Gender Proportionality in Intercollegiate Athletics: The Mathematics of Title IX Compliance*

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Objective. The ongoing controversy over Title IX, requiring university athletic departments to provide equal participation opportunities to men and women, has been the source of heated controversy. The purpose of this research is to determine how much remains to be done before "proportionality" is achieved, i.e., before the number of female athletes matches the female percentage of a school's student body, as well as how various proposals would affect compliance. Methods. We analyze data on the gender composition of 304 Division I athletic programs and student bodies to determine what each school needs to accomplish through strategies of adding female athletes, cutting male athletes, or reallocating participation opportunities from women to men. Results. Most schools—especially those with football teams—are nowhere near compliance. Compliance is more approachable for schools with a smaller proportion of female students, with more financial resources for female athletics, with a smaller athletic program, and without a football team. Compliance is still unlikely or, at best, far in the future for most schools even if certain NCAA rules and federal regulations are enacted. Conclusions. The reallocation strategy appears to present the most inviting avenue to compliance, although the only scenarios in which most football schools come close to compliance would involve exempting football from Title IX coverage or placing a fifty-player cap on football rosters, neither of which seems likely in the near future.

"I had not realized...that athletics is the single most important thing in the United States."

—The bemused reaction of Secretary of Health, Education, and Welfare Caspar Weinberger to the fury kicked off by the circulation of draft Title IX regulations in 1975 ("H.E.W. Head Says Title IX Won't 'Bankrupt' Schools," 1975: 16).

Title IX of the omnibus Education Amendments of 1972 (P.L. 92-318), which President Richard M. Nixon signed into law on June 23, 1972, prohibits gender discrimination in education. Patterned after a provision of

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the Civil Rights Act of 1964, Title IX states 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 education program or activity receiving federal financial assistance.” Title IX attracted little notice and stirred little debate either inside or outside Congress prior to its enactment, but a firestorm of controversy broke out as soon as a draft of its implementing regulations was circulated. For the next two decades, Title IX’s opponents waged a relentless counteroffensive, trying to limit its scope, contesting its constitutionality, debating its interpretation, and delaying its implementation, all in hopes of undoing what was so casually done in 1972.

Central to this controversy is the challenge that Title IX has posed to the male-dominant order in intercollegiate athletics. Reflecting deeply ingrained cultural values, intercollegiate athletic programs have traditionally catered to men and paid little attention to women. In 1974, women’s teams at one Big Ten school received only $40,000 out of a total athletic budget of $6 million, and at a large southwestern university, the budget for ten varsity women’s teams totaled $200. Nationwide, 50,000 men attended school on athletic scholarships, compared to fewer than 50 women (Cantú, 1995: 41).

Much has changed since the enactment of Title IX, and well over 100,000 women now participate in varsity sports at member institutions of the National Collegiate Athletic Association (NCAA). Still, gender equity has not yet been achieved in intercollegiate athletics, and the controversy continues. Underlying much of the hostility toward Title IX is that pressure to comply with the gender-equity mandate comes at a time when most athletic departments are struggling, often unsuccessfully, to avoid red ink (Fulks, 1996; see also Padilla and Baumer, 1994; Sheehan, 1996; Sperber, 1990). In the face of these financial constraints, representatives of the men’s intercollegiate athletic establishment, like Chuck Neinas of the College Football Association (CFA), contend that schools “can’t possibly comply” with Title IX (quoted by Zapler, 1995: A44). In contrast, Title IX’s proponents contend that proportionality can be achieved without massive cuts in opportunities for male athletes by curbing such excesses as bloated football rosters overseen by a legion of coaches, first-class hotel lodgings on the eve of home football games, multimillion-dollar indoor practice facilities, and flashy two-hundred-page media guides (Farrell, 1995; Grant, 1995; Henderson, 1995; Lopiano, 1992).

Although the ongoing controversy over Title IX centers on claims about the catastrophic consequences of compliance and counterclaims about the massive benefits and minimal costs of achieving gender equity, missing from the debate has been hard evidence about the nature and scope of the

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1The congressional debate over the education amendments centered on busing school children to achieve racial balance. Moreover, Representative Edith Green, the sponsor of Title IX, reportedly kept it low profile by, among other things, dissuading women’s groups from testifying on its behalf (Gelb and Palley, 1996: 99).
effort that will be required. Accordingly, our purpose here is to assess how much remains to be done before schools are in compliance with Title IX—or, more accurately, before they are in compliance with what to this point has been Title IX’s key provision, that there be “substantial proportionality” between the gender composition of a school’s undergraduate student body and women’s share of athletic “participation opportunities” (i.e., slots on varsity teams). Such an assessment may seem extremely straightforward. It is not.

A major reason for this is that how far schools must go to reach proportionality depends on which path toward compliance they try to follow. As schools weigh the financial costs of adding athletic opportunities for women against the personal costs of reducing athletic opportunities for men, it becomes clearer and clearer that strategic considerations lie at the heart of the quarter-century-long furor over Title IX. Before we can determine, by pursuing various compliance strategies under various enforcement scenarios, what schools must do to pass the Title IX proportionality test, we need to clarify where the proportionality test stands within the broader Title IX context.

