the purpose of the study was to determine whether an ethic of care was a lived experience for students at select Jesuit secondary schools.

To explore these issues, Conway (2002) used a qualitative approach. The author selected three secondary schools in different Jesuit provinces within the United States. Conway conducted informal and formal interviews of at least 20 students, members of the faculty, and two administrators in each school. The author also completed in-depth observations and a written document review. As a result, five themes emerged as evidence of care: "...a caring faculty, the spiritual development of students, acceptance of diversity, a strong academic program, and an inclusive extracurricular program" (p. 175). Further, the author found evidence that students were not cared for, including abusive language, uninvolved faculty members, and marginalization of certain student populations.

In reference to *cura personalis* and extracurricular athletic programs, Conway (2002) discovered that students reported feeling cared for in this aspect of their experience. In the written documents, one school publication highlighted the importance of "*mens sana in corpore sano*," which means "a sound mind in a sound body" (p. 202). Athletic programs were designed to develop physical skills, to teach discipline, and to develop a well-rounded person. Students reported feeling cared for and supported in the extracurricular athletic programs.

Neenan (2002) also wrote about athletics from a Jesuit perspective, with a focus on American colleges and universities. Neenan did not directly discuss *cura personalis*, but described the benefits of athletics to the student athlete's body and mind. The author also argued that intercollegiate sports did, in fact, add to the Jesuit mission in higher education institutions. Neenan pointed out that intercollegiate sports programs require

significant financial resources. Sustaining expensive athletic programs can have detrimental financial effects on the university. Athletic programs also have other potential negative outcomes. These effects include activities that reflect poorly on the university, such as scandals involving athletes, and dilution of the student body with less qualified athletes. However, the author maintained that the positive outcomes of athletic programs outweighed the negative aspects.

One argument Neenan (2002) presented in support of athletics was that these programs develop "*mens sana* in *corpore sano*" (p. 3). This phrase references the connection between a sound mind and a sound body. Neenan observed that collegiate athletes in Jesuit institutions balanced a demanding training schedule with academic life. With their teammates, athletes worked toward a common goal, while learning the meaning of discipline and sacrifice. Many athletes experienced defeat and had to cope with disappointment. Celebrating success with grace was also part of athletes' lives. "These are important lessons learned from competitive sports that are fully consistent with the Jesuit educational goal of promoting emotional and spiritual maturity among students" (p. 5). In this positive way, athletic programs had the potential to contribute to the overall mission of Jesuit education.

Loughran (2002) also focused on the relationship between athletics and education in the context of the Jesuit mission. The author considered how college-run athletics fit into Jesuit institutions' integrity and adherence to mission. He mentioned the Jesuit focus, adaptability, and *magis*, which means "the more". Considering the potentially negative effects of NCAA athletics, Loughran suggested that one potential resource was the care of the faculty. In Jesuit institutions, faculty care deeply about academic values,

promotion of justice, and mission. In addition to other proposals, Loughran noted that faculty could ideally help maintain the values and goals of Jesuit liberal arts education.

Nolan and Franceschi (2002) commented on how women's athletics related to the Jesuit ideal in higher education. The authors specifically noted that caring was a tradition within Jesuit education. In an interview with the women's basketball coach at Fairfield University, the authors reported that the university provided equal opportunity for women athletes and a recognizably Jesuit approach. Jesuit education signified moral development and a challenging intellectual environment. For the women athletes, compassion and caring was an integral part of their college existence. Faculty-student relationships were also highlighted as part of the institution. In part, Jesuit education was attractive to women athletes, because of the tradition, and the focus on caring and relationships.

Hayes (1993) focused on women in Jesuit higher education and wrote specifically about *cura personalis*. The author noted that Jesuit universities strive for justice, care of the individual, academic rigor, and continuous renewal. Efforts have been made to provide a positive learning environment for women, but more could be done to achieve the articulated *cura personalis*. In terms of athletics, the author recommended a greater sensitivity to Title IX provisions, so that equity in sports programs for women could be achieved. The Ignatian ideal of caring for women students calls for commitment and ability. "The characteristic Ignatian focus on the individual direction of the student and the emphasis on the development of the whole person are more readily fulfilled when there is a shared understanding of what that student may become" (p. 12). Hayes postulated that educating the whole person required recognition of the varied dimensions of women's lives.

In a follow-up article, Hayes (2006) reported that women still did not have true parity, but extensive improvements had been made in Jesuit higher education. Hayes contended that the learning environment for women in universities had been enhanced. In terms of athletics, Hayes remarked that Title IX regulation inspired strong competitive athletic programs for women. Jesuit institutions became places where women were nurtured and valued. Hayes concluded that, given the mission of Jesuit education, these institutions should be leaders in the development of women students.

Laughlin (2003) wrote on the topic of sport at Jesuit universities, with a focus on spiritual development. The author noted that many professionals in higher education viewed athletics as a conduit for spiritual development. Specifically, athletic participation held the potential to shape character or facilitate spiritual growth. Laughlin speculated on how participation in athletics helped shape athletes as human beings. The author argued that one of the primary functions of sport should be to inform participants regarding what was morally right. The author concluded that, in a Jesuit context, spiritual development should be an outcome of sport.

Summary

Each of the authors emphasized that *cura personalis* is a core concept of Jesuit education that extends to the curriculum outside the classroom. The idea of "a sound mind in a sound body" is evident in the articulated rationale for collegiate athletic programs in Jesuit institutions. Several authors indicated that the *Ratio Studiorum*, a foundational document intended to guide Jesuit education, included directives for the physical welfare of students. The document espoused the importance of an integrated curriculum that develops the whole person and facilitates growth through physical activities.

The researchers indicated that this core concept is still supported in Jesuit institutions today. Each author described ways that Jesuit collegiate athletic programs are connected to the "sound body, sound mind philosophy" and founded on the concept of care. Several researchers asserted that intercollegiate sports support the Jesuit mission in higher education institutions. While collegiate athletic programs can carry negative outcomes, the positive outcomes for the student athletes and the institution are more significant. For athletes, athletics offers opportunities for moral growth, physical development, and character formation. Researchers also indicated that women athletes generally report feeling cared for and supported.

Several authors offered suggestions for strengthening the connection between the ideal of *cura personalis* and athletic programming. One author suggested that spiritual growth should be the goal of structuring athletic programs. For women athletes, another author suggested that Title IX legislation could provide guidelines toward achieving gender equity in sports programs. Finally, several authors remarked that the opportunity for moral growth through athletics is an important manifestation of care. Overall, the research and commentary support the connection between Jesuit collegiate athletic programs and the foundational idea of *cura personalis*. Now that the foundational literature for this study has been considered, the next chapter will provide detail regarding the research methodology.

CHAPTER III

METHODOLOGY

Restatement of Purpose

The primary purpose of this study was to examine the impact of participation in collegiate athletics on women athletes' academic experience at selected Jesuit colleges and universities. For women student athletes, their participation in collegiate athletics contributes to a differential experience in comparison to other students on campus. These student athletes spend time practicing, traveling, and training for their respective sports. This study endeavored to investigate the impact of athletic participation on academic experience. Four research questions guided this study, and a survey approach was used to attempt to provide insight into these questions. For example, the study tested whether these student athletes perceived that they had access to additional or diminished academic services. Survey items inquired about access to tutoring, computers, advising, and professor office hours. Additional items asked about course selection, study time, and selection of major. The study also explored whether participation in athletics influenced course selection and choice of academic major. Then, each of the individual items in the survey were linked to one of the four research questions in the study, with the aim of providing insight into respondents' perceptions regarding these questions.

Research Design

To investigate these issues, a quantitative survey research approach was utilized. A Likert-type survey consisted of 32 items that each had five possible options, followed by demographic information and questions regarding religious affiliation and major. The overall goal of the survey was to determine information regarding student athlete academic experience, student support, and care given to athletes.

Population

In the United States, there are a total of 28 Jesuit colleges and universities. Of these institutions of higher education, 17 currently have both co-ed enrollment and women's athletic programs that are classified as NCAA Division I institutions. Table 1 displays the population selection and criteria for inclusion. Within the 17 institutions meeting the criteria, a non-random selection of three institutions was made. Initially, eight of the 17 qualifying institutions were invited to participate. These universities and colleges were chosen in consideration of geographic location, access, and economic considerations. At each of the eight institutions, contact information for the Athletic Director or Assistant Athletic Director was obtained via the school's website. The Athletic Director or Assistant Athletic Director and their administrative support professional were first contacted via e-mail. If no response occurred, a follow-up phone call to the contact people at each institution was made a week later. If the e-mail and phone call did not generate a reply, one brief follow-up e-mail was sent approximately a week following the phone call.

Of the eight invited institutions, administrators at five of the institutions either did not respond to the invitation or declined to participate. One administrator that responded, but declined to participate, was at an institution entering the rigorous NCAA certification process. The following three colleges and universities were invited and agreed to participate: the University of San Francisco in California, Fordham University in New York, and Boston College in Massachusetts.

Population Selection and Criteria for Inclusion

Table 1

Jesuit Colleges and Universities in the United States

Boston College*
Canisius College*
College of the Holy Cross
Creighton University*

Fairfield University
Fordham University*
Georgetown University*
Gonzaga University*

John Carroll University
Le Moyne College
Loyola College (Maryland)*
Loyola Marymount University*

Loyola University Chicago* Loyola University New Orleans Marquette University* Regis University

Rockhurst University St. Joseph's University* St. Louis University* St. Peter's College*

Santa Clara University*
Seattle University**
Spring Hill College
University of Detroit Mercy*

University of San Francisco* University of Scranton Wheeling Jesuit University Xavier University*

Note. *Qualifying Jesuit Colleges and Universities that met criteria for this study **Jesuit Colleges and Universities applying for Division I status in 2007-08

Within each of the three institutions that participated in this study, the population included only women student athletes who participated in an intercollegiate NCAA Division I athletic team. By definition, these women were full-time students. At each of the institutions, several of the NCAA Division I athletic teams were randomly selected

and members of these teams made up the population for that school. There were a total of 12 different randomly selected athletic teams across the three institutions. This selection provided a total population of 100 women student athletes.

Instrumentation

Randomly selected women student athletes at three select Jesuit colleges completed a one-page (front and back) written pencil-and-paper survey (Appendix D) administered in person by an athletic administrator at the university or college. The Institutional Review Board (IRB) issued approval for this research (Appendix A) and the researcher-designed survey that was utilized. In the survey, the demographic information was used to determine basic information about respondents, including ethnicity, year in college, religious affiliation, and academic major. This pencil-and-paper survey took approximately 20 minutes to complete and was administered on-site at the college or university by a designated administrator at that institution.

