

Title IX Information Increases Female Collegiate Athletes' Intent to Seek Help

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Female intercollegiate student athletes continue to lack knowledge of their pregnancy rights. Uninformed athletes may react to pregnancy by concealing it or worse, risking their health and the health of their fetus. This study aimed to determine a) baseline pregnancy rights knowledge in a contemporary sample of female athletes; and b) the extent to which pregnancy rights information, when provided, affected their intent to seek help for pregnancy. A convenience sample of 146 female student athletes from nine teams at one National Collegiate Athletic Association (NCAA) Division I university (mean age 20.2 ± 1.5 years) responded to an anonymous, online, author-designed survey. Halfway through the survey, Title IX information was provided. Prior to the intervention most participants were unaware of pregnancy rights. If they experienced pregnancy and particularly if they decided to remain pregnant to the completion of their pregnancy, participants expected to be cut from the team, lose financial aid, and be unable to return to the team. Following the intervention, participants were significantly less likely to expect negative consequences and significantly more likely to seek help from athletic staff. Those who were aware of federal pregnancy rights were significantly unlikely to be aware of NCAA protections. Recommendations to the NCAA and universities include more vigorous, effective provision of complete, timely pregnancy rights information. Recommendations for student athletes include anticipating unplanned pregnancy and self-education.

Keywords: college, student athlete, pregnancy, rights, Title IX, NCAA

Congress enacted Title IX of the Education Amendments Act of 1972 (20 U.S.C. § 1681; 2018) “with two principal objectives in mind: to avoid the use of federal resources to support discriminatory practices in education programs, and to provide individual citizens effective protection against those practices” (U.S. Department of Justice, 2021). In 2003 Sorensen, a nurse, recognized the serious health risks for college student athletes who conceal pregnancy and began a national conversation on the problem by writing to the National Collegiate Athletic Association (NCAA; Sorensen, personal letter to R. Stallman, Director of Education Outreach, NCAA, 2003). The U.S. Department of Health and Human Services’ Office of Civil Rights



(OCR) strongly reinforced its prohibition of pregnancy discrimination in college athletics (Monroe, 2007) in response to numerous published anecdotes of pregnant student athletes feeling pressured to choose between concealing or aborting their pregnancies and losing financial aid (e.g., Rosenberg, 2004; Rovegno, 2007) and in response to NCAA member schools' independent advocacy to protect pregnant student athletes (Rosenberg, 2004; Smith, 2004; Sorensen et al., 2009). In 2008 the NCAA developed Pregnant and Parenting Student Athletes: Resources and Model Policies (Hogshead-Makar & Sorensen, 2008). In 2009 the NCAA revised Division I Bylaws to protect pregnant athletes' financial aid and extend pregnant athletes' competitive eligibility, but problems remain. While the new NCAA Bylaws carried some weight, use of the NCAA Model Policies was never mandatory. No consequence - other than general notice of university-wide Title IX violation - was attached to ignoring the Model Policies. Policies which facilitate compliance with law can only be effective when all stakeholders - authors, enforcers, implementers, and the target population - are well informed. Unfortunately, pregnant female student athletes still lack knowledge of their options and legal protections. This study aimed to determine a) baseline pregnancy rights knowledge in a contemporary sample of female athletes; and b) the extent to which pregnancy rights information, when provided, affected their intent to seek help for pregnancy.

Literature Review

Crisis Pregnancy

Unintended pregnancy during college may result from consensual or non-consensual sexual activity, or from responsible use of pregnancy prevention methods. About 45% of all pregnancies in the United States are unintended, with the highest rate of unintended pregnancy occurring to women aged 20-24 years (Finer & Zolna, 2016). Women who were unmarried and cohabiting had quadruple the rate of unintended pregnancy compared to women who were married (Finer & Zolna, 2016). Between 17% and 31.6% of U.S. women experience multiple unintended pregnancies (Azatlan-James et al., 2017). In a sample of 70,087 American college students, about 17% reported their or their partner's use of emergency contraception after sex, about 1.2% (about 840 individuals) reported their or their partner's unintended pregnancy, and 4.1% reported participation in varsity sports [American College Health Association (ACHA), 2021]. Unintended pregnancy in college-aged women places this population at greater risk of failing to complete a college degree, suffering economic hardship, and experiencing psychological distress (Power to Decide, 2015). The frequency of pregnancy in female intercollegiate student athletes was reported as 4% in a sample of 517 female intercollegiate student athletes from four universities (Jaco, 2009).

Sorensen, Sincoff, and Siebeneck (2009) argued that unintended pregnancy is a crisis for the student athlete, necessitating re-evaluation of years of training and possibly leading to coping in ways that are unhealthy to both mother and baby. Pregnant student athletes reported concealing their pregnancies to continue participating

in competitive sports (Ford, 2004; Lehman College, 2001; Potts, 2001; Schonbrun, 2007; Sorensen et al., 2009; Willis, 2001), feeling forced to abort (Portnoy, 2004; Rovegno, 2007), feeling forced to choose between their financial aid and pregnancy (Rovegno, 2007), and fearing expulsion or other negative stereotypes (Portnoy, 2004). In two separate instances student athletes concealed their pregnancies, gave birth in their dorm rooms, and were arrested for the homicides of their full-term infants (Student charged, 2007; Former athlete, 2007).

Title IX and Pregnancy Discrimination

In 2007, Stephanie J. Monroe, Assistant Secretary, Office of Civil Rights (OCR), U.S. Department of Health and Human Services, emphasized OCR's concerns over "recent media reports of college athletics practices of terminating scholarships of female athletes on the basis of pregnancy . . . and students choosing to terminate their pregnancy for fear of losing their athletic scholarships" in a Dear Colleague letter copied to athletics directors and Title IX coordinators (Monroe, 2007, p. 1). Monroe (2007) quoted Title IX's requirement of nondiscriminatory treatment of pregnant students and reiterated that terminating or reducing financial assistance on the basis of pregnancy was prohibited:

Title IX of the Education Amendments Act of 1972 (20 U.S.C. § 1681) prohibits recipients [the term "recipients" refers to all schools, colleges, universities, and other educational institutions that receive Federal funds] from applying any rule concerning a student's actual or potential parental, family, or marital status which treats students differently on the basis of sex. The regulation also states that a recipient shall not discriminate against any student or exclude any student from its education program or activity, including any class or extracurricular activity, on the basis of such student's pregnancy, childbirth, false pregnancy, termination of pregnancy or recovery therefrom, unless the student requests voluntarily to participate in a separate portion of the program or activity of the recipient. Regarding financial assistance to any of its students, a recipient shall not apply any rule . . . concerning eligibility for assistance which treats persons of one sex differently from persons of the other sex with regard to marital or parental status. or assist in application of any rule (p. 1).