The Three-Pronged Test and “Substantial Proportionality”

On April 21, 1997, when the U.S. Supreme Court announced its refusal to hear Brown University’s appeal of lower court decisions upholding claims of gender discrimination in its intercollegiate athletic program (Cohen v. Brown University, 1993), it took a major step toward closure on a series of legal challenges to the Title IX regulations, as “interpreted” and “clarified” over the years by the Office for Civil Rights (OCR) of the Department of Education (formerly the Department of Health, Education, and Welfare). 2 These regulations prohibit discrimination in the allocation of participation opportunities, athletic financial aid, and all other athletic benefits. In principle these prohibitions are of equal bearing, but in practice, participation opportunities are primus inter pares in deciding whether a school is in compliance with Title IX. 3

To determine whether discrimination exists in athletic participation opportunities, OCR applies a three-pronged test. The first question is whether opportunities to participate are “substantially proportionate” to a school’s mix of male and female students. If so, the school is in a “safe harbor” and the inquiry will proceed no further. If a school cannot pass the

2 Besides Cohen v. Brown University, the most important Title IX cases have been Favia v. Indiana University of Pennsylvania (1993), Franklin v. Guimmet County Public Schools (1992), Grove City College v. Bell (1984), Haffner v. Temple University (1987), and Roberts v. Colorado State Board of Agriculture (1993).

3 In a departure from the tendency for Title IX litigation to center on participation opportunities, the National Women’s Law Center initiated lawsuits on June 2, 1997, against twenty-five schools that it alleged were not allocating athletic scholarships to women in proportion to women’s share of participation opportunities (see Naughton, 1997a).
proportionality test, the question turns to whether it has "a history and continuing practice of program expansion which is demonstrably responsive to the developing interest and abilities of the members of [the underrepresented] sex." If it does, it meets the participation requirement in spite of failing the proportionality test. If a school cannot pass the program expansion test, it will still be in compliance with the participation requirement if it has "fully and effectively accommodated ... the interests and abilities of the members of [the underrepresented] sex." Only if a school fails all three tests will it be in violation of the participation requirement.

Critics insist, and many defenders concede, that the real issue is proportionality, not program expansion or full accommodation (George, 1995; Shook, 1996; Snow and Thro, 1996). To be sure, Title IX's defenders are formally correct that "Proportionality is only the first—and not the dispositive—question" (Vargyas, 1994: 35). Still, compliance in the foreseeable future with either the second or the third prong of the participation requirement is widely dismissed as a pipe dream. Although the Title IX regulations were promulgated in the mid-1970s, only recently have they begun to be enforced and taken seriously. Moreover, cost cutting, not program expansion, has been the norm in intercollegiate athletics over the last two decades. As a consequence, most schools cannot demonstrate a "continuing practice of program expansion" and are not even close to the point where women's athletic interests are "fully and effectively accommodated." Realistically, then, the compliance issue boils down to whether a school can pass the proportionality test.

Without entering into the debate over whether proportionality is a reasonable standard to employ in assessing gender equality in intercollegiate athletics, we should note that it is an extremely controversial one. Critics attack it for, among other things, ignoring differences between male and female students in athletic interest and competence to play varsity sports, and portray the proportionality test as bean counting taken to its mindless, illogical extreme (Beveridge, 1996; Mahoney, 1995; Straubel, 1996). Defenders respond that gender differences in athletic interest and ability reflect institutionalized sexism in athletic programs (Brake and Catlin, 1996; Henson and Cabaniss, 1994; Weistart, 1996), and portray the proportionality in participation opportunities as a watered-down rather than an extreme or demanding standard.5

4 On Title IX's legislative, enforcement, and case-law histories, see, e.g., Cox (1977), Graf (1983), Johnson (1994), Seha (1984), and Shook (1996).

5 In Farrell's (1995: 1038) words, "Proportionate funding, unlike proportionate participation rates, would require men's programs to give up a substantial part of their current riches. Opponents of the proportionality benchmark should be grateful that the [OCR's] Policy Interpretation requires so little"; on this point, see also Boutilier and San Giovanni (1983). In a recent CBS News national survey, 86 percent of respondents nationwide said they believed that financial support for men's and women's sports programs should be equal, and 77 percent said this should be the case even if men's sports had to be cut ("Sidelines," 1997: A53.)
Alternative Compliance Strategies

What will it take for the typical school with “big-time” intercollegiate athletic programs to pass the proportionality test? The answer depends, in large measure, on the compliance strategy the school pursues—whether it tries to comply by expanding the overall scope of its athletic operations, by cutting back on these operations, or by holding the line and reallocating existing resources. This point comes home vividly when we consider a hypothetical school conjured up by the OCR in its Title IX “policy clarification”:

Institution A is a university with a total of 600 athletes. While women make up 52 percent of the university’s enrollment, they only represent 47 percent of its athletes. If the university provided women with 52 percent of athletic opportunities, approximately 62 additional women would be able to participate. (Office for Civil Rights, 1996)

Why does OCR equate providing additional athletic participation opportunities for 62 women at A with meeting the proportionality standard? We can reconstruct its reasoning as follows:

(1) Given that A currently has 318 male athletes (318 = 53% of 600), it needs 344 female athletes to achieve proportionality with its 52-48 female-male enrollment ratio.6

(2) Adding 62 participation opportunities for women to the current 282 (282 = 47% of 600), while holding the number of male athletes at 318, would satisfy the proportionality standard.