Respondents had the option of not participating in the study and were informed that respondents were anonymous. The survey itself consisted of 37 total items, including five demographic questions and 32 survey items, which each had five possible options on a Likert-type scale. Measures of academic experience, student support, and perception of care were scaled (from 0=never to 4=always). The survey was intentionally designed to be brief. Most athletic directors and administrators who granted permission specifically requested that the survey be short, due to their own time constraints. In addition, student athlete respondents might have been more likely to answer a short, concise questionnaire rather than a longer one.

On the survey, the 32 Likert-type survey items correlated to the research questions according to Table 2.

Table 2

Research Questions and Corresponding Survey Items

Research Question	Corresponding Survey Items
Question #1 ("Selection"): To what extent does participation in collegiate athletics impact women student athletes' selection, attendance, and participation in academic classes?	10, 11, 12, 13, 14, 15, 16
Question #2 ("Access"): To what extent do women student athletes perceive that their participation in athletics affects registration for preferred classes, access to computer technology, and selection of a major?	7, 8, 9, 17, 18, 19, 20, 21
Question #3 ("Assistance"): To what extent do women student athletes perceive that their participation in athletics affects their access to academic assistance, including tutoring and office hours?	1, 2, 3, 4, 5, 6, 22, 23, 25, 26
Question #4 ("Care"): To what extent do women student athletes perceive that they are cared for by coaches, administrators, athletic staff, and faculty?	24, 27, 28, 29, 30, 31, 32

Validity

Face, construct, and content validity of the survey were established by sending the survey instrument to a panel of eight experts for review (Appendix G). These validity panel members were familiar with or involved in NCAA Division I athletic programs in the United States. Several of the validity panel members had specific knowledge of athletic programs within Jesuit institutions; others were former Division I women collegiate athletes.

Each member of the validity panel received the survey instrument, a questionnaire regarding the survey (Appendix F), a cover letter describing the study (Appendix E), and

a self-addressed stamped envelope to return their comments. The questionnaire specifically inquired whether each survey item accurately addressed the research questions of the study. The panel was also asked to provide feedback about item readability, use of terms, format clarity, and length of time required to complete the survey. The panel had an opportunity to provide any additional comments regarding the survey.

Based on the comments of the validity panel, several survey items were removed and re-worded for clarity and purpose. All of the panel members responded that the survey was adequate in length. While five panel members stated that all of the items were clear, three experts indicated that a few items were ambiguous. These items were clarified based on these comments. In addition, one of the panel members stated that some of the items were extraneous or too lengthy.

As a result of their input, the researcher made modifications to select items in the survey instrument. The wording was clarified for four of the items. Two of the items were shortened to make the questions more concise. One panel member suggested that the choices in the response scale be clarified. Based on this comment and the input of a statistician, the scale was simplified.

Reliability

The survey was tested for reliability by utilizing the statistical computation of the coefficient alpha, also known as Cronbach's alpha. This test measured how well a set of items gauged an underlying construct and provided a measure of consistency. In general, as the average inter-item correlation increases, the value for Cronbach's alpha will also increase. The coefficient alpha is a widely accepted test for internal consistency

reliability. For research in education, psychology, and the social sciences fields, alpha coefficients with a range of at least 0.70 to 1.0 are considered desirable.

This test for reliability can be used for both Likert-type scale items and demographic questions that yield responses that are greater than binary ones. Each item on the survey is assigned a range of points and is given an individual score for the coefficient alpha. Surveys for this study were administered once per respondent. Because the study was not longitudinal or disseminated multiple times, reliability over time was not considered to be a factor. The information gathered from this study was treated as data from one point in time.

For this research study, Cronbach's alpha was calculated for the 32 items in the survey. Initially, when the coefficient alpha was computed for all of the 32 items, a reliability score of 0.67 was achieved. In an attempt to increase the value of Cronbach's alpha, three items from the survey were removed. These three items were questions #2, #4, and #23. Each of these three items was linked to the third research question, referred to as "Assistance". With these three items removed, the alpha coefficient was calculated to be 0.71, which was considered to be an acceptable level of reliability.

Data Collection

The survey was administered on-site at each of the three selected Jesuit institutions. The researcher followed a number of specific steps to collect data at each of the selected universities. The same general data collection process was used at each of the institutions.

The first step in the process was to contact the Athletic Director at each institution for permission to survey women student athletes. Once permission was granted, each Athletic Director designated a contact person within the athletic department. Each

contact person at the three institutions was contacted via e-mail to make logistical arrangements. Once an agreement was reached regarding arrangements, the researcher sent a package by U.S. mail to each contact person. This package contained a cover letter (Appendix H), the surveys, pens, and a large, self-addressed stamped envelope to return the completed surveys. One of the administrators preferred that the cover letter and surveys be delivered electronically, and this request was honored. The contact person was responsible for distributing, collecting, and returning the surveys within three weeks. One contact person needed additional time to distribute the surveys, because the women athletes at that institution were required to fill out a NCAA nutrition survey within that time period.

In the cover letter, the researcher requested that the survey environment have certain specifications to theoretically achieve a similar experience for all of the participating athletes. The ideal environment was an indoor classroom or study area on campus that was in close proximity to each team's practice site. This area was to be indoors, furnished with tables and chairs, and ideally had a quiet environment. In the end, the administrators who distributed the surveys described the environments as such. At each of the schools, the surveys were distributed in the offices and conference rooms of the athletic department.

The cover letter also requested that the contact person briefly describe the purpose of the study and its importance. Student athlete respondents were thanked for their participation. They were also informed that their participation would be anonymous and that their participation was completely voluntary. Respondents were also made aware that they could decide to end their participation at any time without penalty.

Before the survey was circulated, the contact person ensured that the student athletes were comfortable completing the survey. Then, pens or #2 pencils and surveys were distributed. The logistics of completing the survey were briefly covered. Student athletes were made aware that the survey should take approximately 20 minutes to complete and that there were no right or wrong answers. Capturing the perceptions and experience of the respondents was the aim of the research. Respondents were asked if they had any questions prior to survey distribution.

All respondents were allowed to complete their survey with no time limit. As each student athlete completed her survey, the contact person collected the survey as each respondent finished. Student athletes were advised that they could leave when they had completed their survey. When all respondents were finished, the administrator sealed the surveys in the large envelope. Any remaining supplies, including pencils and trash were collected. When all supplies and surveys were collected, the data collection was concluded. The contact person then mailed the completed surveys to the researcher in the large envelope.

Data Analysis

The subjects in this study were all female NCAA Division I athletes, and the sampling frame was the three Jesuit institutions of higher education. For the demographic information, there were five variables: 1) NCAA sport, 2) ethnicity, 3) year in college, 4) religious affiliation, and 5) major. The results were reported for each of the five separate demographic variables. For each NCAA sport played, the respondents' sports were stated with raw numbers by school. For each of the three schools, the top three NCAA sports played were conveyed by percentage for that school. For the three

schools in aggregate, the top three NCAA sports played by all respondents were reported by percentage.

For the demographic data regarding ethnicity, the ethnic composition of the three schools combined was included. Then, the ethnic composition of each of the three schools was detailed by raw number and by percentage. With the demographic item for year in college, the overall percentage for the three schools in aggregate was calculated. The year in college will also be presented for each of the three schools by percentage and by raw numbers.

The demographic item for religious affiliation was included for all three schools in aggregate, split by Catholic and non-Catholic. For each of the three schools separately, the percentage of respondents by religious faith was provided. Finally, for the demographic item regarding major, the two most frequently selected categories for major were reported for the three schools combined. The most infrequently selected major for all of the three schools was stated as well. For each of the three schools separately, the selected majors were included by percentage and by raw values.

For the 32 Likert-type type survey items, the data analysis included several components. Each of the 32 survey items were correlated with one of the four corresponding research questions. The aggregated mean and standard deviation from the mean was reported for each of the items by their attachment to the four research questions. In addition, four ANOVAs were be calculated. This included the significance probability, or *p*-value, for each of the items. Following the ANOVA, the measure of effect size and the Scheffe test were reported for those research questions that produced statistically significant differences between the three schools.

The four research questions for this study were analyzed as follows:

Question #1: To what extent does participation in collegiate athletics impact women student athletes' selection, attendance, and participation in academic classes?

This question was linked to corresponding survey items 10, 11, 12, 13, 14, 15, and 16. The aggregated data for all of these items were reported in overall means and standard deviations. The ANOVA for this question, as well as the measure for the effect size and Scheffe contrast test were included.

Question #2: To what extent do women student athletes perceive that their participation in athletics affects registration for preferred classes, access to computer technology, and selection of a major?

Survey items 7, 8, 9, 17, 18, 19, 20 and 21 were designed to gather information to respond to this question. These specific items were collectively analyzed for overall means and standard deviations. The ANOVA, measure for effect size, and Scheffe contrast test provided additional statistical information for this second research question.

Question #3: To what extent do women student athletes perceive that their participation in athletics affects their access to academic assistance, including tutoring and office hours?

Because this research question had breadth, 10 survey items were utilized to provide data regarding this subject. Specifically, survey items 1, 2, 3, 4, 5, 6, 22, 23, 25, and 26 supplied feedback pertinent to this question. The mean, standard deviation from the mean, ANOVA, measure of effect size, and Scheffe test were reported.

Question #4: To what extent do women student athletes perceive that they are cared for by coaches, administrators, faculty, and athletic staff?

This research question, linked directly to the theoretical rationale, was asked in a direct way in survey items 24, 27, 28, 29, 30, 31, and 32. The mean and standard

deviation from the mean were provided. An ANOVA completed the statistical analysis for this question.

As stated, the demographic data, which included items 33-37 were also included. Statistical information was provided for 1) NCAA sport, 2) ethnicity, 3) year in college, 4) religious affiliation, and 5) major. In the next chapter, the findings of the study will be outlined and reported in detail.

CHAPTER IV

FINDINGS

Introduction

The purpose of this chapter is to present the findings regarding the impact of participation in collegiate athletics on women athletes' academic experience at selected Jesuit colleges and universities. To investigate this issue a survey approach with 32 Likert-type items and five demographic questions was used. As reported in the Methodology chapter, the reliability of the survey was assessed by utilizing the coefficient alpha, also known as Cronbach's alpha. The respective Cronbach's alpha values for the first, second, third, and fourth research questions were: 0.68, 0.64, 0.71, and 0.72. The coefficient alpha score for all of the survey items was 0.71. In educational research, values of 0.70 and higher are generally considered an acceptable coefficient of reliability.