Monroe offered the OCR's support for "voluntary efforts to comply with Title IX" (p. 1), a telling statement about the difficulties enforcing this law unless an abused party sues. Individuals who are not legal experts may not understand that a Title IX violation in one department (e.g., athletics) constitutes an institutional Title IX violation. It was unclear if the Monroe letter was received and read by athletics staff as well as the institutional leadership team (president, provost, and legal representatives) and women's health advocates (women's centers, healthcare professions, student health clinics).

Beyond its prohibition on pregnancy discrimination, Title IX requires institutions and their athletic departments to educate student athletes on their rights and protections. Section 86.9 requires recipients to implement:

specific and continuing steps to notify applicants for admission and . . . students . . . that it does not discriminate on the basis of sex in the educational programs or activities which it operates. Such notification shall contain such information . . . as necessary to apprise such persons of the protections against discrimination assured to them by Title IX . . . Notification shall include publication in . . . written communications distributed to every student [45 CFR 86.9(a)(2)(ii)].

This statement implies that intercollegiate student athletes should reasonably expect to find “such information as necessary to apprise [them] of the protections against discrimination assured to them by Title IX”, i.e., pregnancy rights information in “written communications distributed to every student”, i.e., their student athlete handbooks which are provided by the athletic department.

Brake (2008) provided a critical analysis of Title IX’s legal dynamics and the difficulty that athletic departments have with accommodating student athlete pregnancy. To comply with Title IX, the NCAA historically directed member institutions to ensure that resources like facilities, financial aid, sport participation, and support services were equivalent for female and male athletes. Pregnancy, Brake argued, was absent from that paradigm because the ability to become pregnant and birth children is unique to female bodies. Thus, pregnancy and parenting rights were often left out of sex equality arguments in intercollegiate athletics, an open door to discrimination. Brake offered this observation regarding the OCR letter and NCAA guidelines:

. . . whether the OCR letter actually results in any gains for pregnant athletes will depend on the athletes’ awareness of their rights and their resolve to enforce them. Without concerted education efforts on this issue, the OCR letter may make little difference in the lives of women whose college athletic careers are interrupted by pregnancy (p. 350).

Sex and pregnancy discrimination take on unique forms in athletics compared to the general academic community. Prior to 2006 female student athletes were subjected to mandatory contracts requiring them to relinquish their financial aid if they became pregnant or submit to pregnancy urine tests if their coaches or care teams had reasonable suspicion the student athlete was pregnant, requirements not faced by fellow male student athletes (Rainey, 2006). “These dramatic stories of . . . young women should remind us of how powerfully sports can affect young people’s lives . . . and how vulnerable students are to the decisions and judgements of those who govern these opportunities” (Brake, 2008, p. 356).

NCAA Response

Prior to 2007 the NCAA did not address student athlete pregnancy. In 2003 Sorensen recognized the absence of NCAA guidance and began advocating for change, arguing for recognition of the health, legal, and ethical risks associated with ignoring student athlete pregnancy (Sorensen, personal letter to R. Stallman, Director of Education Outreach, NCAA, 2003). In May 2007 the presentation *Best Practices: Pregnancy Policies* (Sorensen et al., 2007) was given to the NCAA Gender Equity and Issues Forum. In June 2007 NCAA President Myles Brand charged the Committee

on Women's Athletics (CWA) with studying this issue, calling for university athletic administrators to submit their policies for review (NCAA, 2007a). In July 2007 the CWA produced a Statement (NCAA, 2007b) calling for NCAA institutions to "conduct their intercollegiate athletics programs in a manner designed to protect and enhance the physical and educational well-being of student athletes" including treating "female students . . . who may be pregnant in accordance with federal law". In 2007, the ESPN program "Outside the Lines" dedicated an episode to the challenges and fears faced by student athletes who experienced a pregnancy (Rovegno, 2007). This episode was aired several times and viewers expressed sympathy for the student athletes whose college careers were interrupted by pregnancy. This public support created a push for new national policies addressing student athlete pregnancy (Brake, 2008). At that time 90% of university athletic departments lacked written pregnancy policies (Sorensen et al., 2009). The NCAA was moved to action, perhaps, by their ethic of caring for student athletes, by their desire to better serve their member schools, and by a groundswell of OCR, member, and media attention to the issue.

In 2008 the NCAA produced its publication *Pregnant and Parenting Student Athletes: Resources and Model Policies* (Hogshead-Makar & Sorensen, 2008) to educate its member schools and the student athletes in their charge about pregnancy, health, and Title IX. The work was intended to help NCAA members understand healthy participation in sport while pregnant; help them comply with Title IX's requirements regarding participation, financial aid, and return to sport following pregnancy; and increase members' awareness of Title IX violations. The publication emphasized the need to create athletics environments in which athletes could feel safe revealing pregnancy and could seek help with decisions. The publication explained Title IX's prohibition of institutional discrimination against pregnant individuals, their financial aid, and their participation in sport before, during, and after pregnancy; including a Title IX requirement that the individual be returned to the position held before pregnancy. The NCAA distributed two printed copies of the Model Policies to every NCAA member school and made the information available online. Yet, the NCAA could not mandate that members adopt the Model Policies recommendations and actively share Title IX information with student athletes, i.e., the university mandate flows from Title IX, not the NCAA.