Undeniably, adding 62 female athletes would be one way for A to achieve proportionality. By no means, however, is expansion the only way. What if A were unwilling or unable to expand its athletic programs? Indeed, what if it found itself in a cutback rather than an expansionist mode? In that case, A might follow an altogether different path from the one envisioned by OCR:

(1) Given that A has 282 female athletes, it needs 260 male athletes to achieve proportionality with its 52-48 female-male enrollment ratio.7

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6 This is calculated by first determining how many athletes a school (in this case, A) would have if the given number of men (here, 318) were proportional to the gender composition of the student body (here, 48 percent male). In this instance, we divide the number of male athletes (318) by the proportion of men in the student body (.48), yielding a total of 662.5 athletes. The required number of women (here, 344) is simply the difference between the increased number of athletes and the number of male athletes. Here, this would entail an additional 62.5 women.

7 This is calculated by determining the total number of athletes if the number of women athletes were proportional to women’s share of the student body. For A, we divide the number of women athletes (282) by the proportion of students who are women (.52), yielding a total of 542 athletes—a reduction of 58 men, to the new level of 260 male athletes.
(2) Dropping 58 participation opportunities for men from the current 318, while holding the number of female athletes constant at 282, would satisfy the proportionality standard.

This cutback strategy would enable A to pass the proportionality test while reducing the number of varsity athletes from 600 to 542, instead of expanding from 600 to 662. A less draconian strategy would be to maintain the existing number of athletes and substitute female athletes into some of the slots currently occupied by males, as follows:

(1) Given that A has 600 athletes, it needs 312 female athletes and 288 male athletes to match its 52-48 female-male enrollment ratio.\(^8\)

(2) Adding 30 participation opportunities for women while dropping 30 for men \((282 + 30 = 312; 318 - 30 = 288)\) would satisfy the proportionality standard.

In practice, these strategies shade into one another, permitting A to choose from more alternatives than the “pure” expansion, cutback, and replacement strategies we have just described. As shown in Figure 1, which depicts A’s alternatives graphically, A could meet the proportionality standard not only by pursuing these three pure strategies, but by positioning itself at any point on the line connecting them. Clearly, then, there are many ways for a school to achieve proportionality. A could do so by adding 62 participation opportunities for women, by adding 0, or by adding anywhere between 0 and 62. Alternatively, A could comply by cutting 58 male athletes, by cutting none, or by cutting anywhere between 0 and 58.\(^9\)

Assessing Compliance

How close to complying with the proportionality standard are schools that maintain NCAA Division I athletic programs?\(^10\) We know from published reports of the NCAA’s 1996 survey of member institutions that as of

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\(^8\) This is calculated by multiplying the number of athletes by the proportion of women in the student body. The difference between this product and the actual number of women athletes represents the number of male athletes who need to be replaced by women. For A, if women occupied 52 percent of the 600 athletic slots, there would need to be 312 slots for women—30 more than currently exist.

\(^9\) Strictly speaking, A’s range of permissible strategies is even wider. At one extreme, A could add hundreds of participation opportunities for women and somewhat fewer for men, thereby extending the diagonal line beyond \((62, 62)\) in Figure 1. At the other extreme, A could eliminate intercollegiate athletics altogether, thereby extending the diagonal line far beyond \((-58, 0)\). Nonetheless, it seems safe to restrict our attention to the range of strategies described in the text, which are themselves broader than would be seriously considered in all but the most unusual circumstances.

\(^10\) Division I is the top level of the intercollegiate athletics pyramid, as defined by the number of sports in which a school’s teams compete, quality of competition, attendance, and financial aid. Most major athletic powers belong to Division I-A; the criteria for membership
1995–96 (the most recent year for which data are currently available), only 36 percent of the varsity athletes at these schools were women. At just a handful of Division I schools did women’s share of athletic participation opportunities equal or exceed women’s share of the student body (Naugton, 1997b; NCAA, 1997).

However, before we can reach any firm conclusions about how far schools that participate in big-time college sports have to go before they pass the proportionality test, we must answer two questions. What does “substantial proportionality” mean? What does passing the proportionality test entail? In the absence of definitive court or OCR answers to these
questions, we employ two different evaluative benchmarks. The first is exact correspondence between the gender composition of a school's student body and that of its varsity athletes. By this standard, if Institution A in OCR's hypothetical example were pursuing a pure expansion strategy, it would have to add 62 participation opportunities for women to achieve perfect balance between the gender composition of its varsity athletes and that of its student body. However, on numerous occasions schools have passed the substantial proportionality test despite falling short of exact correspondence, because the shortfall was considered small enough to be tolerable. How large a shortfall is tolerable? In practice, no school has been found in violation of the proportionality standard with a shortfall of five percentage points or less, our second evaluative benchmark. With women accounting for 47 percent of its varsity athletes, Institution A in OCR's hypothetical example would already be within five percentage points of its exact correspondence target of 52 percent; thus, by the de facto 5 percent standard, A would not have to add any participation opportunities for women.  