In the survey, each of the 32 Likert-type items was connected to one of four research variables. These four research variables were labeled as "Selection," "Access," "Assistance," and "Care". For each of the four variables, the overall mean and the standard deviation from the mean was calculated. The results for the four variables were split by the three schools: Boston College, Fordham University, and the University of San Francisco. Four one-way ANOVAs were calculated and will be reported in this chapter. In addition, an analysis for effect size (eta²) and pair-wise comparisons via a Scheffe test were performed.

Demographic Data

Demographic information was requested from the respondents attending the three schools: Boston College, Fordham University, and the University of San Francisco. The three groups were of similar size. For Boston College the total number of respondents was 30, for Fordham University the total was 29, and for the University of San Francisco the size was 41. There were five demographic variables: 1) NCAA sport, 2) ethnicity, 3) year in college, 4) religious affiliation, and 5) major. The results will be reported for each of the five separate demographic variables and are summarized in Tables 3 and 4.

For the first demographic variable, NCAA sport played, there were 19 different NCAA Division I team sports offered for women, from basketball to water polo. Of the 19 possible Division I sports, the female athlete respondents participated in 12 different sports. These 12 sports were basketball, cross country, field hockey, ice hockey, lacrosse, rowing, soccer, softball, swimming and diving, tennis, track and field, and volleyball. Of the 100 women athlete respondents, 35% of the respondents played soccer, 18.0% competed in volleyball, and 16.0% participated in tennis.

At Boston College, the women respondents played six different varsity sports, with lacrosse accounting for the highest percentage at 33.3%. At Fordham University, student athletes were involved in seven different sports, and the highest percentage by sport was track and field at 24.1%. At the University of San Francisco, respondents competed in four different sports and the highest percentage by sport was 51.2% for soccer. Specific data by school and sport played can be found in Table 3.

Table 3

Demographic Data for Sport Played

Sport	Boston College	Fordham	University of San
12	20	University	Francisco
n=12	n=30	n=29	n=41
Basketball	-	1	-
Cross Country	-	-	2
Field Hockey	1	-	-
Ice Hockey	2	-	-
Lacrosse	10	-	-
Rowing	-	5	-
Soccer	8	6	21
Softball	-	2	-
Swim & Diving	4	3	-
Tennis	-	2	10
Track & Field	-	7	-
Volleyball	4	4	8
No response	1	-	-
Total	30	29	41

The ethnic composition of the respondents at the three schools was similar, as each of the schools had a majority of White or European-American respondents. For the three schools combined, the ethnic breakdown was 83.0% White or European-American, 6.0% Other, 5.0% No response, 4.0% Hispanic or Latino, 2.0% Asian or Pacific Islander, and 1.0% African-American. For Boston College, the most frequent ethnicity was White or European-American at 93.3%. Similarly, 96.6% of the respondents at Fordham University were White or European-American. At the University of San Francisco, 65.9% of the student athletes who responded were White or European-American. The

summary of the demographic data, including ethnicity, year in college, religious affiliation, and major, can be found in Table 4.

For the demographic item regarding year in college, the distribution between the three schools was fairly similar. For the three schools in aggregate, the distribution was as follows: 27.0% freshman, 32.9% sophomores, 22.5% juniors, 15.3% seniors, and 1.1% 5th year. Overall, 1.2% of the respondents did not reply to the item regarding year in college. At Boston College, the respondents by class were relatively evenly distributed by percentage. Each class in order from freshman to 5th year was: 26.7%, 26.7%, 20.0%, 20.0%, and 3.3% respectively. For the year in college item, the results for Fordham University were comparable with 27.6% freshman, 37.9% sophomores, 20.7% juniors, and 13.8% seniors. University of San Francisco respondents reported the following breakdown by year in college: 26.8% freshman, 34.1% sophomores, 26.8% juniors, and 12.2% seniors.

The demographic item regarding the religious affiliation of the student athletes indicated that the majority of the respondents identified as Catholic. For the three schools in aggregate, the reported religious affiliation was 68.0% Catholic overall, 27.0% Non-Catholic, and 5.0% did not respond. At Boston College, 76.7% of the respondents were affiliated with the Catholic faith. Only 16.7% of the respondents were non-Catholic, which included Protestant, Jewish, and the No religion choice. The remaining 6.7% did not respond to the religious affiliation question.

At Fordham University the percentage of Catholic respondents was the highest for the three schools at 96.6%. All of the respondents replied to the religious affiliation item and the remaining 3.4% of student athletes were Non-Catholic, which specifically included the Protestant faith.

Table 4

Summary of Demographic L	Pata		
	Boston College	Fordham University	University of San Francisco
	n=30	n=29	n=41
Ethnicity			
Asian or Pacific Islander	-	-	2
Hispanic or Latino	1	-	3
Native American	-	-	-
African-American	-	-	1
Middle Eastern	-	-	-
White/ European Am.	28	28	27
Other	-	-	6
No Response	1	1	2
Year			
Freshman	8	8	11
Sophomore	8	8 11	14
Junior	7	6	11
Senior	6	4	5
5 th Year	1	4	3
3 Tear	1	-	-
Religious Affiliation			
Catholic	23	28	17
Protestant	2	1	2
Other Christian	-	-	3
Jewish	2	-	-
Chinese traditional	-	-	-
Buddhist	-	-	-
Hindu	-	-	1
Muslim	-	-	-
Agnostic	-	-	1
No religion	1	-	13
Other	-	-	1
No Response	2	-	3
Major	7	2	0
Arts and Humanities	7	2	9
Math & Engineering	1	-	-
Natural Sciences	2	-	3
Social Sciences	5	11	6
Technical- Pre-Prof.	6	11	14
Other	4	-	6
Undecided	3	5	3
No Response	2	-	-

At the University of San Francisco, 41.5% of the sample identified as Catholic, which was the lowest percentage for this response between the three schools. For the remainder of the respondents, 51.2% identified as Non-Catholic, which included Protestant, Other Christian, Hindu, Agnostic, No religion, and other religion. Interestingly, the second highest religion category by percentage was No religion, which was 31.7%. At the University of San Francisco, 7.3% did not respond to the religious affiliation category.

For the demographic item regarding major, there were seven choices of major, although a few student athletes did not reply to this question and one respondent wrote in a major. For the three schools combined, the two most frequently selected majors by percentage were the Technical-Pre-Professional category, which included education, business, or physical therapy, and the Social Sciences major. For the 100 student athletes who completed the survey, the Technical-Pre-Professional major was selected by 30.7%, while 23.1% of respondents majored in the Social Sciences. The most infrequently selected major was Math and Engineering, which accounted for only 1.1% of the total responses for all three schools.

At Boston College, the highest percent by major was Arts and Humanities at 23.3%, followed by the Technical-Pre-Professional major at 20.0%. The most rarely selected major, for those student athletes completing this item, was Math and Engineering at 3.3%. Boston College was the only institution where some individuals did not answer this question, and the non-responders comprised 6.7% of the total.

At Fordham University, the most frequently selected majors were the Technical-Pre-Professional and the Social Sciences, which each made up 37.9% of the total. There were three majors that were not selected, which were Math and Engineering, Natural

Sciences, and the Other category. For the remainder of the respondents at Fordham University, 17.2% were undecided and 6.9% majored in Arts and Humanities.

At the University of San Francisco, the two most frequently reported majors were the Technical-Pre-Professional category at 34.2% and Arts and Humanities at 22.0%. There was a variety of selected majors at this school, including 7.3% Natural Sciences majors and 14.6% focusing in the Social Sciences. The lowest major by percentage was Math and Engineering at 0.0%, and 2.4% of respondents opted to write in their major.

Statistical Comparisons

In the survey, each of the 32 Likert-type questions was connected to one of the four research questions, which were given variable names. For Research Questions #1-4, the variable names were "Selection," "Access," "Assistance," and "Care" respectively. For each of the four research questions, the mean and the standard deviation was calculated for each school. These statistics and the overall mean with the standard deviation for each question can be found in Table 5. In the table, each cell contains the mean and, in parenthesis, the standard deviation from the mean.

Research Question One

The first research question, with the variable moniker "Selection," investigated: To what extent does participation in collegiate athletics impact women student athletes' selection, attendance, and participation in academic classes? The responses were numerically scaled from 0 for "Never", 1 for "Rarely", 2 for "Sometimes", 3 for "Often", and 4 for an "Always" response.

For this first research question, dubbed "Selection," the University of San Francisco had a mean of 1.91 and the largest standard deviation from the mean for all the

Summary of the Mean and Standard Deviation for Each School by Research Question

Table 5

School	RQ #1	RQ #2	RQ #3	RQ #4
	"Selection"	"Access"	"Assistance"	"Care"
Boston College	1.86	1.75	2.04	2.68
	(0.28)	(0.37)	(0.49)	(0.58)
Fordham	2.18	2.61	2.33	2.57
University	(0.28)	(0.28)	(0.33)	(0.37)
University of San	1.91	2.24	1.66	2.50
Francisco	(0.33)	(0.40)	(0.65)	(0.70)
All	1.98	2.21	1.97	2.57
	(0.32)	(0.38)	(0.60)	(0.58)

schools at 0.33. The mean of 1.91 for the University of San Francisco fell between the responses of "Rarely" and "Sometimes," but corresponded very closely to a response of "Sometimes," which was coded numerically at a value of 2.

For this same research question regarding "Selection," Boston College reported the lowest mean of the three schools at 1.86 with a standard deviation of 0.28. The mean of 1.86 also fell between the responses of "Rarely" and "Sometimes".

Fordham University reported the highest mean for the first research question referred to as "Selection". The mean for Fordham was 2.18 and a standard deviation of 0.28. This mean placed the responses between "Sometimes" and "Often," which were coded as 2 and 3 respectively. For all three of the schools, the overall mean for this question was 1.98, which corresponded closely to a choice of "Sometimes".

For each research question, a one-way ANOVA was performed. The summary of ANOVA results can be viewed in Table 6. For each of the four ANOVAs, the degrees of freedom (df) between groups was 2, the df within groups was 97, and the total df was 99.

Summary of ANOVA for the Four Research Ouestions

Table 6

	Sum of	Mean	F	p Value	Eta ²
	Squares	Square			
Research Question #1					
Between Groups	1.83	0.91	10.26	0.000	0.17
Within Groups	8.63	0.09			
Total	10.46				
Research Question #2					
Between Groups	10.94	5.47	42.99	0.000	0.47
Within Groups	12.35	0.13			
Total	23.29				
Research Question #3					
Between Groups	8.13	4.07	14.65	0.000	0.23
Within Groups	26.92	0.28			
Total	35.05				
Research Question #4					
Between Groups	0.52	0.26	0.77	0.47	n/a
Within Groups	32.98	0.34			
Total	33.50				

For each of the four research questions, a one-way ANOVA was performed to assess the variance between the three schools. Table 6 provides the value of the Sum of Squares between groups, within groups, and the total by research question. The Mean Square between groups and within groups is also provided in this table. For three of the four research questions, these data indicated statistically significant differences between the schools.