In 2009 the NCAA implemented new Division I Bylaws (NCAA, 2021a; Walker, 2008). Bylaw 15.3.4.3 now stated that institutional financial aid could not be decreased, removed, or cancelled due to a medical condition (which, although not specifically named, included pregnancy). Bylaw 12.8.1.5 now granted a female student athlete an additional year of eligibility, beyond the usual five years of competitive eligibility, for reasons of pregnancy. While the new Bylaws were landmark, laudable NCAA responses, they remain imperfect in creating a safe environment for pregnant athletes to ask for help. No bylaw requires compliance with Title IX, and no bylaw requires reinstatement to the position held before pregnancy as Title IX requires. The Bylaws still retain substantial "trap door" problems for pregnant athletes and for those who advocate for creating a safe environment for revealing pregnancy. Bylaw 15.3.4.2 allows an institution to withdraw an athlete's financial aid when the athlete:

renders himself or herself ineligible for intercollegiate competition; fraudulently represents any information on an application, etc.; engages in serious misconduct; and/or voluntarily withdraws from sport (NCAA, 2021a).

Student athletes who lack knowledge of their legal protections under Title IX may incorrectly believe that pregnancy renders them ineligible to participate in sports. Student athletes at universities in which sexual activity and pregnancy are considered serious misconduct resulting in expulsion may be especially unmotivated to reveal pregnancy. Students who lack knowledge of NCAA 15.3.4.3 and Title IX may unknowingly voluntarily withdraw from their sport without revealing that they are pregnant, inviting summary cancellation of their financial aid without any further conversation (Sorensen, et al., 2009). Additionally, if they feel that they cannot or should not seek help, the student athlete may not realize that they have time to decide what to do before action is needed (Brake, 2008; Sorensen et al., 2009).

Female Student Athletes Lack Pregnancy Rights Knowledge

Jaco (2009) surveyed 517 NCAA Division I female student athletes (age range 18 – 22 years; 66% received athletic aid) at four Division I universities to determine pregnancy prevalence and pregnancy rights knowledge. Nearly all (96%) reported heterosexual identity. Four percent of participants indicated that they had been pregnant at some time. Only three percent were aware that Title IX provided protection to student athletes. Eighty-four percent were not aware of any NCAA rules regarding pregnancy. Jaco reported that:

More study participants believed that they would be released from the team, lose their eligibility to compete, and be treated differently by their coaches and teammates if they became pregnant than those who believed the opposite (p. 73).

Jaco concluded that “when educated, female student athletes remember what the NCAA legislation requires, and it is important to them” (p. 75).

Williams (2017) used a qualitative design to examine the lived experiences of 12 mothers aged 22 – 35 years who previously experienced pregnancy while competing and receiving athletic financial aid at a Division I or II university. Time since participating ranged from 0 - 10 years (mean 3 years). Eleven (92%) reported that the pregnancy was unplanned; 9 participated in sports knowingly or unknowingly while pregnant. Five reported receiving information about their pregnancy rights from athletic staff while seven reported that they did not. Upon learning of the pregnancy, participants described feeling shocked and devastated. One expressed surprise that her pregnancy was more advanced than she thought. Three participants reported fears of losing their scholarship. When they learned of their pregnancies, most concealed it “for a long time”, for “6 months”, or disclosed it to a small number of confidants but not their coaches. Some reported supportive responses which allayed their fears about losing scholarships, while some experienced unsupportive responses: coaches tacitly recommended abortion or tied the athlete’s scholarship to their sport participation, e.g., “. . . if you can run again, I’ll let you keep your scholarship” (p. 109). One participant reported being denied access to facilities, e.g., “I

worked out the whole pregnancy, but they banned me from the athletic training facility . . . (saying) ‘we don’t want you here’” (p. 110). The unsupportive responses are violations of Title IX. Participants recommended improved support from the NCAA and their athletic departments. Cumulatively the results indicated that coaching staff as well as participants lacked knowledge of pregnant athletes’ rights.

Specific Aims

Arguably, female intercollegiate student athletes experience unplanned pregnancy as a crisis. Despite a 50-year history of federal protections for pregnancy rights, and stakeholder advocacy to protect and inform these young women at risk, they remain uninformed. Uninformed student athletes who experience pregnancy remain at risk for concealing pregnancy or acting on a decision about their pregnancy before or without receiving essential information. This study aimed to determine a) baseline pregnancy rights knowledge in a contemporary sample of female athletes; and b) the extent to which pregnancy rights information, when provided, affected their intent to seek help for pregnancy. We hypothesized that if athletes lacked Title IX knowledge, then providing Title IX information would increase their intent to seek help.

Method

Following internal review board approval from a large Midwestern NCAA Division I university, a convenience sample of female athletes completed an anonymous, online, author-developed survey during spring semester 2021. Completing the survey constituted informed consent.

Participants

Individuals were invited to participate if they were female, at least 18 years of age, active or temporarily inactive (e.g., redshirted) members of one or more of the university’s 12 women’s intercollegiate sports teams, could access the online survey, and were enrolled as university students. Potential participants were recruited by sharing a link to an online, anonymous survey with all female sport representatives on the university Student Athlete Advisory Council at one NCAA Division 1 university. The representatives were asked to share the link with their respective teams through a group-message style platform. Individuals who were excluded were males, were not intercollegiate student athletes, and/or were not enrolled as university students.

Instrument

An investigator-designed survey instrument was developed based on Jaco’s work (2009). Jaco used a self-developed, 20-item survey consisting of female college athletes’ demographic, financial aid, sexual activity, birth control, and pregnancy experience information with mostly dichotomous yes/no response options. Jaco inquired whether participants expected negative consequences from being pregnant

and whether pregnancy rights information was known. Jaco provided pregnancy rights information at the end of the survey, but no follow-up questions. Jaco did not report instrument validity or reliability.

The current survey instrument extended Jaco's work. The current survey consisted of 38 items including participant demographics (age, year in school, current year of NCAA eligibility, athletic aid proportion, athletic team, sexual orientation, sexual activity, birth control use, and birth control methods used). Pregnancy-focused items tested pregnancy knowledge and expected consequences related to pregnancy using rank-ordered, dichotomous, and narrative response options. Title IX information was provided about halfway through the instrument, followed by items assessing for changes in knowledge, expectation of negative consequences, and intent to seek help. The current survey's pre-test/post-test format allowed for determining the extent to which pregnancy rights information, when provided, affected participants' knowledge and intent to seek help. The survey, illustrated below, was pilot tested with five recently graduated female student athletes from the institution to develop face validity.