Table 1, shows, for all 304 Division I schools and for Division I-A, I-AA, and I-AAA schools separately, the number of participation opportunities that would have to be added for women and/or dropped for men to achieve compliance with the proportionality standard, understood as either exact correspondence or a shortfall of 5 percent or less. In the first portion of Table 1 several points stand out.

11See, e.g., Gray (1996). "Unfortunately, no one knows, or has adequately articulated, precise parameters for 'substantial proportionality.' The OCR investigator's manual states 'there is no set ratio that constitutes "substantially proportionate" or that, when not met, results in a violation. . . . ' Likewise, the courts [have] declined to offer a definitive range that the disparity ratio must fall within to be considered substantially proportional" (Ingrum, 1995: 769).

12The de facto five-percentage-point criterion is actually de jure in California, whose state law requiring equal opportunity for women in intercollegiate athletics is more explicit than its federal counterpart (see, e.g., Selingo, 1997); on the use of an implicit five-percentage-point criterion under Title IX, see, e.g., Seh (1984) and Farrell (1995).

13These data are from a survey conducted by the NCAA of its member institutions in the fall of 1996, and refer to participation opportunities during the 1995-96 academic year. The NCAA reported these data only in aggregated form (NCAA, 1997). Subsequently, both the Chronicle of Higher Education and the Women's Sports Federation contacted every Division I athletic department, and, capitalizing on the Equity in Athletics Disclosure Act (which took effect in October 1996), obtained copies of the completed forms that each department submitted in response to the NCAA survey. In its April 11, 1997, issue the Chronicle printed the numbers of male and female varsity athletes at each school (Naughton, 1997b), as did the Women's Sports Federation in its Gender Equity Report Card (Sabo, 1997), which also showed the gender composition of each school's student body. Neither source indicated the number of football players at each Division I-A or I-AA school, but we obtained these figures from the Chronicle's copies of the NCAA reporting forms; we are grateful to Jim Naughton of the Chronicle for making the forms available to us. On these forms, institutions were asked to indicate the number of participants on each men's team, each women's team, and each coed team (most commonly a rifle team). Oddly, the forms did not inquire about the gender composition of coed teams. Accordingly, we contacted every Division I school with coed teams and obtained this information directly from them.
### Table 1
Change in Participation Opportunities Needed to Achieve Gender Proportionality at the Median School

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Pure Expansion Strategy</th>
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<th>Pure Cutback Strategy</th>
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<th>Pure Replacement Strategy</th>
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<td></td>
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<td>150</td>
<td>61</td>
<td>106</td>
<td>129</td>
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<tr>
<td>&lt; 5% shortfall</td>
<td>70</td>
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<td>95</td>
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<td>74</td>
<td>101</td>
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<tr>
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<td>&lt; 5% shortfall</td>
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<td>-18</td>
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<td>61</td>
<td>90</td>
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<td>63</td>
<td>102</td>
<td>61</td>
<td>66</td>
<td>66</td>
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**Note:** The entries in the table are the number of participation opportunities that the median school would have to add for women under a "pure expansion" strategy, eliminate for men under a "pure cutback" strategy, or add for women and drop for men under a "pure reallocation" strategy. The data on which these calculations were based are from Naughton (1997b) and Sabo (1997).
First, a quarter century after Title IX became law, much remains to be done in order to achieve gender proportionality in athletic participation. For example, to reach exact gender correspondence between varsity teams and the student body, a typical (fiftieth percentile) Division I school would have to add 118 slots under a pure expansion strategy, eliminate 106 slots under a pure cutback strategy, or reassign 56 slots under a pure replacement strategy. Since the median Division I school currently has a total of 348 varsity athletes, changes on this scale would require major reconfiguration of the teams a school sponsors.

Second, Division I schools vary greatly in what they must do to achieve proportionality. Whereas the median school, following a pure expansion strategy, would need to add 118 slots, a school that is currently at the twenty-fifth percentile would have to add only about half that many (66), while a school currently at the seventy-fifth percentile would have to add about half again that many (172). The sources of this variability are threefold. First, the gender composition of student bodies differs, with military and engineering-oriented schools in particular having a low proportion of female students; because their proportionality target is so low, such schools can pass the proportionality test with relative ease. Second, the current gender mix of varsity athletes varies from school to school, some of which have gone much further than others in expanding programs for women, in eliminating men’s teams, or in reducing men’s roster sizes. Third, some schools have many more varsity athletes than others; the median is 348, but the range extends all the way from 95 to 1,317. This matters, for if two schools, one with 800 athletes and the other with 400, both fall 10 percent short of proportionality, the former will have to add, eliminate, or reallocate twice as many slots as the latter.