For Research Question One, the data indicated that there was a significant difference (F = 10.62, p = 0.00) between the three schools. In Table 7, the summary of the ANOVA results for the first research question can be found. To study the extent of

Summary of ANOVA for Research Question #1

Table 7

	Sum of	Mean	F	p Value	Eta ²
	Squares	Square			
Research Question #1					
Between Groups	1.83	0.91	10.26	0.000	0.17
Within Groups	8.63	0.09			
Total	10.46				

this difference, effect size was measured using eta². To interpret these effect sizes, the guidelines set forth by Cohen (1988) were consulted. According to Cohen's suggested guidelines, the values of 0.01-0.05 for effect size are considered small, 0.06-0.13 are considered medium, and 0.14 or greater is considered to be large.

For research question one, the measure for effect size (eta²) was calculated and interpreted, using the guideline that an effect size equal to or greater than 0.14 (eta² ≥ 0.14) was considered large. For the first research question, the value for the effect size (eta² = 0.17) was large, although it was the smallest of the three effect sizes performed for the research questions producing statistically significant variance. For the first three research questions, an ANOVA based Scheffe (contrast) test was calculated. Scheffe contrast tests are often used to determine direction when significant differences exist and effect size is large. The effect size and Scheffe test were not calculated for Research Question Four, as statistically significant differences were not found for this question.

For research question one, the Scheffe test indicated two significant contrasts.

Table 8 summarizes the significance values for the Scheffe test for this research question.

Table 8

Summary of the Significance Values for the Scheffe (Contrast) Test for Research Ouestion #1

Dependent Variable	School	Boston College	Fordham University	University of San Francisco
Research Question #1 "Selection"	B.C. Fordham U.	0.00	-	
Selection	U.S.F.	0.74	0.00	

First, the significance value (p=0.00) between Boston College and Fordham University showed difference between the two schools with directionality towards Fordham University. The Scheffe test indicated a significant difference (p=0.00) between the University of San Francisco and Fordham, again favoring Fordham University.

Research Question Two

The second research question, called the "Access" variable, attempted to determine: To what extent do women student athletes perceive that their participation in athletics affects registration for preferred classes, access to computer technology, and selection of a major? Table 5 presents the summary of the mean and the standard deviation for each school by research question. At the University of San Francisco, the mean response to the second research question was 2.24 with a standard deviation of 0.40. This mean for the second research question fell numerically between the means of Fordham and Boston College, just as it was for the first research question. The University of San Francisco's value for the "Access" research question places the responses from athletes at this institution between "Sometimes and "Often".

At Boston College, the mean for the "Access" question was again the lowest of all of the three schools with a value of 1.75. This mean fell between "Rarely," which had a

coded value of 1 and "Sometimes" with a value of 2. The standard deviation from the mean for this question at Boston College was 0.37.

For the second research question called "Access," Fordham University reported the highest mean, just as it did for the first research question. This mean of 2.61 fell between "Sometimes" and "Often" and was the only mean for this question that indicated a value closer to the "Often" response. The standard deviation for Fordham, which was 0.28, was also the lowest value for the three schools for this particular question. For the three schools in aggregate, the overall mean for the "Access" question was 2.21, closer to "Sometimes," and had a standard deviation of 0.38.

As with the first research question, the data for Research Question Two produced statistically significant differences (F = 42.99, p = 0.00) between the three schools. The summary of the ANOVA results for the second research question can be found in Table 9. The F value for the second research question was the largest of the three research Table 9

Summary of ANOVA for Research Question #2

	Sum of Squares	Mean Square	F	p Value	Eta ²
Research Question #2 Between Groups	10.94	5.47	42 99	0.00	0.47
Within Groups Total	12.35 23.29	0.13		2.00	2.1,

questions that yielded statistically significant results. For this second research question, effect size (eta^2) was calculated. The value for this effect size ($eta^2 = 0.47$) was large, and it was the largest of the three effect sizes performed for the first three research questions. An ANOVA based Scheffe (contrast) test was calculated for this question, as shown in

Table 10. For Research Question Two, the Scheffe test indicated significant differences between all three schools.

Table 10
Summary of the Significance Values for the Scheffe (Contrast) Test for Research
Ouestion #2

guestion na				
Dependent Variable	School	Boston	Fordham	University of
		College	University	San Francisco
Research Question #2	B.C.	-	-	
"Access"	Fordham U.	0.00	-	
	U.S.F.	0.00	0.00	-

The comparison between Boston College and Fordham University was significant (p=0.00) with directionality towards Fordham University. When Boston College and the University of San Francisco were compared, the difference was significant (p=0.00) favoring the University of San Francisco. The difference between Fordham University and the University of San Francisco was also statistically significant (p=0.00) with directionality towards Fordham University.

Research Question Three

The third research question, named the "Assistance" variable, queried: To what extent do women student athletes perceive that their participation in athletics affects their access to academic assistance, including tutoring and office hours? For the University of San Francisco, the mean for this question was the lowest value for the three schools, while the standard deviation at 0.65 was the highest. The mean for the University of San Francisco, with a value of 1.66, fell between the choices "Rarely" and "Sometimes". The low mean for this school can be interpreted as a student response that indicated participation in athletics only occasionally affected access to academic assistance.

For the first two research questions, Boston College had the lowest mean of the three schools, but for the third question dubbed "Assistance" Boston College's mean was higher than the University of San Francisco's value. For Boston College, the mean for the "Assistance" items had a value of 2.04, which corresponded very closely to a response of "Sometimes". The standard deviation for this third research question was 0.49.

Fordham University had the highest mean value for the third research question and the lowest standard deviation, which was 0.33. The mean value of 2.33 for the "Assistance" question was between the selections "Sometimes" and "Often". For all of the schools, the mean for this third research question was 1.97, which was very consistent with the "Sometimes" reply. The standard deviation from the mean for all of the schools was 0.60, which was the largest value across all four of the research questions.

For Research Question Three, the ANOVA data indicates that there is a significant difference (F = 14.65, p = 0.00) between the three schools. The summary of the ANOVA results for this research question can be found in Table 11. For this third research question, the ANOVA based test for effect size (eta $^2 \ge 0.23$) was calculated and was considered large.

Summary of ANOVA for Research Ouestion #3

Table 11

	Sum of Squares	Mean Square	F	p Value	Eta ²
Research Question #3 Between Groups Within Groups	8.13 26.92	4.07 0.28	14.65	0.000	0.23
Total	35.05	0.20			

An ANOVA based Scheffe (contrast) test was calculated for the third research question, as shown in Table 12. For Research Question Three, the Scheffe test indicated Table 12

Summary of the Significance Values for the Scheffe (Contrast) Test

<u> </u>	,	75 75 75 75 75 75 75 75 75 75 75 75 75 7		
Dependent Variable	School	Boston	Fordham	University of
		College	University	San Francisco
		_	_	
Research Question #3	B.C.	-		
"Assistance"	Fordham U.	0.11	-	
	U.S.F.	0.01	0.00	-

a significant difference (p=0.01) between Boston College and the University of San Francisco with directionality towards Boston College. When Fordham University and the University of San Francisco were compared, a difference (p=0.00) was detected favoring Fordham University.

Research Question Four

The fourth research question, designated the "Care" variable, attempted to determine: To what extent do women student athletes perceive that they are cared for by coaches, administrators, athletic staff, and faculty? The mean scores for each of the three schools were relatively similar in comparison to each other. Overall, the mean for the three schools in aggregate had the highest average mean of all four research questions. For the three schools overall, the mean for this fourth research question was 2.57 and the standard deviation was 0.37.

Boston College had the highest mean for this "Care" question at 2.68, which was the closest to the response "Often," which was coded at 3. This mean score for Boston College was the highest numerical mean reported for all of the four research questions. The standard deviation from the mean for Boston College was 0.58.

Fordham University was close behind for this question with a mean of 2.57 and a relatively small standard deviation of 0.37. The University of San Francisco posted a similar mean for this question at 2.50, but had the highest standard deviation of all three schools at 0.70. Interestingly, this was also the highest standard deviation for any of the four research questions.

The ANOVA data for Research Question Four did not indicate statistically significant differences (F = 0.77, p = 0.47). Table 13 shows the summary of the ANOVA for this research question. Therefore, the measure for effect size and the Scheffe contrast test were not applicable for this question.

Summary of ANOVA for Research Question #4

Table 13

	Sum of Squares	Mean Square	F	p Value	Eta ²
Research Question #4	1	•			
Between Groups Within Groups	0.52 32.98	0.26 0.34	0.77	0.47	n/a
Total	33.50				

Summary of the Data

The survey data sought to capture respondent information from the three schools. The overall goal of the statistical tests was to determine whether any significant differences existed between the three schools. Specifically, the goal of the study was to determine the perceived impact of participation in NCAA Division I athletics on academic experience. To investigate this issue, four research questions were used. These four research questions were given monikers, which were, in order, called "Selection," "Access," "Assistance," and "Care".

The first research question, which was named "Selection", attempted to determine: To what extent does participation in collegiate athletics impact women student athletes' selection, attendance, and participation in academic classes? Overall, the responses from the three schools in aggregate corresponded closely to a response of "Sometimes". Fordham University reported the highest mean for this question, followed by the University of San Francisco, and Boston College. When the ANOVA, test for effect size, and Scheffe test were calculated, significant differences between the three schools were detected. These tests indicated significant differences between Boston College and Fordham University, favoring Fordham University. A statistically significant difference was also detected between the University of San Francisco and Fordham University, favoring Fordham University.

Research Question Two, which was labeled "Access", attempted to determine: To what extent do women student athletes perceive that their participation in athletics affects registration for preferred classes, access to computer technology, and selection of major? For the three schools in aggregate, the overall mean for this question was 2.21, which fell between a response of "Sometimes" and "Often". For the second research question, Fordham University reported the highest mean, subsequently followed by the University of San Francisco, and Boston College. The ANOVA, test for effect size, and Scheffe test indicated large differences between the three schools. These tests suggested that significant differences between Boston College and Fordham University existed with directionality towards Fordham University. The comparison between Boston College and the University of San Francisco was also significant and favored the University of San Francisco. In addition, statistically significant differences were found between the University of San Francisco and Fordham University, favoring Fordham University.