Data Analysis

Data were analyzed via Statistical Analysis Software JMP version 14 and IBM SPSS Statistics software. Paired, two-tailed t-tests were used to compare mean group responses and determine statistical significance in continuous variables. Chi square tests were used to compare frequencies and determine statistical significance in categorical variables. The $p < 0.05$ level was used to establish statistical significance.

Results

Demographics

Of 314 eligible participants, 146 (46.5%) completed the survey. Participants averaged 20.2 ± 1.5 years of age. Two thirds were freshmen, sophomores, and juniors. Participants represented women's basketball, cross country, hockey, rowing, soccer, swim and diving, tennis, track and field, and volleyball teams. Eighty percent were in their first, second, or third year of athletic eligibility. Sixty-two percent reported receiving athletically related financial aid. Eighty-six percent identified as heterosexual or straight. The majority (59.7%) reported having vaginal sex at some point with a male partner since attending the university. Seventy-eight percent reported always using birth control during vaginal sex. Participants' demographic characteristics are presented in Table 1. Responses to pregnancy-focused survey items are found in Table 2.

Table 1
Sample Demographics

| | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|
| Age, years | Range 18 – 24 | Mean 20.2 | SD 1.5 | | |
| Year in school | Freshmen 27.8% | Sophomore 22.9% | Junior 22.9% | Senior 18.1% | Graduate 8.3% |
| Athletic eligibility year | 1 st 36.9% | 2 nd 24.8% | 3 rd 19.9% | 4 th 9.9% | 5 th 7.8% |
| Receive athletic aid | Yes 62.5% | No 35.4% | | | |
| Athletic aid % of total tuition | < 25 13.5% | 25-49 15.6% | 50-74 10.4% | 75-99 16.7% | 100 31.3% |
| Sexual identity | Heterosexual 86.4% | Bisexual 11.1% | Other 2.5% | | |
| Heterosexual intercourse since attending university | Yes 59.7% | No 39.6% | | | |
| Use of birth control to prevent pregnancy | Always 77.7% | Almost always 7.8% | Half time 1.9% | Never 12.6% | |
| Type of birth control used * | Male condom 3.9% | Female condom 0.5% | Pill 11.8% | IUD 7.4% | Hormone implant 1% |
| Note: % = % of sample. * = Not mutually exclusive: participants could “select all that apply”. | | | | | |

Table 2
Pregnancy-Focused Items

| The following questions discuss hypothetical scenarios of experiencing an unplanned pregnancy as a student athlete. Please answer based on your current knowledge or understanding. | | |
|---|---------------------------|--------|
| Item | Response Options | Result |
| If you became pregnant: | | |
| . . . and you have not made a decision about your pregnancy, or you decided not to continue your pregnancy, and you disclose this to your coach or athletic trainer, you expect to: * | Released or cut from team | 11.9% |
| | Suspended from team | 23.7% |
| | Lose athletic aid | 11.9% |
| | Lose NCAA eligibility | 6.7% |
| | None of these | 67.4% |

| | | |
|--|---------------------------|-------|
| . . . and you decided to continue the pregnancy and give birth, and you disclose this to your coach or athletic trainer you expect to: * | Released or cut from team | 46.6% |
| | Suspended from team | 27.9% |
| | Lose athletic aid | 31.6% |
| | Lose NCAA eligibility | 16.9% |
| | None of these | 33.8% |
| . . . and you decided to give birth, would you be able to return to the team after birth if you wanted to? | Very likely | 6.7% |
| | Likely | 20.1% |
| | Unsure | 43.3% |
| | Unlikely | 19.4% |
| | Very unlikely | 10.4% |
| . . . how important are the impacts on your athletic status (scholarship, participation, eligibility) in making decisions about your pregnancy? | Extremely important | 51.5% |
| | Moderately important | 29.1% |
| | Slightly important | 12.7% |
| | Not at all important | 6.7% |
| How concerned are you about an unplanned pregnancy in general? | Very concerned | 9% |
| | Moderately concerned | 12.7% |
| | Somewhat concerned | 14.2% |
| | Slightly concerned | 24.6% |
| | Not at all concerned | 39.6% |
| How concerned are you about an unplanned pregnancy affecting your scholarship, NCAA eligibility, and athletic participation? | Very concerned | 15.7% |
| | Moderately concerned | 15.7% |
| | Somewhat concerned | 14.2% |
| | Slightly concerned | 18.7% |
| | Not at all concerned | 35.8% |
| Do you believe that you have any legal rights protecting your status (scholarship, eligibility, athletic participation) as a pregnant student athlete? | Yes | 60.9% |
| | No | 39.1% |
| Are you aware of any NCAA rules that address student athlete pregnancy? | Yes | 9.7% |
| | No | 90.3% |
| Have you received information from the athletics department (not a teammate) with instructions about what to do if you are pregnant? | Yes | 2.2% |
| | No | 97.8% |
| If you answered yes to the previous question, how was this information provided to you? | Coaches | 0% |
| | Athletic administrators | 0% |
| | Athletic Trainers | 1.3% |
| | Athletic doctors | 0% |
| | NCAA Division 1 Manual | 2.5% |
| | Compliance meeting | 1.3% |
| | It was not provided to me | 95% |