14 Indeed, of the six schools that currently meet this target, four are the U.S. Military Academy; the U.S. Naval Academy; the U.S. Air Force Academy; and Georgia Tech; the other two are Washington State University (reflecting court-mandated changes in the athletic program) and Drexel University (where only one-third of the undergraduates are women).

15 As a measure of a school’s financial support for women’s athletics, we can subtract the percentage of total spending on varsity sports that goes to women’s teams from the percentage of undergraduate students who are women; this difference indicates how much more or less a school is spending on women’s sports than would be expected, given the gender composition of the student body. The correlation between this difference and the number of participation opportunities that would be affected by pure expansion, pure cutback, and pure reallocation strategies is .561, .465, and .537, respectively. (The expenditure data are from the data schools submitted in the NCAA survey, as presented by Naughton [1997b].)

16 For instance, Brown, with 927 athletes, falls more than 6 percent below proportionality, as does Iowa State, which has 495 athletes. Whereas Brown would need to add 131 women athletes, cut 119 male athletes, or reallocate 62 slots from men to women, Iowa State would have to add only 58, cut only 76, or reallocate only 33. To get a clearer picture of the impact of the three factors referred to in the text, we performed a series of ordinary least squares regression analyses in which the dependent variables were the number of participation opportunities for women a school would have to add under pure expansion, eliminate for men under pure cutback, or add for women and eliminate for men under pure reallocation. The predictors in each model were the female percentage of the undergraduate student body,
Third, the 5 percent shortfall criterion substantially reduces what the great majority of schools must do to comply. For example, under a pure expansion strategy, it lowers the required number of new slots at the median school by 41 percent, from 118 to 70. Even so, most schools would have to make major changes to meet even this more lenient criterion: the median school would be required to add 70, eliminate 74, or convert 37 slots. Only 24 Division I schools (7.9 percent) are in compliance when judged against this standard.

Fourth, the costs and consequences of compliance depend fundamentally on the strategy a school follows. Proponents of gender equity point to the huge number of new participation opportunities that complying with Title IX will open up for women, implicitly assuming that schools will follow a pure expansion strategy. By contrast, some opponents try to turn these impressive numbers against Title IX by depicting expansion on such a grand scale as totally unrealistic. Other opponents, especially representatives of "minor" men's sports, contend that a huge number of existing participation opportunities for men will have to be eliminated, implicitly assuming that schools will follow a pure cutback strategy. But a school could avoid such extreme outcomes by simultaneously ratcheting up opportunities for women and ratcheting down opportunities for men. Thus, whereas the median school would have to provide 118 new slots via pure expansion or eliminate 106 slots via pure cutback, pure replacement would involve only about half as many added slots for women and lost slots for men (56).

Fifth, no matter which criterion OCR or the courts employ or which strategy a school pursues, football schools (those in Divisions I-A and I-AA) have much more ground to make up than schools that do not field a football team. The median football rosters in Division I-A and I-AA schools number 110 and 92 players, respectively. Maintaining football squads this large while sponsoring an array of other men's teams makes it

the percentage of athletic expenditures that the school devoted to women's sports, the number of varsity athletes, and the number of football players. The performance of these models was excellent, with $R^2$ values of .71, .59, and .70, respectively, and with all coefficients being statistically significant. The lower the female percentage of the student body, the greater the spending on women's sports relative to men's, the fewer the varsity athletes, the fewer the football players, and the less that remained for a school to do to get into compliance with the proportionality standard.

17These tendencies can be seen in OCR's "policy clarification" (OCR, 1996), the district court's decision in *Cohen v. Brown University* (1993), and Kerr's (1995) calculation of the number of participation opportunities for men that would have to be eliminated nationwide to meet the proportionality standard.

18Whether a school would have to add more women than it would have to cut men to reach compliance depends on the gender composition of its student body. If most students are women, as is true at 227 schools, more slots would have to be added for women than dropped for men. However, at the 77 schools with a majority of male students, the reverse is true.
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extremely difficult to provide women with a proportionate share of participation opportunities. This point comes through clearly when Division I-AAA schools are compared to their Division I-A and I-AA counterparts: in no instance is the Division I-AAA figure even half as large as those for Divisions I-A and I-AA, and in many instances it is only a small fraction thereof.\(^{19}\)

Assessing Compliance under Alternative Enforcement Scenarios

Under the current rules by which intercollegiate athletics is governed and Title IX compliance is enforced, the results we have just summarized take our analysis as far as it can go. However, we can greatly increase our understanding of compliance issues by considering what the situation would be if the "rules of the game" were changed—if Congress, the Office for Civil Rights, the NCAA, or the schools themselves made changes of various sorts in what constitutes compliance or in what schools must do to be in compliance. In what follows, we proceed from the simple mathematics of compliance under the current Title IX regime to the higher mathematics of compliance under scenarios ranging from a measure that would take football entirely out of the picture insofar as compliance with Title IX is concerned, to a stringent belt-tightening measure that would fundamentally alter the character of big-time college football.