For research question three, called "Assistance," the query was: To what extent do women student athletes perceive that their participation in athletics affects their access to academic assistance, including tutoring and office hours? For the three schools, the mean for this question was 1.97, which was consistent with a reply of "Sometimes". For the third research question, Fordham University produced the highest mean with Boston College and the University of San Francisco following in respective order. Statistically significant differences between the three schools were revealed by the ANOVA, test for effect size, and Scheffe test. These tests indicated that significant differences between Fordham University and the University of San Francisco were present with directionality towards Fordham University. The contrast between Boston College and the University of San Francisco was also significant and favored Boston College.

The fourth research question, which was given the moniker "Care", attempted to determine: To what extent do women student athletes perceive that they are cared for by coaches, administrators, athletic staff, and faculty? The mean from three schools in aggregate fell between a response of "Sometimes" and "Often" but was closer to the "Often" choice. Boston College reported the highest mean for this question, followed by Fordham University and the University of San Francisco. When the ANOVA was computed, the data did not indicate significant differences. Therefore, the test for effect size and the Scheffe contrast test were not required for this final research question. In the next chapter, the results of the study will be discussed with conclusions and implications drawn, as well as recommendations for future practice.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The objective of this chapter is to provide a summary of the study, to draw conclusions from the findings, state implications, and offer recommendations for future research. The overall purpose of this study was to explore women athletes' academic experience at three Jesuit colleges and universities with NCAA Division I athletic programs. The study took place exclusively at Jesuit colleges and universities, which have an educational philosophy of care for the person, or *cura personalis*. Using a quantitative survey based research approach, women student athletes at select institutions were asked about their perceptions regarding academic choices, access to support, availability of technology, and perception of care.

The instrument contained 32 questions and several demographic items. The 32 questions were designed to connect to four overall research questions. The four research questions that guided this study were:

- 1. To what extent does participation in collegiate athletics impact women student athletes' selection, attendance, and participation in academic classes?
- 2. To what extent do women student athletes perceive that their participation in athletics affects registration for preferred classes, access to computer technology, and selection of a major?
- 3. To what extent do women student athletes perceive that their participation in athletics affects their access to academic assistance, including tutoring and office hours?

4. To what extent do women student athletes perceive that they are cared for by coaches, administrators, faculty, and athletic staff?

In addition to the 32 questionnaire items, which were tied to the four research questions, the survey included demographic items. These items included NCAA sport played, ethnicity, year in college, religious affiliation, and academic major.

The population surveyed included 100 women student athletes from three Jesuit colleges and universities, specifically Boston College, Fordham University, and the University of San Francisco. Permission to survey the women student athletes was granted from these institutions by the athletic director or the assistant athletic director. Following this approval, the Institutional Review Board (IRB) at each of the three institutions reviewed and accepted the proposed study.

At each of the three institutions, an administrator in the athletic department randomly selected approximately 30-40 women student athletes to complete the two-page survey. The survey was administered on site in the athletic department by the athletic administrator. Participation in the study and completion of the survey was anonymous and completely voluntary.

The data analysis for this study included the mean and standard deviation from the mean for each of the four research questions. The 32 items in the survey were connected to one of the four research questions before the analysis was performed. After calculating the mean and standard deviation, an ANOVA for data related to each of the four research questions was calculated. Of the four ANOVAs, three of these tests for variance indicated statistically significant differences. Therefore, tests for effect size and Scheffe contrast were performed to determine directionality for the first three research

questions. Demographic data, which included sport played, ethnicity, grade level, religious affiliation, and major, were also reported by percentile.

Conclusions

The major findings of the survey can be summarized for the demographic information and each of the four research questions. As reported, the sample size for the three schools was similar, and the total number of respondents for the study was 100. For the first demographic item, NCAA sport played, student athletes participated in 12 of the possible 19 NCAA sports, providing a range of different student athlete participants.

Respondents from the three schools had a comparable ethnic composition, with the majority at each school identifying as White or European-American. The distribution for year in college was also relatively similar for the three schools. Each of the years in college was fairly evenly represented, and the majority of the respondents were sophomores, followed by freshmen, juniors, seniors, and a small percentage of 5th year seniors.

For the religious affiliation item, the overall majority of the respondents identified as Catholic. Fordham University had the highest percentage of student athlete participants who identified as Catholic, followed by Boston College. The University of San Francisco was the only institution where a greater percentage of the respondents identified as Non-Catholic.

Student athlete respondents were also asked about selection of major. For the three schools combined, the majority of these athletes reported that that they had selected a Technical-Pre-Professional major, which included education, business, or physical therapy, or the Social Sciences major category. For all of the women athletes who completed the survey, 30.7% chose the Technical-Pre-Professional focus and 23.1% of

respondents majored in the Social Sciences. Math and Engineering was the most infrequently selected major and accounted for only 1.1% of the total responses.

As stated in the Review of the Literature, there has been a significant amount of research published regarding the selection of major by collegiate athletes. According to Nolan and Franceschi (2002), who considered women's athletics in a Jesuit context, these women athletes selected majors without consideration of fields dominated by men. These fields included mathematics and the physical and biological sciences. In this dissertation study, the research indicated that women athletes surveyed tended to avoid selecting mathematics and the sciences, instead opting for a Technical-Pre-Professional major (such as education or business) and the Social Sciences. These results are in closer agreement to the research published by Shulman and Bowen (2001). The researchers reported that female athletes were less likely to major in the humanities in comparison to female non-athletes. In their longitudinal study, the authors reported that psychology and the social sciences were the most likely majors for women athletes. In a follow-up study, Einarson and Matier (2002) reported that women student athletes tended to opt for majors in the social sciences and the other professional fields categories. The research by Einarson and Matier is consistent with the findings in this research study.

The main findings of this inquiry can also be examined by reviewing the results for each of the four research questions. The first research question, dubbed "Selection," queried to what extent does participation in collegiate athletics impact women student athletes' selection, attendance, and participation in academic classes? For each research question, including the first one, responses were coded from 0 for "Never", 1 for "Rarely", 2 for "Sometimes", 3 for "Often", and 4 for an "Always" response.

For the first research question, the overall mean for all of the respondents from the three schools was 1.98, which corresponded closely to the value for "Sometimes". This result indicated that when women student athletes thought about selection, attendance, and participation in academic classes, their participation in collegiate athletics was "sometimes" a factor.

There were also differences between the three schools in the mean for the first research question. The mean for Fordham University was the highest for this "Selection" question at a value of 2.18, which meant more than "Sometimes" but less than "Often". This can be interpreted as a greater self-reported impact among Fordham respondents. In other words, participants from Fordham responded that participation in collegiate athletics impacted their selection, attendance, and participation in academic classes more often than respondents from the other two schools.

The University of San Francisco followed with the second highest mean for this question at 1.91. Boston College had the lowest mean for the "Selection" question at a mean of 1.86, which fell between 1 for "Rarely" and 2 for "Sometimes". This can be interpreted to mean that respondents from Boston College answered that participation in collegiate athletics impacted their selection, attendance, and participation in academic classes less frequently than the participants at the other two schools.

For the first research question, a three way ANOVA was performed to assess the variance between the three schools. The result of this ANOVA indicated that there was a significant difference (F = 10.62, p = 0.00) between the three schools. Further statistical tests, including a test for effect size and a contrast test, pointed to the size and directionality of the difference. These statistical tests indicated a significant difference between Fordham University and Boston College with directionality toward Fordham

University. There was also a statistically significant difference between Fordham University and the University of San Francisco with directionality towards Fordham University.

For Research Question One, dubbed "Selection," the mean, ANOVA, test for effect size, and contrast test yielded significant findings. These statistical results indicate that respondents at Fordham University perceived a significantly greater impact of participation in athletics on their selection, attendance, and participation in academic classes in comparison to athletes from the other two schools.

The second research question, with the moniker "Access," inquired to what extent do women student athletes perceive that their participation in athletics affects registration for preferred classes, access to computer technology, and selection of a major? For the three schools, the overall mean for this question was 2.21, which was between 2 for "Sometimes" and 3 for "Often". The overall mean for this question was numerically higher than the overall mean for the first research question for all respondents. This can mean that the participants felt that athletic participation impacted registration, computer access, and major selection more than it affected their selection, attendance, and participation in academic classes.

For the second research question, called "Access," Fordham University again had the highest mean, just as it did for the first research question. The mean for this question, which was 2.61, corresponded to a response closer to 3 for "Often". This finding indicates that respondents from Fordham perceived that their athletic participation affected registration for preferred classes, access to computer technology, and selection of major more often than respondents from the other two schools. Following the pattern found in the results for the first research question, the University of San Francisco

reported the second highest mean for the "Access" question. The mean, which was 2.24, indicated a response between "Sometimes" and "Often" for participants from the University of San Francisco. For the second research question, the mean at Boston College, which was 1.75, was the lowest for the three schools just as it was for Research Question One. This result suggests that respondents from Boston College perceived that their participation in athletics affected their registration, computer technology access, and selection of major less of the time in comparison to the other respondents.

For the second research question, labeled "Access," a three-way ANOVA was performed. The ANOVA for the second research question indicated statistically significant differences (F = 42.99, p = 0.00) between the three schools. The effect size for the second research question indicated a high degree of difference between the three schools and was the highest effect size calculated. A Scheffe contrast test confirmed that there were significant differences between each of the three schools. Like the differences found for research question one, there was a statistically significant difference between Fordham University and Boston College, with directionality towards Fordham University. There were differences found between Fordham University and the University of San Francisco for the second research question, with directionality towards Fordham University. This means that the participants from Fordham answered significantly different from their peers and that they reported a greater impact of athletic participation on registration, computer access, and major selection.

Unlike the first research question, there were also statistically significant differences found for the second research question between the University of San Francisco and Boston College, with directionality towards the University of San

Francisco. These statistical results point to a high degree of difference between the three schools for the "Access" question.

Overall, the results for the second research question indicated that respondents at Fordham University perceived a greater impact of participation in athletics on "Access". Specifically, the results for Fordham University indicated that respondents perceived that registration for classes, access to computer technology, and selection of major were impacted between "Sometimes" and "Often". This result was notably different from the other two schools. Respondents from the University of San Francisco perceived that "Access" was impacted by their participation in athletics between "Sometimes" and "Often", with a value closer to "Sometimes". The mean response for Boston College was significantly different from both the University of San Francisco and Fordham University. These statistical results could indicate that respondents at Boston College perceived a lesser impact of participation in athletics on registration for classes, access to computer technology, and selection of major in comparison to athletes from the other two schools.