| | | |
|--|-----------------------------|-------|
| Have you received information about student athlete pregnancy rights from any source other than the athletics department? | Yes | 3.2% |
| | No | 96.8% |
| If you suspected pregnancy, what would you likely do within the first week? * | Home pregnancy test | 91.5% |
| | Contact team physician | 0.04% |
| | Contact athletic trainer | 13.8% |
| | Contact coaches | 0.05% |
| | Go to student health clinic | 33.1% |
| | Go to outside clinic/doctor | 43.1% |
| | Contact parents | 29.2% |
| | Contact sexual partner | 66.9% |
| If pregnant, how likely are you to approach someone in the athletics department for help? | Very likely | 8.5% |
| | Likely | 14.6% |
| | Unsure | 33.1% |
| | Unlikely | 24.6% |
| | Very unlikely | 19.2% |
| If you confirmed you were pregnant, would you choose to: | Terminate (abortion) | 49.6% |
| | Continue pregnancy | 21.1% |
| | Unsure | 29.3% |
| <p>[Intervention] Legal rights and NCAA bylaws regarding pregnancy among student athletes. You <u>cannot</u> be removed from the athletic team, removed from scholarship, or discriminated against because of a pregnancy or pregnancy-related absences by your coaches, teammates, or the athletic department. Additionally, you are granted an additional year of NCAA eligibility if you choose to continue your pregnancy until birth, sometimes known as a pink shirt. More information will be available after survey completion via a link on the final page after survey submission.</p> | | |
| Were you aware of this information prior to this survey? | Yes, all of it | 3.9% |
| | Yes, some of it | 27.1% |
| | No | 69% |
| Does the information change any of your answers about the impacts on your athletic status (participation, scholarship, eligibility) in the previous sections of this survey? | Yes, all of it | 3.9% |
| | Yes, some of it | 27.1% |
| | No | 69% |
| Does the information provided change any of your answers about the hypothetical decisions you would make about a pregnancy in the previous sections of this survey? | Yes | 26.2% |
| | No | 73.8% |

| | | |
|---|---------------|-------|
| Knowing this information, if pregnant in the future, how likely would you be to approach someone in the athletics department for help? | Very likely | 13.3% |
| | Likely | 43.8% |
| | Unsure | 21.1% |
| | Unlikely | 14.1% |
| | Very unlikely | 7.8% |
| Should the athletic department provide more information about pregnancy rights to student athletes at risk for an unplanned pregnancy? | Yes | 97.6% |
| | No | 2.4% |
| If athletic medicine provided access to birth control, how likely would you be to utilize this aspect of care? | Very likely | 49.2% |
| | Likely | 30.5% |
| | Unsure | 11.7% |
| | Unlikely | 3.1% |
| | Very unlikely | 5.5% |
| Notes: % = % of sample. * = Not mutually exclusive; participants could “select all that apply”. Internal consistency reliability (Cronbach’s alpha) on mutually exclusive items = .488. | | |

Baseline Pregnancy Rights Knowledge

This study aimed to determine baseline pregnancy rights knowledge in a contemporary sample of female athletes. The results support a conclusion that female athletes continue to lack knowledge. While 60.9% of participants believed that they “had [some] “legal rights protecting their status (athletic aid, eligibility, and participation) as a pregnant student athlete”, significantly fewer (9.7%) were aware that NCAA rules protected them (paired, two-tailed $t = 21.45$; $df = 80$; $p < .001$). Almost all participants reported not receiving pregnancy rights information from either their school athletics department or university (98% and 97%, respectively). The majority (69%) reported being unaware of any pregnancy rights prior to participating in the study. Almost all participants (97.6%) believed that the university athletic department should provide more information about pregnancy and pregnancy rights.

Participants were significantly less concerned about the effects of unplanned pregnancy in general than they were about its effect on their athletic participation. While 21.6% were very concerned or moderately concerned about unplanned pregnancy in general, 31.4% were very concerned or moderately concerned about its effect on their athletic status (Table 3).

Table 3
Concerns about the Effects of Unplanned Pregnancy

| | Very | Moderately | Somewhat | Slightly | Not At All |
|--|-------|------------|----------|----------|------------|
| Concerned in general | 9% | 12.7% | 14.2% | 24.6% | 39.6% |
| Impact on athletic status | 15.7% | 15.7% | 14.2% | 18.7% | 35.8% |
| n = 134. Chi square = 10.1, df = 4, p = .039. Post hoc observed power = .805, observed effect size medium. | | | | | |

Significantly fewer participants expected negative impacts (loss of athletic eligibility, athletic aid, and team participation) to their athletic status if they chose to terminate the pregnancy than if they chose to remain pregnant and potentially give birth. If they chose to terminate the pregnancy, under one fourth (23.5%) expected negative impacts. If they decided to remain pregnant and potentially give birth, half (49.9%) expected negative impacts (Table 4).

Table 4

*Expected Negative Impacts of Unplanned Pregnancy if Disclose Pregnancy**

| | If terminate pregnancy | If remain pregnant |
|---------------------------|------------------------|--------------------|
| Released or cut from team | 11.9% | 46.6% |
| Suspended from team | 23.7% | 27.9% |
| Lose athletic aid | 11.9% | 31.6% |
| Lose NCAA eligibility | 6.7% | 16.9% |
| None of these | 67.4% | 33.8% |

* = Not mutually exclusive. Participants were invited to "check all that apply". n = 88. Paired, two-tailed $t = 9.99$; $df = 87$; $p = 4.3 \times 10^{-16}$. Post hoc: observed power = .996, observed effect size large.

Intent to Seek Help If Pregnant

The second aim of this study was to determine the extent to which pregnancy rights information, when provided, affected participants' intent to seek help for pregnancy. We hypothesized that if participants lacked Title IX knowledge, then providing it would increase their intent to seek help. Pregnancy rights information was offered about halfway through the survey instrument. Participants who imagined themselves as pregnant were significantly more likely to approach someone in athletics for help after reading the pregnancy rights information. Before receiving Title IX information 23.1% were likely or very likely to ask for help from athletics staff. After receiving the information 57.1% were likely or very likely to ask for help (Table 5). Thus, the study's results supported the hypothesis.

Table 5

Likelihood of Approaching Athletic Staff for Help when Pregnant Before and After Pregnancy Rights Information

| | Very likely | Likely | Unsure | Unlikely | Very unlikely |
|--------|-------------|--------|--------|----------|---------------|
| Before | 8.5% | 14.6% | 33.1% | 24.6% | 19.2% |
| After | 13.3% | 43.8% | 21.1% | 14.1% | 7.8% |

n = 88. Paired, two-tailed $t = 8.17$; $df = 126$; $p = 2.7 \times 10^{-13}$. Post hoc: observed power = .996, observed effect size large.