The Football Exemption Scenario. That football schools would find it extremely difficult to pass the proportionality test was recognized as soon as the draft Title IX regulations were circulated, giving rise to widespread fears that compliance would destroy college football. Accordingly, in 1974, the alarmed Senator John Tower (R-TX) sponsored an amendment that would have exempted revenue-generating sports from Title IX compliance calculations. After being passed by the Senate, this measure was dropped in a House-Senate conference committee. The idea of an exemption for football lives on nonetheless, and continues to spark heated debate in congressional hearings on gender equity in intercollegiate athletics.

The stated rationales for exempting football are that it requires a uniquely large roster unparalleled in women's sports and that anything that undermines its popularity could "kill the goose that lays the golden egg" for intercollegiate athletic programs, including women's programs (see, e.g., Duncan, 1996; Kerr, 1995; Zapler, 1995). Defenders of Title IX ridicule these arguments, depicting current football squad sizes as a

\(^{19}\)We employed a series of rank sum tests to compare the medians for Division I-AAA schools with those of their counterparts in Division I-A and Division I-AA. According to these tests, the median for Division I-AAA schools differs significantly from that for football schools for each strategy considered in the "status quo scenario" portion of Table 1 (\(p \leq .0000\) in all instances).
travesty and football as a money loser at the great majority of schools, and
arguing that even if football were profitable, profitability is not an accept-
able rationale for discrimination (see, e.g., Farrell, 1995; George, 1993).
Mocking what has been called the “three-sex theory of sports” (Harris,
1991: 709), Ellen Vargyas, attorney for the National Women’s Law Center,
asks: “Who do they think is playing football—eunuchs? Last time I
looked, they were all men” (quoted by Harris, 1991: 709). Some Title IX
proponents dismiss the football exemption as a male fantasy, but others
are not so sure, noting that although “Sport has been called the last bast-
ion of male domination, . . . there are others—Congress, for instance”
What if Congress resuscitated the Tower Amendment?20 The second set
of figures in Table 1 contrast starkly with its status quo scenario. For
example, under the status quo the median Division I-A school must provide
136 new slots for women, eliminate 129 for men, or reallocate 67 from
men to women, but under the football exemption scenario these figures
plummet to 17, 16, and 8, respectively. Moreover, with football exempted
the median Division I-A school would already have surpassed proportion-
ality according to the 5 percent shortfall criterion (hence the negative
numbers in the table), and the median Division I-AA school would be
within easy striking distance. Obviously, then, exempting football would
dramatically reduce what football schools need to do to pass the propor-
tionality test, or would even make it unnecessary for most football schools
to do anything at all. In this light, it is easy to see why a football exemp-
tion continues to generate so much heat on both sides of the Title IX
debate.

The Big Ten’s 60-40 Intermediate Scenario. In 1992, the Big Ten
Conference approved a resolution promising that within five years 40 per-
cent of the varsity athletes at each of its schools would be women (an
increase from the then-prevailing 30 percent), and that by 2002 each
school would achieve full proportionality (see, e.g., Shaw, 1995). Big Ten
commissioner James Delany said this plan was “not an attempt to get in
compliance. . . . It’s an attempt to live within what we think is the right
thing to do” (quoted by Moran, 1992: C1, C2). Delany was unquestion-
ably correct on the first score, for the Big Ten’s approach is inconsistent
with the Title IX proportionality standard. Whether this was “the right
thing to do” is another question altogether. Some greeted it as a pro-
gressive—even aggressive—step toward eventual compliance (see, e.g.,

20It has also been argued that a school could create its own football exemption by declari-

20ng football a business enterprise, in which case players would be treated as employees

20(Daniel, 1995). However, this step could subject a school to adverse tax consequences, and it

20is by no means certain that treating football players as employees would exempt football

20from Title IX coverage (Anderson, 1995).
Henderson, 1995: 152), but others derided it as “about as admirable as a tax cheat announcing that within five years he will increase his level of federal income tax payments until he reaches the point where he is paying 80 percent of what he legally owes” (Farrell, 1995: 1042; see also Miguel, 1994).

How far are Division I schools from the Big Ten’s intermediate goal? According to the third part of Table 1, the median school could meet this goal by adding just 17 slots, dropping 25, or converting 10. Closer examination of these figures reveals that achieving a 60-40 split would pose no problem for the great majority of schools that do not have a football team, for even the seventy-fifth percentile Division I-AAA school has already gone beyond 40 percent. Only in Divisions I-A and I-AA does much remain to be done to reach the Big Ten’s 60-40 goal. In the Big Ten itself, women’s share of slots ranges from 30 percent at Illinois to 41 percent at Iowa and Ohio State, and seven of the conference’s eleven schools fall short of 40 percent.

**Football Roster Cap Scenarios.** Gender proportionality poses a special challenge to schools with football teams. The problem is that football, “the leviathan of college sports” (Pieronek, 1994: 351), has teams “as big as invading armies” (Farrell, 1995: 994). The average Division I football school has almost as many football players as total participants on women’s teams, and it would take seven women’s volleyball teams to match the size of the football team (Anderson, 1995: 76; Duncan, 1996: 1028). If football roster sizes remain at their current levels, at a great many schools gender proportionality in varsity athletics can be achieved, if at all, only by wholesale expansion of women’s programs, which could pose major budgetary problems in athletic departments already straining to remain solvent, or by dramatic cutbacks in “minor” men’s sports, an outcome no one favors. Football players constitute 40 percent and 41 percent of the male athletes at the median Division I-A and Division I-AA schools, respectively. To achieve compliance via the pure cutback strategy, the median Division I-A school would have to go from 167 male non-football athletes down to just 41, a 75 percent reduction, and the median Division I-AA school would be left with only 8 male non-football players, a 94 percent reduction from the current 135.