As stated in the Review of the Literature, there is a limited amount of research specifically devoted to registration for preferred classes and access to computer technology. The selection of a major among student athletes, however, has been a topic of numerous studies. In a study with a Jesuit focus, Nolan and Franceschi (2002) found that women student athletes tended to select majors without concern for male-dominated fields. In this study, the findings indicated that the women respondents had not chosen to major in male dominated fields, such as mathematics, the physical sciences, and engineering.

In their extensive research study, Shulman and Bowen (2001) also considered the patterns found in athletes' major selection. As stated, these authors found that women student athletes tended to cluster in the Social Sciences, which is in agreement with the findings of this study. Unlike Shulman and Bowen, this study also found that women student athletes tended to select the Technical-Pre-Professional major, which included education, business, and physical therapy.

Following the research by Shulman and Bowen (2001), authors Einarson and Matier (2002) considered the topic of major selection among collegiate athletes. These researchers found that the majority of women athletes tended to major in the social sciences and the other professional fields categories. This result is in agreement with the outcome of this research study. Einarson and Matier (2002) also asked athletes and non-athletes about their experiences with technology. They found that athletes were reportedly "very satisfied" with computer services and facilities. This study asked a slightly different question regarding the effect of athletic participation on technology access, so the results are not analogous to the question asked in the Einarson and Matier (2002) research.

In this study, the third research question attempted to determine to what extent do women student athletes perceive that their participation in athletics affects their access to academic assistance, including tutoring and office hours? This research question was identified as "Assistance". For the three schools, the overall mean for this question was 1.97, which matched very closely to the response value of 2 for "Sometimes". The overall mean for the third research question was numerically very close to the mean for the first research question and lower than the overall mean for the second research question.

For the first two research questions, Fordham University had the highest mean of the three schools, and this trend continued for the third research question. For this question, called "Assistance", the mean for Fordham University was 2.33, which fell between a response of 2 for "Sometimes" and 3 for "Often". This can be interpreted to mean that respondents from Fordham University perceived that their access to academic assistance was affected more often in comparison to participants at the other two schools. Unlike the first two research questions, in which Boston College had the lowest mean of the three schools, the school's mean for the third research question was the second highest after Fordham University. Boston College's mean, which was 2.04, corresponded closely to a response of 2 for "Sometimes". The University of San Francisco had the lowest mean for the third research question, and this value was the lowest mean for all of the four research questions. This mean for the University of San Francisco, which was 1.66, fell between a response of 1 for "Rarely" and 2 for "Sometimes". This result indicates that respondents from The University of San Francisco perceived that athletic participation affected their access to academic assistance less frequently than respondents from Fordham University and Boston College.

For the third research question, labeled "Assistance," a three way ANOVA was calculated. The results indicated that statistically significant differences (F = 14.65, p = 0.00) existed between the three schools for the third research question. The test for effect size and a Scheffe contrast test indicated a sizeable difference between the three schools. As with the first two research questions, there was a statistically significant difference between Fordham University and the University of San Francisco for the third research question, with directionality towards Fordham University. Differing from the results for the first two research questions, a significant difference existed between

Boston College and the University of San Francisco with directionality towards Boston College. These results point to a marked difference between the three schools for the "Assistance" question. The outcome may indicate that respondents from Fordham University perceived that their participation in athletics affected their access to academic assistance, including tutoring and office hours, between "Sometimes" and "Often". Women athletes at the University of San Francisco perceived that access to academic assistance was impacted by their participation in athletics between "Rarely" and "Sometimes".

In the Review of the Literature regarding academic assistance, including tutoring and office hours, the writings are mixed in perspective. In a study written from a Jesuit perspective, Nolan and Franceshi (2002) reported that women student athletes at one Jesuit university were given resources needed to succeed, including tutoring and study halls. In a study written from a secular perspective, Pope and Miller (1996) asserted that specialized academic advising was critical for athletes, but did not specifically probe whether these services were being disseminated at institutions. Broughton (2001), Suggs (1999), and Watt and Moore (2001) agreed in their respective studies, emphasizing that student athletes are a unique population on college campuses with need for specialized advising.

Einarson and Matier (2002) researched the issues of student resources and access to academic assistance, including learning facilities and availability of faculty. They found that women student athletes were less satisfied than non-athletes with foreign language facilities and the responsiveness of the administration to student concerns, but did not differ with non-athletes about their opinion of faculty availability. Bruening, Armstrong, and Pastore (2005) also investigated perceived support of student athletes

from the athletic department, with a focus on the experiences of African-American women student athletes. They found conflicting perceptions, with some athletes pointing to evidence of support, while others cited examples of a lack of assistance from the athletic department. Overall, the authors reviewed had differing perspectives of academic support for student athletes based on their research. In this study, a very specific and somewhat different question was asked, which attempted to determine the perception of how athletics affected academic assistance, including access to office hours and tutoring. The question in this study was framed differently than the issues considered by the authors in the literature review, thus the results are not directly comparable.

The fourth research question tried to ascertain to what extent do women student athletes perceive that they are cared for by coaches, administrators, athletic staff, and faculty? This final research question was identified as the "Care" variable. For the three schools, this last research question reported the highest overall mean for all of the four research questions. For the "Care" question, the overall mean for all of the schools was 2.57, which was between 2 for "Sometimes" and 3 for "Often".

For the fourth research question, designated as "Care," all of the schools reported relatively high means in comparison to the values for the first three research questions. For the first three research questions, Fordham University had the highest mean of the three schools, but for the "Care" item, Boston College reported the highest mean. For this fourth question, Boston College's mean at 2.68 was closest to a response of 3 for "Often". The mean for Fordham University, with a value of 2.57, was relatively high and corresponded to a response between "Sometimes" and "Often". For the third research question, the University of San Francisco had the lowest mean of the three schools, a trend that continued for the fourth research question. The mean for the University of San

Francisco for the fourth research question was 2.50, which fell half way between 2 for "Sometimes" and 3 for "Often".

A three-way ANOVA was performed for the fourth research question. For the fourth research question, called "Care," the ANOVA did not indicate significant differences (F = 0.77, p = 0.47) between the three schools. Therefore, the tests for effect size and contrast were not applicable for the fourth research question.

For the fourth research question, the overall mean was the highest of all of the four research questions. This item asked about respondent perception of care by coaches, administrators, athletic staff, and faculty. The relatively high overall mean for the three schools could be interpreted as a positive result, as a relatively high average on this question is indicative that respondents felt the presence of care. In addition, the individual means at each of the three schools were relatively high for the "Care" item. For Boston College, the results for the fourth research question indicated that respondents perceived that they were cared for close to "Often". The results for Fordham University indicated that respondents perceived that care was present between "Sometimes" and "Often". For the University of San Francisco, respondents also perceived that care was present between "Sometimes" and "Often".

In the Review of the Literature regarding care and *cura personalis*, several authors considered the issue of care in the lives of students. In a study involving secondary students at a Jesuit institution, Conway (2002) considered the presence of care in the lives of the students. In that study, evidence of care was found in several aspects, including the faculty, academic areas, and extracurricular programs. There were also facets of the student experience that pointed to lack of care, including marginalization of some students. Writings by Neenan (2002) covered athletics from a Jesuit perspective,

with a focus on American colleges and universities. The author asserted that intercollegiate athletics did add to the Jesuit mission and benefited the student's body and mind. Nolan and Franceschi (2002) concurred that women's athletics could support the Jesuit ideal in higher education. Hayes (2006) cited the significant potential that collegiate athletics had to nurture women athletes and support the Jesuit mission in colleges and universities.

In this study, the fourth research question indicated that evidence of care was present. The collegiate student athletes surveyed indicated that they felt the presence of care between "Sometimes" and "Often". This outcome is in agreement with authors referenced in the review of literature, who cited concrete evidence of care and the strong potential of athletic programming to support the Jesuit mission.

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Implications

There are various implications of this study. The four research questions produced interesting results that may have ramifications for women collegiate athletes. The first research question asked about respondents' selection, attendance, and participation in academic classes. For the three schools, the athletes reported that these facets of their academic life were affected close to "Sometimes". The results of this question indicated that women athletes felt an impact in the selection, attendance, and participation of academic classes. This outcome may signify that this issue needs further examination. For example, women student athletes could be interviewed about the specific ways that their selection, attendance, and participation of academic classes are influenced. This narrative detail would provide information that could be used to assist women athletes as they balance their academic workload with their athletic endeavors.

The second research question inquired about the impact of athletic participation on registration for preferred classes, access to computer technology, and selection of major. For the three schools, the mean response to this question was between "Sometimes" and "Often". The response to this question indicated that women athletes felt that their registration choice, access to technology, and major selection were impacted more than some of the time. Interestingly, the mean response for this question was greater than the mean response for the first and third research questions. This result may suggest that the issue of access is important to study further. For example, women athletes could be consulted about the exact ways that participation in athletics affects their class registration, technology access, and major selection. Getting comprehensive information about these areas could be used to structure registration procedures, offer technology access, and aid student athletes with major selection.

The third research question investigated the influence of athletic participation on access to academic assistance, including tutoring and office hours. For the schools combined, the mean response indicated that women student athletes perceived that they had access to academic assistance "Sometimes". If these student athletes perceived that their access to academic assistance was shaped by their athletic participation, it may be important to strategize about ways to streamline this connection. For example, access to tutoring and office hours could be improved by creating a process to link athletes to their professors and tutors, even if athletic schedules interfere with regular office hours or tutoring sessions.

The fourth research question attempted to determine whether women student athletes perceived that they were cared for by coaches, administrators, athletic staff, and faculty. The mean response for all respondents to this question was numerically closest

to "Often". This was also the highest overall mean for all of the four research questions, and the only question where there was not a significant difference between the three schools. This result implies that there seems to be a presence of care and evidence of *cura personalis* at the three institutions. The majority of student athlete respondents indicated that coaches, administrators, athletic staff and faculty cared for them. Jesuit institutions, such as the ones included in this study, have a philosophy of caring for the whole person. The results and the presence of care could indicate that the actualization of the institutional mission is occurring.

Recommendations for Future Research

This study was conducted in three Jesuit colleges and universities in the United States. There are 28 Jesuit institutions of higher learning, and 17 met the criteria for this study, which was to field NCAA Division I athletic teams. Future studies could include the entire subset of institutions meeting the criteria for this study. Having 17 total institutions would yield a greater sample of women student athletes and could result in more generalizable and statistically significant data. In addition to including women student athletes, surveying women non-athletes would provide a point of comparison for the data collected.