Summary

This study aimed to determine a) baseline pregnancy rights knowledge in a contemporary sample of female athletes; and b) the extent to which pregnancy rights information, when provided, affected their intent to seek help for pregnancy. We found that baseline pregnancy rights information was low. While participants reported awareness of some legal protection should they experience pregnancy, they were not aware of any NCAA protections. They reported not receiving pregnancy rights information from the athletic department or their university and felt that the ath-

letic department should provide the information. Respondents were less concerned about unexpected pregnancy in general than concerned about its negative impact on their sport, especially if they decided to remain pregnant rather than terminate the pregnancy. The finding that more than two-thirds of participants expected negative consequences if they decided to remain pregnant rather than terminate the pregnancy is of concern, indicating a lack of knowledge about healthy pregnancy, healthy athletic participation while pregnant, and federal protections for pregnant individuals. Providing Title IX information within the survey significantly increased participants' intent to seek help from athletic staff.

Recommendations

For the NCAA

Although Jaco (2009) reported a 4% incidence of pregnancy in her sample and anecdotal stories abound, scientific knowledge about student athlete pregnancy, pregnancy decisions, and pregnancy experiences remains sparse. Two NCAA Committees are well-positioned to fill the gap. The NCAA Committee on Competitive Safeguards and Medical Aspects of Sports (CSMAS) “promotes and sponsors research to address relevant health and safety issues” and “operates a national injury surveillance program (ISP) to monitor injury trends and enhance safety in intercollegiate athletics” (NCAA, 2021b). A review of publications using ISP data indicates that the instrument collects orthopedic data (e.g., injuries to feet, elbows, hips, knees, etc.). College student athlete pregnancy frequency may be measured through the American College Health Association’s National College Health Assessment (ACHA NCHA; American College Health Association, 2021), which includes items inviting self-reports of gender, pregnancy, and participation in varsity sports. Crosstab analysis could reveal the frequency of pregnancy in the male and female student athlete subpopulation. We recommend that the CSMAS add pregnancy and other mental health issues to the list of medical conditions currently being collected via the ISP (voluntarily reported by athletic staff), and commission ongoing analysis of the ACHA NCHA data (self-reported by athletes) to develop evidence.

The NCAA Committee on Women’s Athletics (CWA) “provides leadership to the association in its efforts to provide equitable opportunities, fair treatment, and respect for all women in all aspects of intercollegiate competition” (NCAA, 2021c). The failure of pregnancy-related information to effectively reach female student athletes is a gender equity issue. We recommend that the CWA take a more active role in ensuring that timely, effective Title IX information is shared. We recommend that the CWA commission research on NCAA member universities’ adoption of the NCAA Model Policies and commission both quantitative (e.g., Jaco, 2009) and qualitative (e.g., Williams, 2017) research on student athlete pregnancy experiences.

For Athletic Departments and Universities

The athletic department and academic institution possess greater experience, knowledge, and power than the student athlete. It is safe to assume that student ath-

letes themselves do not, on their own initiative, study Title IX and the NCAA Bylaws but rather they rely on their university athletics staff to inform and protect them when unexpected events like pregnancy occur. Participants in the current study reported receiving no information about pregnancy from their athletics department and believed that their athletics staff should provide more information about pregnancy health and pregnancy rights.

Athletic trainers serve as first responders on each team, managing medical appointments, rehabilitation, and acute injuries, while also regularly interacting with all student athletes on a team. To ensure that the student athlete is well supported, the athletic institution should ensure that all athletic trainers who work with student athletes at risk for an unplanned pregnancy understand the full scope of crisis pregnancy and pregnancy rights, are prepared to answer immediate questions, and are empowered to make appropriate referrals to university resources outside of athletics. Most importantly the athletic trainer can emphasize that a pregnant athlete has time to consider options.

Every university athletics department has four established vehicles for imparting knowledge to student athletes. The NCAA requires annual compliance meetings and annual forms for all student athletes (NCAA, 2021). Intercollegiate student athletes are provided with written guidance on responding to any number of academic, athletic, and personal challenges via the university student athlete handbook. The handbook, usually updated annually, lists numerous resource people and their contact information. Unfortunately, student athletes may rely solely on the student athlete handbook; in this case the 2020-2021 student athlete handbook for the site university does not mention pregnancy or the NCAA resources. Student athletes attend life skills classes intended to optimize their athletic and academic success; for example, time in near-future life skills classes will certainly be dedicated to counseling athletes on the recent NCAA rule changes allowing athletes to profit from their names, images, and likenesses (e.g., Moody, 2021). Finally, the NCAA mandates that its members develop a Student Athlete Advisory Committee made up of representatives from each team. All four vehicles are opportunities to share information about Title IX, Infant Safe Haven Laws (Child Welfare Information Gateway, 2022), and contacts within and outside of athletics in the event of unplanned pregnancy.

There is one existing vehicle by which university faculty resources may bridge the gap between an athletic department and the resources of the larger university. The NCAA requires that every member school appoint and involve at least one NCAA Faculty Athletic Representative (FAR) to:

ensure the academic integrity of the athletics program, to serve as an advocate for student-athlete well-being and to play a part in maintaining institutional control of the athletics program. The FAR who must be on the faculty or administrative staff and may not hold a position in the athletics department. (NCAA, 2013, p. 13).

In 2013 the NCAA surveyed 658 FARs from 651 institutions (NCAA, 2013). In each division, over two-thirds of FARs were males (65%, 74%, and 67% in Divisions I, II, and III, respectively) of white race (89% in each division). The FARs were tenured

faculty members (96%, 80%, and 79%, respectively). They had worked in higher education for an average of 27, 24, and 22 years, respectively and had served in the FAR position for an average of 7 years. About one-fourth of the sample reported competing in college athletics as undergraduates. The FARs' most frequently reported academic areas were social sciences and history (16.9%, 17.3%, and 18.6%, respectively), business management (14.6%, 13.7%, and 14%, respectively), and other (12.3%, 12.2%, and 13.2%, respectively). FARs with academic backgrounds in health and medicine comprised about a tenth of the sample (11.9%, 11.7%, and 7.4%, respectively). This suggests that 90% of FARs might not be optimally prepared to advocate or serve as resources for healthy pregnancy, pregnancy rights, and university athletics Title IX compliance; and that the FAR position does not get refreshed very often. While the FAR position carries other important functions, we recommend that universities appoint more healthcare experts to the FAR position.