Faced with these alternatives, reducing football squad sizes looks more and more likely, even though Florida State football coach Bobby Bowden fears that any such measure would water down college football “until it can’t compete with the pros for the attention and dollars” (quoted by Wolff, 1992: 84). Grant Teaff (1996), executive director of the AFCA, asserts that “From a numbers standpoint, the sport already is dangerously close to compromising the safety of the players, not to mention damaging the integrity and quality of the game.” Supporters of roster reduction note
that National Football League teams manage with rosters less than half as large as that of the average Division I-A squad and argue that reducing squad size might even enhance the sport’s fan appeal.21

Even though passage of such a limit is unlikely, if such a measure were instituted, how would the mathematics of compliance with the proportionality standard be affected? The answer depends on how deep the roster cuts are. It has been suggested that under existing rules, big-time college football teams could field a “marketable product” with 85 roster positions (Henderson, 1995: 159–60). This would allow a coach to suit up three full offensive and defensive units plus three placekickers and three punters, while still leaving 13 slots for injured, red-shirted, and special-teams players. A much more extreme step would be to cap squads at 50 (Farrell, 1995), which would require a reversion to one-platoon football.22 Although it is unrealistic to think that such a radical step will be taken within the foreseeable future, Penn State’s revered coach, Joe Paterno, has said that he would “love to go back to one-platoon football right now” (quoted by Farrell, 1995: 1055).

The impact on gender proportionality of capping football rosters at 85 or 50 can be gauged by comparing the figures in the fourth and fifth parts of Table 1 to those in the status quo portion. At the median Division I-A school, an 85-player cap would reduce by roughly one-third the number of slots that need to be created, eliminated, or reallocated. The other side of the coin is that two-thirds of what would be required to achieve proportionality would remain, even with football rosters capped at 85. At the median Division I-AA school, an 85-player cap would have little impact, because the median football roster size, 92, is already close to the cap. And at Division I-AAA schools, any measure pertaining to football would be irrelevant.

Slashing football rosters to 50 would bring Division I-A and I-AA schools closer to proportionality. As compared to the status quo, a 50-player football cap would reduce by one-half to two-thirds the number of participation opportunities that have to be added, eliminated, or reallo-

21 “When Johnny Majors coached at Pitt and won a national title, he recruited so many players that the NCAA went to scholarship limits. Those once were 105 for a team, now they’re down to 85. The limits have made the game more competitive by increasing the overall talent pool. There are more players available for more teams. A Northwestern, which can bring in as many scholarship athletes as a Nebraska, now competes and wins the Big Ten title” (McManamon, 1996). Sportswriter Alexander Wolff pooh-poohs the notion that reducing squad sizes might water down the quality of the product and thereby undermine fan appeal. Fans, Wolff (1992: 84) contends, “wouldn’t miss a handful of young men who weren’t going to play anyway.”

22 This would bring full circle a series of developments that began in the 1960s. In the words of Walter Byers (1995: 247), the longtime executive director of the NCAA who led the initial charge against Title IX but now seems to have had second thoughts, “The costs of Title IX and the entry of women into the big time should not be blamed for today’s highly publicized financial problems for college sports. Two-platoon football was the culprit in the 1960s, and Title IX was held responsible in the 1980s.”
cated at the median Division I-A school, and by one-third to one-half at the median Division I-AA school. These are hardly negligible reductions, but here again considerable ground would still have to be made up. For example, even with football rosters trimmed to 50, to achieve exact correspondence the median Division I-A school would need to add 63 slots, eliminate 66, or convert 32.

Simply capping football rosters at 85 or even 50 is no panacea as far as proportionality is concerned. How can these results be reconciled with the claim of Donna Lopiano, executive director of the Women’s Sports Federation, that sharp cuts in football rosters “would give every Division I school the ability to comply [with Title IX] tomorrow” (quoted by Zapler, 1995: A43)? The key is that on a participant-by-participant basis, football is extremely expensive. Therefore, football roster cuts would produce substantial savings that could be redirected. For example, football costs an average of $900 per player per year for equipment alone, much more than for most other sports (Henderson, 1995: 153–54). Moreover, Division I-A football teams are currently permitted to have as many as 12 paid coaches, four times the number allowed in most college sports; with smaller squad sizes, some of these positions could presumably be vacated (Johnson, 1994: 586). In sum, for the same amount of money, a school can sponsor more participants in other sports than it does in football. It follows that if a school eliminated a certain number of roster spots in football, it could accommodate considerably more than that number of athletes in other sports (Shaw, 1995: 20).