As stated, the length of the survey was limited and there were additional questions that were not asked. Future research could address these related questions in an open-ended format. For example, student athletes could be asked about the amount of time athletic and academic endeavors require, the support services offered, and the barriers in their academic life. In the area of care for the student athlete, survey questions could include whether they felt their coaches modeled Ignatian pedagogy, whether they prayed before games, and if there were noticeable Jesuit influences in their lives as athletes.

Future researchers may want to examine these and other questions about student athletes' experiences.

In future research, extra steps could be taken to validate and compare student athlete responses. For example, when students are asked about the access to technology, the actual offerings could be examined and compared. Students could be asked specifically whether they have met with an academic advisor in the athletic department and the frequency of those meetings. The actual quantitative data for this question could be obtained from the academic advisors in the athletic department. The comparison between self-reported information and institutional records might provide insight into the accuracy of student athlete perceptions.

Future studies could also include separate surveys for athletic coaches, administrators, faculty, and staff. These personnel could be asked about their perception regarding availability and use of student support services and other assistance. This information could help provide a more complete picture of the offerings and support for student athletes.

Finally, future research could incorporate a longitudinal approach. This type of approach tends to provide statistically sound data. Capturing information at different points in time yields data sets that can be compared using techniques, such as regression. In some cases, longitudinal data can be used to establish causality more easily than data sets taken at one point in time. In the case of this study, longitudinal data would be helpful if this information were to be used for policy changes. Future research could capture student athletes' feedback over time, which may result in more reliable data to inform decisions.

Recommendations for Future Practice

Based on the results of this study, there are several potential recommendations for future practice. The four research questions yielded information that may be beneficial for women collegiate athletes. For the first research question, responses from women athletes indicated that their selection, attendance, and participation in academic classes were affected close to "Sometimes". Based on this result, athletic departments could target this area for further investigation. There is a strong possibility that women athletes may need processes and resources in place to aid them in selecting classes. For example, advisors could provide information and guidance to athletes during the class selection period. If athletes report that their class attendance is affected by their athletic participation, efforts could be made to limit this effect. For example, academic advisors could work with coaches in setting practice and competition times to minimize class attendance disruption. These measures may be helpful in improving the balance between athletic commitments and academic workload.

In response to the second research question, women athletes perceived that their registration choice, access to technology, and major selection were affected more than some of the time. This outcome may indicate that the issue of access is an avenue worthy of further examination. Some women athletes may require preferential registration to ensure that their class schedule will not conflict with practice times or competition schedule. In addition, women athletes may need assistance with technology access. For example, a laptop computer loaner program may help athletes who are competing on the road and need to complete work. Finally, women athletes will most likely require specialized advising for major selection. The interest of the individual student, the varied requirements for different majors, and stricter NCAA regulations make selection of a

major a complicated decision. Students could use help from an athletic advisor, who is trained to mentor students in choosing a major.

In response to the third research question, women athletes reported that they "Sometimes" had access to academic assistance, including tutoring and office hours. As stated, it may be important to strategize about ways to improve the connection for athletes. An academic advisor could facilitate a link between athletes, their professors, and, if needed, tutors. When athletes are not able to identify a qualified tutor, an advisor could supply this information, set up the appointment, and provide payment for this service as allowed by NCAA regulations. If athletes needed special accommodations from professors, an academic advisor could act as a liaison to ensure that athletes were able to make up work and access assistance from faculty.

In response to the fourth research question, women student athletes perceived that they were "Often" cared for by coaches, administrators, athletic staff, and faculty. There seems to be a evidence of care at the three institutions. This positive trend could be reinforced by offering coaches, administrators, athletic staff and faculty access to information regarding the Jesuit mission and *cura personalis*. For example, these professionals may be interested in pertinent articles that discuss the philosophy of caring for the whole person. In addition, coaches and other staff may be willing to share best practices regarding how they actualize caring in the athletic aspect of students' lives.

Closing Comments

When the process to undertake this survey began, it was evident that there was a large amount of research regarding student athlete graduation rates, selection of major, and grade point average. These aspects of collegiate athletics are all critical to monitoring the success of athletic programs in educating student athletes. Along with

these well researched topics, there are many important avenues for exploration in collegiate athletics. This study attempted to decipher the perception of women athletes at select Jesuit institutions. After completing the study, there are still many more questions to explore and more detail to be investigated. In particular, the use of interviews following the survey investigation could help target areas where student athletes might need help the most. This level of detail could help to shape programming and form practice at the institutional level.

From the study, it was apparent that the women student athletes at the three Jesuit institutions were experiencing care in their academic and athletic lives. This evidence of caring is particularly important, given its connection to the Jesuit mission for education. The care that these athletes experience as they study, compete, and progress during their college years has the potential to shape them and prepare them for life beyond graduation. After all, the strength of Jesuit education is that growth and formation should occur inside the classroom, as well as on the field, track, and court.

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APPENDIXES

APPENDIX A IRBPHS APPROVAL LETTER

September 29, 2006

Dear Ms. McKinney:

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study.

Your application has been approved by the committee (IRBPHS #06-073). Please note the following:

- 1. Approval expires twelve (12) months from the dated noted above. At that time, if you are still in collecting data from human subjects, you must file a renewal application.
- 2. Any modifications to the research protocol or changes in instrumentation (including wording of items) must be communicated to the IRBPHS.

Re-submission of an application may be required at that time.

3. Any adverse reactions or complications on the part of participants must be reported (in writing) to the IRBPHS within ten (10) working days.

If you have any questions, please contact the IRBPHS at (415) 422-6091.

On behalf of the IRBPHS committee, I wish you much success in your research.

Sincerely,

Chair, Institutional Review Board for the Protection of Human Subjects _____

IRBPHS - University of San Francisco Counseling Psychology Department Education Building - 017 2130 Fulton Street San Francisco, CA 94117-1080 (415) 422-6091 (Message) (415) 422-5528 (Fax)

irbphs@usfca.edu

APPENDIX B LETTERS TO ATHLETIC DIRECTORS REQUESTING PERMISSION TO DO RESEARCH

Athletic Director University of San Francisco
Dear ,
I am a graduate student in the School of Education at The University of San Francisco. In the Fall of 2006, I will be conducting a research study on the impact of athletics on academic experience among women student-athletes. This study is intended to provide detail about the experience of women student-athletes at Jesuit colleges and universities. Specifically, the study will also examine women student-athletes' selection of academic classes and access to tutoring, technology, and advising.
I am requesting your permission to survey approximately 30 women athletes at University of San Francisco in regard to their experience in academics and athletics. Limited research currently exists in this area and this study hopes to provide further insight. With your consent, the timeframe for distribution of the survey would be during the Fall of 2006. The survey is one page and takes approximately twenty minutes to complete. All student responses will be anonymous and will remain confidential.
I hope you will consider granting permission for this research study at USF. If you have any questions concerning the research study, please feel free to call me at or my faculty chair Dr. Gini Shimibukuro at Please indicate your decision by marking the appropriate line below. Thank you for your consideration.
Sincerely, Hillary McKinney USF Doctoral Candidate
Your response: Yes, I grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006. I understand that additional information will be forthcoming.
No, I do not grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006.
Undecided, need to discuss further. Please contact me to provide additional information.

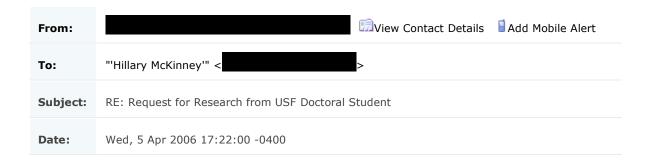
March 6, 2006

Athletic Director Fordham University
Dear ,
I am a graduate student in the School of Education at The University of San Francisco. In the Fall of 2006, I will be conducting a research study on the impact of athletics on academic experience among women student-athletes. This study is intended to provide detail about the experience of women student-athletes at Jesuit colleges and universities. Specifically, the study will also examine women student-athletes' selection of academic classes and access to tutoring, technology, and advising.
I am requesting your permission to survey approximately 30 women athletes at University of San Francisco in regard to their experience in academics and athletics. Limited research currently exists in this area and this study hopes to provide further insight. With your consent, the timeframe for distribution of the survey would be during the Fall of 2006. The survey is one page and takes approximately twenty minutes to complete. All student responses will be anonymous and will remain confidential.
I hope you will consider granting permission for this research study at USF. If you have any questions concerning the research study, please feel free to call me at or my faculty chair Dr. Gini Shimibukuro at least l
Sincerely, Hillary McKinney USF Doctoral Candidate
Your response: Yes, I grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006. I understand that additional information will be forthcoming.
No, I do not grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006.
Undecided, need to discuss further. Please contact me to provide additional information.

March 6, 2006

Associate Athletic Director Boston College
Dear ,
I am a graduate student in the School of Education at The University of San Francisco. In the Fall of 2006, I will be conducting a research study on the impact of athletics on academic experience among women student-athletes. This study is intended to provide detail about the experience of women student-athletes at Jesuit colleges and universities. Specifically, the study will also examine women student-athletes' selection of academic classes and access to tutoring, technology, and advising.
I am requesting your permission to survey approximately 30 women athletes at your institution in regard to their experience in academics and athletics. Limited research currently exists in this area and this study hopes to provide further insight. With your consent, the timeframe for distribution of the survey would be during the Fall of 2006. The survey is one page and takes approximately twenty minutes to complete. All student responses will be anonymous and will remain confidential.
I hope you will consider granting permission for this research study at USF. If you have any questions concerning the research study, please feel free to call me at or my faculty chair Dr. Gini Shimibukuro at decision by marking the appropriate line below. Thank you for your consideration.
Sincerely, Hillary McKinney USF Doctoral Candidate
Your response: Yes, I grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006. I understand that additional information will be forthcoming.
No, I do not grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006.
Undecided, need to discuss further. Please contact me to provide additional information.

APPENDIX C
PERMISSION LETTERS FROM ADMINISTRATORS GRANTING PERMISSION TO CONDUCT RESEARCH



I do not mind having our kids do a survey as long as they give permission.

It will have to be short and not too involved.

I will refer you to our Learning Resources Department when you get the survey to me, to administer it.

Associate AD/SWA
Boston College Department of Athletics
310 Conte Forum
Chestnut Hill, MA 02467

phone:

GO EAGLES!!!

----Original Message----

From: Hillary McKinney [mailto:

Sent: Tuesday, April 04, 2006 1:16 AM

To:

Cc:

Subject: Request for Research from USF Doctoral Student

Dear

I am a graduate student in the School of Education at The University of San Francisco. In the Fall of 2006, I will be conducting a research study on the impact of athletics on academic experience among women student-athletes. This study is intended to provide detail about the experience of women student-athletes at Jesuit colleges and universities. Specifically, the study will also examine women student-athletes' selection of academic classes and access to tutoring, technology, and advising.