The university's manifest objective is to facilitate every student's work towards completion of her/his college education. College health professionals focus on optimizing students' physical and psychological health in the pursuit of university objectives. The university, supported by college health services, has a primary interest in encouraging all students' academic progress even during difficult circumstances, which include injury, disability, and pregnancy (Sorensen et al., 2009). University departments of women's studies, women's centers, student health services, and health studies actively advocate for pregnant students. However, pregnant student athletes may not be aware of expert support outside the athletic department or may not be referred toward these expert resources by athletic staff. We recommend that university women's centers, women's health, and legal advisors carefully assess the female student athlete experience, Title IX implementation in athletics, and student athlete handbooks.

For Student Athletes: Do Your Homework in Advance

The results of this study were consistent with Jaco's (2009) and Williams' (2017) findings that female student athletes continue to lack knowledge of their pregnancy rights under Title IX. While the current sample believed they had some legal protection for their athletic status if they experienced an unplanned pregnancy, very few knew of NCAA rules. The current study was the first to embed Title IX information within the instrument, allowing for comparisons of participant responses before and after the intervention. Within this study, receiving pregnancy rights information significantly changed participants' expectations for negative impacts on athletic status, and increased their likelihood of seeking help rather than concealing pregnancy. Some participants reported that pregnancy rights information might change the decisions they would make about their unplanned pregnancy. Title IX information when provided was effective in both increasing knowledge and increasing likelihood of seeking help.

Student athletes should not wait on the actual occurrence of an unexpected event to form an effective plan for its potential occurrence. Student athletes who participate in consensual sexual activity, even while responsibly using pregnancy prevention

methods, should anticipate the occurrence of unplanned pregnancy. During recruiting visits, they should ask about women's health services. They can review online the university's student athlete handbook and the availability of support resources outside of the athletic department. Student athletes should also initiate discussions among peers on Title IX, the NCAA Model Policies, Infant Safe Haven Laws (Child Welfare Information Gateway, 2022), and options for responding to crisis pregnancy. They should know that their health, athletic aid, decisions about the pregnancy, sport participation, and return to sport following pregnancy *are protected by federal law*. Although student athletes will feel in crisis, they should understand that they have time to decide and safe places – hopefully within athletics, within the larger university, and outside the university – to reach out for help and to find people who are completely committed to helping.

Limitations

The current study has several limiting elements. The selected quantitative approach may have failed to explore the full scope of participants' experiences, especially with such a nuanced and personal topic as unplanned pregnancy. The study design could have been strengthened by including comparison groups of male student athletes or female non-athlete students. The sample size was sufficient, but the sample was conveniently selected without *a priori* power analysis to determine a necessary sample size, and the participants were recruited by word-of-mouth. The investigator-designed survey instrument contained a few non-mutually exclusive response options ("select all that apply") which could not be included in statistical analysis. While face validity was reasonably established, it is the weakest form of validity. Instrument reliability was less than optimal. Further instrument development will be important if this instrument is used in future research. Anonymous survey methods are limited to self-reporting, which may be exaggerated or biased. Respondents may feel safer with anonymity, but that design choice also limited our ability to follow up or clarify responses. Lastly, while the survey asked about sexuality and pregnancy prevention practices, it did not ask whether participants had actually experienced pregnancy (planned or unplanned) and did not ask whether actual pregnancies were terminated (electively or involuntarily) or continued to childbirth. Data on pregnancy frequency and outcomes in this specialized sample of young adult college students could have contributed new information to the current knowledge. Despite these limitations the study contributed to knowledge by confirming other researchers' findings that female student athletes lack knowledge, and by stimulating continued research on this unsolved, dangerous problem.

Conclusion

The United States has a long history of advocating for the rights of pregnant women, intercollegiate women's sports, and crisis pregnancy. However, despite clear federal laws, NCAA resources, and nearly 20 years of advocacy and research on

college student athlete pregnancy, female intercollegiate student athletes still lack knowledge of pregnancy rights and protections. The lack of knowledge is concerning as it may lead to concealing pregnancy and other forms of unhealthy coping including infanticide. Continued work and advocacy are needed at the local and national levels. We must do better.

References

- American College Health Association (2021). *National College Health Assessment Spring 2021 Undergraduate Reference Group Executive Summary*. American College Health Association. https://www.acha.org/documents/ncha/NCHA-III_SPRING-2021_UNDERGRADUATE_REFERENCE_GROUP_EXECUTIVE_SUMMARY_updated.pdf.
- Aztlan, E., McLemore, M., & Taylor, D. (2017). Multiple unintended pregnancies in U.S. women: A systematic review. *Women's Health Issues*, 27(4), 407-413.
- Brake, D. (2008). The invisible pregnant athlete and the promise of Title IX. *Harvard Journal of Law & Gender*, 31, 323-366. https://scholarship.law.pitt.edu/cgi/viewcontent.cgi?article=1013&context=fac_articles
- Child Welfare Information Gateway (2022). Infant Safe Haven laws. US Department of Health & Human Services, Administration for Families, Children's Bureau. Retrieved February 27, 2022 from <https://www.childwelfare.gov/pubpdfs/safe-haven.pdf>.
- Education Amendments Act of 1972, 20 U.S.C. §§ 1681-1688. <https://www.justice.gov/crt/title-ix-education-amendments-1972>.
- Education Amendments Act of 1972, 45 CFR 86.9(a)(2)(ii). <https://www.ecfr.gov/current/title-45/subtitle-A/subchapter-A/part-86>.
- Finer, L., & Zolna, M. (2016) Declines in unintended pregnancy in the United States 2008-2011. *New England Journal of Medicine*, 374, 843-852. <https://www.nejm.org/doi/pdf/10.1056/NEJMsa1506575?articleTools=true>.
- Ford, P. (2004, March 6). Athlete kept pregnancy secret, played for eight months. *Cincinnati Enquirer*.
- Former athlete at Mercyhurst College charged with killing her newborn baby (2007). *Chronicle of Higher Education*. https://www.chronicle.com/article/former-athlete-at-mercyhurst-college-charged-with-killing-her-newborn-baby/?cid2=gen_login_refresh&cid=gen_sign_in.
- Hogshead-Makar, N. & Sorensen, E. (2008). Pregnant & parenting student-athletes: Resources & model policies. *National Collegiate Athletic Association*. <https://www.ncaa.org/about/resources/inclusion/pregnant-parenting-student-athletes>.
- Jaco, L. (2009). Pregnancy prevalence, outcomes, and knowledge of rights for NCAA Division I female student athletes. *Master's thesis*. <https://cdr.lib.unc.edu/concern/dissertations/m326m2061?locale=en>.
- Lehman College (2001). Athletics hall of fame inducts six new members. <https://lehmanathletics.com/honors/hall-of-fame/pauline-carney-tellone/18>.