This suggests that, rather than continuing to assume a one-to-one ratio between participation opportunities reallocated from men’s to women’s athletic programs, we can incorporate a bigger payoff for women into the football cap scenarios. This we have done in the sixth and seventh parts of Table 1, where we assume that for every football roster spot that is eliminated, two participation opportunities open up for women. Though somewhat arbitrary, this two-for-one assumption may, if anything, be overly conservative.23

Under this scenario, with its football roster capped at 85, the median Division I-A school would fall 24 slots for women short of full proportionality, but with its football roster capped at 50, the median or even the seventy-fifth percentile Division I-A school would surpass proportionality. By contrast, with an 85-football-player cap the median Division I-AA school would still fall 55 slots for women short, and even with its football

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23 For a “typical” Division I-AA school, Orleans (1996) pegs football expenses at roughly $13,000 per player per year, two or three times as high as those of any women’s sport except basketball. Pierson (1994: 378), drawing expense figures from briefs submitted in Title IX cases, calculates that “Eliminating only one equipment-intensive men’s sport such as ice hockey could provide funding for perhaps four non-equipment-intensive women’s sports, and in so doing effectively shift 100 participation opportunities to the women.”
roster capped at 50, the median Division I-AA school would have to provide 10 more slots for women to achieve exact correspondence.

Conclusion

In sum, what do Division I schools need to do to comply with Title IX's gender proportionality standard? How would compliance with this standard be affected by changes in the federal regulations or the NCAA rules that govern intercollegiate sports?

First, most Division I schools—especially those with football teams—currently are nowhere near compliance. Although most Division I-AAA schools have surpassed the Big Ten's intermediate 60-40 goal, they still fall far short of proportionality. The great majority of Division I-A and I-AA schools have not even reached the intermediate 60-40 stage, let alone full proportionality.

Second, if football were exempted from Title IX coverage, only relatively small steps, if any at all, would remain for most football schools to be in compliance, leaving Division I-AAA schools as those where compliance poses the greatest challenge. Realistically, though, the prospects for a football exemption are dim at best.

Third, if football squad sizes were capped, Division I-A schools in particular would have much less ground to make up in order to achieve proportionality. Of course, the deeper the cuts in football rosters, the less that would remain to be done in terms of expanding participation opportunities for women or cutting back in other men's sports.

Fourth, the only scenarios under which most football schools would be in compliance or close to it are the least likely ones—a football exemption and a 50-player cap on football rosters.

Fifth, in light of the distance most schools still must go to reach proportionality, anything approaching a pure expansion strategy may well be prohibitively expensive. By the same token, at most schools anything like a pure cutback strategy would take a tremendous toll on established men's teams. Accordingly, a reallocation strategy, which would entail opening up fewer new opportunities while closing down fewer for men, seems likely to present an inviting middle road for many schools to follow.

Is it even possible, under current circumstances, for a football school to pass the proportionality test without decimating its men's athletic teams? Notwithstanding frequent claims to the contrary, it can be done. The example of Washington State University, which under a court-approved plan has reconfigured its offerings to satisfy the proportionality standard, proves this, and calculations by Jim Naughton of the Chronicle of Higher Education show how a typical Division I-A school could do the same (Naughton, n.d.). Table 2 presents a modified version of Naughton's calculations, which demonstrate how a school with 50 percent female enrollment and a total of 432 varsity athletes, slightly below the Division
TABLE 2

Program Configuration in a Hypothetical Compliant School

<table>
<thead>
<tr>
<th>Varsity Sport</th>
<th>Men Participants</th>
<th>Women Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Crew</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Track/cross-country</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Baseball</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Swimming</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Soccer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field hockey</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Softball</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Basketball</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Gymnastics</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Volleyball</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Golf</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Tennis</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>216</td>
<td>216</td>
</tr>
</tbody>
</table>

Note: This table summarizes slight modifications of an analysis by Jim Naughton of the Chronicle of Higher Education (Naughton, n.d.), to whom we are grateful for providing this material.

I-A median of 442, could pass the proportionality test without any expansion of the overall number of varsity athletes it supports. Such a school could field teams of adequate size in each of the seven most popular men’s sports (football, basketball, track/cross-country, baseball, soccer, golf, and tennis) and still meet the proportionality standard.\(^{24}\) That is, a school can field a football team with almost 100 members, sponsor a reasonably well-rounded array of men’s teams, hold the total number of student-athletes at or even below its current level, substantially expand participation opportunities for women, and comply with the Title IX proportionality standard. The point is simply that it is possible, given sufficient internal motivation or (as in the case of Washington State) external pressure, to “have it all.” However, this does not mean that compliance will be easy at most schools, for, as we have clearly seen, much remains to be done before most schools are even close to being in compliance.

REFERENCES


\(^{24}\) The configuration in Table 2 does not take a school’s athletic tradition into account. A traditional power like Syracuse would presumably want to maintain its lacrosse team, as would Minnesota its ice hockey team, Iowa its wrestling team, and Tennessee its men’s swimming team. The offerings in Table 2 are meant to be indicative rather than definitive, and OCR does not require a “one-size-fits-all” approach.


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