I am requesting your permission to survey approximately 30 women athletes at Boston College in regard to their experience in academics and athletics. At this time, administrators at Fordham University and University of San Francisco have granted permission for this study. Limited research currently exists in this area and this study hopes to provide further insight.

With your consent, the time frame for distribution of the survey would be during the Fall of 2006. The survey is one page and takes approximately twenty minutes to complete. All student responses will be anonymous and will remain confidential.

I hope you will consider granting permission for this research study at USF. If you have any questions concerning the research study, please feel free to call me at or my faculty chair Dr. Gini Shimibukuro at Please indicate your decision by marking the appropriate line below. Thank you for your consideration.

Sincerely, Hillary McKinney USF Doctoral Candidate

Your response:

__[Yes, I grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006. I understand that additional information will be forthcoming.

____No, I do not grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006.

_____Undecided, need to discuss further. Please contact me to provide additional information.

To: "Hillary" <



Your response: Provided we can have a copy of the results of your survey.

__X Yes, I grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006. I understand that additional information will be forthcoming.

____No, I do not grant permission for you to conduct a survey among a sample of women student-athletes in the Fall of 2006.

_____Undecided, need to discuss further. Please contact me to provide additional information.

Office:
Fax:
E-mail:

Hillary < 03/19/2006 07:41 PM



Subject Request for Research from USF Doctoral Student

Dear

I am a graduate student in the School of Education at The University of San Francisco. In the Fall of 2006, I will be conducting a research study on the impact of athletics on academic experience among women student-athletes. This study is intended to provide detail about the experience of women student-athletes at Jesuit colleges and universities. Specifically, the study will also examine women student-athletes' selection of academic classes and access to tutoring, technology, and advising.

I am requesting your permission to survey approximately 30 women athletes at Fordham University in regard to their experience in academics and athletics. Limited research currently exists in this area and this study hopes to provide further insight. With your consent, the timeframe for distribution of the survey would be during the Fall of 2006. The survey is one page and takes approximately twenty minutes to complete. All student responses will be anonymous and will remain confidential.

I hope you will consider granting permission for this research study at USF. If you have any questions concerning the research study, please feel free to call me at or my faculty chair Dr. Gini Shimibukuro at Please indicate your decision by marking the appropriate line below. Thank you for your consideration.

Sincerely,
Hillary McKinney
USF Doctoral Candidate

APPENDIX D THE IMPACT OF PARTICIPATION IN COLLEGE ATHLETICS ON ACADEMICS SURVEY

The Impact of Participation in College Athletics on Academics

Please answer these questions about your experiences as a woman college athlete over the past year.

There are no right or wrong answers.

This survey is completely anonymous.

Please check [] the frequency of each item in the past year.	Never	Rarely	Sometimes	Often	Always
1. To what extent have you utilized tutoring services through the athletic					
department?					
2. To what extent have you utilized tutoring services <i>outside</i> the athletic department?					
3. In comparison to non-athletes, do you feel that you have greater access to tutoring services?					
4. How often have you attended office hours with your professor(s)?					
5. Has your participation in athletics <i>prevented</i> you from attending office hours with your professor(s)?					
6. Has your participation in athletics <i>enabled</i> you to attend office hours with your professor(s)?					
7. Does your participation in athletics allow you to have preferential registration for classes?					
8. Does your participation in athletics interfere with your ability to register for classes?					
9. Does your status as an athlete help you register for desirable or preferred classes?					
10. To what extent have you been absent from class because of your participation in athletics?					
11. If athletic participation prevented you from attending class, did your professors accommodate you (i.e., let you make up tests or assignments)?					
12. Did your participation in athletics influence your selection of academic courses?					
13. Has your participation in athletics <i>limited</i> the classes you have chosen to take?					
14. Has your participation in athletics <i>expanded</i> your options for course selection?					
15. Did your participation in athletics interfere with your ability to complete class assignments?					
16. Does your status as an athlete affect your class participation (i.e. choosing to speak or ask questions)?					
17. Did your participation in athletics restrict your choice of major?					
18. Did your participation in athletics expand your options when selecting your major?					

Please check [] the frequency of each item in the past year.	Never	Rarely	Sometimes	Often	Always
19. Have you used computers or other technology available to you through the Athletic Department?					
20. Did your participation in athletics limit your access to computer					
technology?					
21. As an athlete, do you feel that you have greater access to computer technology?					
22. Have you met with an academic advisor available to you through the Athletic Department?					
23. Have you met with an academic advisor available to you <i>outside</i> the Athletic Department?					
24. As an athlete, do you feel cared for by your academic advisor?					
25. In comparison to non-athletes, do you feel that you have greater access to academic advising?					
26. Did your teammates provide academic help to you (i.e., help you with assignments)?					
27. As an athlete, do you feel cared for by your coach(es)?					
28. As an athlete, do you feel cared for by the athletic administration?					
29. As an athlete, do you feel cared for by the athletic staff?					
30. As an athlete, do you feel cared for by the faculty?					
31. As an athlete, do you feel you receive more care in comparison to non-athletes?					
32. Do you generally feel cared for and supported?					
33. What NCAA sport do you play?					
34. What is your ethnicity? [] Asian or Pacific Islander	ern	merican			
Other					
35. What year are you in college? [] Freshman [] Sophomore [] Junior	[] Sei	nior	[] 5 th	Year	
36. What best describes your religious affiliation? [] Catholic					
Other religious					

37.	What is your major?	
	[] Arts and Humanities (i.e., literature, philosophy, or languages)	[] Other
	[] Math & Engineering	[] Undecided
	[] Natural Sciences	
	[] Social Sciences (i.e., economics, history, political science, or psychology)	
	[] Technical-Pre-Professional (i.e., education, business, or physical therapy)	

APPENDIX E LETTER TO VALIDITY PANEL

"Title, Name"

Dear "Title, Name",

Thank you for agreeing to serve on my validity panel for my doctoral research at The University of San Francisco. The name of my study is The Impact of Participation in Collegiate Athletics on Women Athletes' Academic Experience at Select Jesuit Universities. Based on your experience in athletics, I would greatly appreciate your input about the attached survey. For this purpose, I have attached an evaluation form that solicits your feedback. Your comments will help me construct the best survey instrument possible.

Enclosed is the survey for women college athletes, an evaluation form, and a self-addressed, stamped envelope in which to return the forms. As you review the enclosed survey, please provide comments on the evaluation form. You are also welcome to provide editorial feedback directly on the survey. All critiques on the surveys and the responses on the evaluation form will be kept confidential. I appreciate your time and consideration.

Please mail the survey with the accompanying evaluation form on or before September 28, 2006 in the enclosed self-addressed, stamped envelope. Your response may be sent to: Hillary McKinney;

you have any questions you may reach me via e-mail at:

In addition, I would be happy to provide you with the results of this research if you are interested. Thank you again for your assistance with this research project.

Sincerely,

Hillary McKinney, M.A. University of San Francisco Doctoral candidate

Enclosures: College Athlete Survey

Validity Panel Questionnaire Self-addressed, stamped envelope

[&]quot;Address"

[&]quot;City, State, Zip"

APPENDIX F VALIDITY PANEL QUESTIONNAIRE

Questionnaire for Validity Panel

In reference to the survey that you have just read, please give your opinion about the following:

1.	Is the wording of each item clear? Yes No If "No," please specify item number(s):
2.	Is the wording of each item free from bias? Yes No If "No," please specify item number(s):
3.	Is the wording of each item appropriate for college-age students? Yes No If "No," please specify item number(s):
4.	Is the meaning of each item clear? Yes No If "No," please specify item number(s):
5.	Are the standardized answer choices appropriate for each item? Yes No If "No," please specify item number(s):
6.	Are there any omissions in the set of questions? Yes No If so, please explain:
7.	Does each item relate to the purpose of the survey? Yes No If "No," please specify item number(s):
8.	Is the objective of each question clear? Yes No If "No," please specify item number(s):
9.	Is the time required to take the survey reasonable? Yes No If "No," please explain:
10.	Is the questionnaire easy to read and follow? Yes No If "No." please explain:

Additional Comments:

^{*} Please feel free to write additional comments directly on the survey. Thank you!

APPENDIX G VALIDITY PANEL MEMBERS AND QUALIFICATIONS

Validity Panel Grid

Professional Position	Knowledge of Jesuit Institutions	Knowledge of Athletics	Knowledge of Collegiate Athletics	Knowledge of Collegiate Academics	Experience with Collegiate Student Athletes
Athletic Director- USF	X	X	X	X	X
Director of Academic Support for Student Athletes, USF	X	X	X	X	X
Associate Athletic Director, SICP	X	X	X	X	
Head Baseball Coach and Former Collegiate Coach, SICP	X	X	X		X
Associate Athletic Director- Academics, Duke		X	X	X	Х
Former Head Tennis Coach, SFSU		X	X	X	Х
Former college athlete		X	X	X	

APPENDIX H LETTER TO CONTACT PERSON DISTRIBUTING SURVEY TO STUDENT ATHLETES

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"Title, Name"
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Dear "Title, Name",

Thank you for your support and assistance with my doctoral research at The University of San Francisco. I truly appreciate your time and consideration. Enclosed you will find the surveys for the women college athletes and a self-addressed, stamped envelope in which to return the surveys.

To ensure the best possible environment and the protection of the participating student athlete respondents, please:

- Distribute the surveys in an environment that is convenient and comfortable for the student athletes. Ideally, the environment will be a quiet, indoor classroom or study area on campus that is in close proximity to each team's practice site.
- ➤ Briefly describe to the student athletes the purpose of the study and its importance. This study will examine the impact of participation in athletics on academic experience. The results will provide information about the experience women athletes in select Jesuit NCAA Division I colleges and universities.
- ➤ Inform the student athletes that the survey is anonymous and that their participation is completely voluntary. Please advise respondents that they may decide to end their participation at any time without penalty.
- > Thank all student athlete respondents for their participation.

When all of the surveys have been completed, please return the sur	rveys on or
before March 15, 2007 in the enclosed self-addressed, stamped envelope.	Your response
may be sent to: Hillary McKinney;	. If
you have any questions you may reach me via e-mail at:	
Thank you again for your assistance with this research project.	

Sincerely,

Hillary McKinney, M.A. University of San Francisco Doctoral candidate

[&]quot;Address"

[&]quot;City, State, Zip"