- Monroe, S. (2007). Office of Civil Rights dear colleague letter. *United States Department of Health & Human Services*. <https://www2.ed.gov/about/offices/list/ocr/letters/colleague-20070622.html>.
- Moody, J. (2021, August 9). Name, image, likeness: What college athletes should know about NCAA rules. <https://www.usnews.com/education/best-colleges/articles/name-image-likeness-what-college-athletes-should-know-about-ncaa-rules>
- National Collegiate Athletic Association (2007). CWA takes educational approach to pregnancy issue. Retrieved February 27, 2022 from <https://ncaanewsarchive.s3.amazonaws.com/2007/Association-wide/cwa-takes-educational-approach-to-pregnancy-issue---07-30-07-ncaa-news.html>.
- National Collegiate Athletic Association (2021a). *2021-22 Division I Manual*. National Collegiate Athletic Association. <https://www.ncaapublications.com/p-4630-2021-2022-ncaa-division-i-manual.aspx>
- National Collegiate Athletic Association (2021b). Committee on Competitive Safeguards and Medical Aspects of Sports NCAA Injury Surveillance Program. National Collegiate Athletic Association. <https://www.ncaa.org/sports/2018/4/9/ncaa-injury-surveillance-program.aspx#:~:text=The%20Injury%20Surveillance%20Program%20is,injury%20database%20in%20the%20world>.
- National Collegiate Athletic Association (2021c). Committee on Women's Athletics. National Collegiate Athletic Association. <https://d67oz7qfnvmpz.cloudfront.net/governance/committees/committee-womens-athletics>
- National Collegiate Athletic Association (2013). *Roles, Responsibilities, & Perspectives of NCAA Faculty Athletics Representatives*. National Collegiate Athletic Association. <https://www.ncaapublications.com/productdownloads/FAR13.pdf>
- Power to Decide (2015). *Briefly: Unplanned pregnancy among college students and strategies to address it*. Washington, DC: Author. <https://powertodecide.org/what-we-do/information/resource-library/briefly-unplanned-pregnancy-among-college-students>.
- Potts, K. (2001, May 7). Family matters: In many ways student-athletes learn parenthood by trial & error. *NCAA News*. <http://ncaanewsarchive.s3.amazonaws.com/2001/Association-wide/family-matters---5-7-01.html>
- Portnoy, J. (2004, November 11). Lafayette student fights to break to break college norm. *The Express-Times*.
- Rainey, A. (2006, May 26). What athletes can expect when they're expecting. *Chronicle of Higher Education*, 52(38), A41-42. https://www.chronicle.com/article/what-athletes-can-expect-when-theyre-expecting/?cid2=gen_login_refresh&cid=gen_sign_in.
- Rosenberg, B. (2004, April 12). Legislative proposal crafted to benefit pregnant athletes. *National Collegiate Athletic Association News*, 29.
- Rovegno, L. (2007, May 12). Athletes often forced into heartbreaking decisions. *ESPN*. <https://www.espn.com/college-sports/news/story?id=2865230>.
- Schonbrun, Z. (2007, April 29). Fantasia Goodwin speaks about pregnancy. *Syracuse Daily Orange*. <https://dailyorange.com/2007/04/year-in-sports-fantasia-goodwin-speaks-about-pregnancy/>

- Smith, L. (2004). Changing times. *Training & Conditioning, XIV*(9), 31-39.
- Sorensen (2003). Personal letter to R. Stallman, Director of Education Outreach, National Collegiate Athletic Association.
- Sorensen, E., Sincoff, M., & Siebeneck, E. (2007). Best practices: Pregnancy policies. Paper presented at the NCAA Gender Equity & Issues Forum, New Orleans, LA.
- Sorensen, E., Sincoff, M., & Siebeneck, E. (2009). The need for an effective student-athlete pregnancy policy. *Journal of Issues in Intercollegiate Athletics, 1*, 25-45. http://csri-jiaa.org/old/documents/publications/research_articles/2009/JIAA_2009_3_Sorensen_Publish%20Copy_1.0.pdf
- Student charged with killing newborn (2007). *United Press International*. https://www.upi.com/Top_News/2007/10/25/Student-charged-with-killing-newborn/18631193368531/?tt=4.
- U.S. Department of Justice (2021). Title IX Legal Manual. Retrieved February 27, 2022 from <https://www.justice.gov/crt/title-ix#:~:text=Congress%20enacted%20Title%20IX%20with,effective%20protection%20against%20those%20practices>.
- Walker, T. (2008, January 13). NCAA acts on pregnant athlete issue. *The Post and Courier*. https://www.postandcourier.com/sports/ncaa-acts-on-pregnant-athlete-issue/article_8d400d18-7e68-53a3-ae50-11d74ea42f9c.html
- Williams, C. (2017). A qualitative exploration of a select group of student athlete mothers who experienced a pregnancy while competing at a NCAA Division I or Division II university. *Doctoral dissertation, Sam Houston State University*. <https://shsu-ir.tdl.org/bitstream/handle/20.500.11875/2562/WILLIAMS-DIS-SERTATION-2017.pdf?sequence=1&isAllowed=y>.
- Willis, M. (1996). Helping Paralympic athletes go for the dream. *Wright State University News & Events*, Fall 1996.