# Women's Athletics and the Elimination of Men's Sports Programs: A Reevaluation

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Don Sabo (1998) distributed surveys to 902 colleges and universities in order to assess the impact on so-called gender equity that may have been imparted by the implementation of Title IX of the Education Amendment of 1972. (The term *gender* is used increasingly but nonetheless colloquially, even in the scientific literature, to mean sex.) The purpose of Title IX (20 U.S.C. §§1681–88), of course, was to equalize opportunities between the sexes for participation in collegiate athletics, in effect, by requiring member schools to proportionalize the quantity of offerings for men and women against enrollments. Sabo (1998: 27) cites political columnist George Will as representative of a doubtful perspective on the outcomes of the legislation: "Title IX is having the perverse effect of destroying opportunities for men" (Will 1997). Sabo's conclusion, based on his inspection of 637 questionnaires, was that "the evidence does not support the contention that the growth of women's opportunities in college athletics was accompanied by the widespread elimination of men's sports" (p. 30). Simple inspection and reexamination of Sabo's data suggest otherwise.

### Analysis of Survey Results

Sabo's tabularized results are summarized in Table 1. The data indicate that, for the 19 years represented (and assuming that the 71 percent net yield of survey returns was representative of the national trend), women's programs increased across all NCAA divisions com-

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TABLE 1 NET OUTCOMES OF WOMEN'S AND MEN'S SPORTS PROGRAMS (1978-96)

NCAA		aber of Added	Sports I	nber of Eliminated 's Data	Net (	Change
Division	Men	Women	Men	Women	Men	Women
I II III	183 344 400	679 653 907	298 286 269	208 201 172	-115 58 131	471 452 735
Totals	927	2,239	853	581	74	1,658

Source: Sabo (1998).

bined, by 1,658. Men's programs increased by 74. Thus, women's programs grew at a rate of approximately 87 per year; men's grew at a rate of less than four per year—or about one per division per year. Assuming that men's program growth is not statistically equivalent to zero, female sports programs grew more than 22 times faster than did men's. For Division I schools, women's programs increased by 471, men's *decreased* by 115. Combining the trends of male and female program changes, the national change was 1,732 in net program growth. Thus women's programs grew at a rate that is almost an order of magnitude greater than the combined (male and female) national trend.

Sabo concluded that men's athletic participation did not decline, based presumably on the observation that there was a net increase of 74 programs. There are at least three problems with this hasty (we contend) conclusion: (1) the inference assumes no background growth expectation for men's programs; (2) it ignores the fact that Divisions I, II, and III are not at all alike in enrollment; and (3) the analysis implicitly trusts the validity of a 71 percent survey sample. These three issues are addressed in turn.

# Background Growth Rate

First, consider the background growth rate. As in all market environments, from biology to business, there is a natural dynamic of extinction and speciation—in this case, in the demand and supply of sports programs. Moreover, in public policy matters, there is a commonly ratified assumption of base or baseline of service that is intentionally wed to the size of the population served (see Schick 1995: 12–31;

Wildavsky 1979). Thus, when the quantity of service provided grows in proportion to demand (e.g., with quantity of population), the net is considered to be nongrowth. An increase of service at a rate less than population growth is referred to as program *reduction*. It is very reasonable that for NCAA sports, absent Title IX, there may well have been substantial and successful pressures to increase men's offerings, particularly in light of the approximately 25 percent increase in enrollment that occurred between 1978 and 1996 among American colleges and universities (see Funk and McBride, forthcoming). In fact, although offset by eliminations, over 900 new men's programs were added nationally during the nearly two decades covered by Sabo's data. This confirms that a nonnegligible background dynamic existed for male programs, and therefore, that a zero-growth expectation was not obvious. Sabo should have compared the net increase of 74 men's programs that obtained during the Title IX regime against a baseline (or potential growth) expectation generated by market demand without Title IX (e.g., mean net growth from pre-Title IX eras). In other words, Sabo's assumption (or implicit null hypothesis) of a static market is flawed. An appropriate comparison cannot be adduced from Sabo's data.

# Per Capita versus Aggregated Impact

The second issue is that the simple tabulation provided by Sabo ignores student body (enrollment size) differences among Division I, II, and III schools, and thus it ignores the impact on per capita athletic *opportunity*. This fallacy of aggregation obscures the real net effect of Title IX per student. Current NCAA enrollments (as of January 1999) are listed in Table 2. As is evident, Division I schools enroll over a million more students nationally than do Divisions II and III combined.

Based on these figures, the total number of students impacted by Title IX per year were approximately 2.7 million (Division I), 0.9 million (Division II), and 0.6 million (Division III). These sums (each divided by 1 million for convenience) were normalized with Division III as the baseline (i.e., each multiplied by .64) to weight the totals reported by Sabo (from Table 1). This provides an assessment of per capita opportunity to participate in sports—a statistic that is more meaningful than coarsely resolved program totals per division. The rightmost column in Table 2 reflects net normalized opportunity for each NCAA division, adjusted by the corresponding coefficients in the adjacent column. Specifically, these entries modify Sabo's Table 1 column entitled, "Net Change for Men," by factors of 5.6

		TAB	TABLE $2$		
	NCAA ENROLLME	NTS AS OF JANUARY ]	1999 and Net Ath	VCAA ENROLLMENTS AS OF JANUARY 1999 AND NET ATHLETIC OPPORTUNITY	
NCAA Division	Number Members	Total Enrollment	Mean Enrollment	Enrollment Coefficient	Adjusted Opportunity
	308	2,678,619	8.697	5.6	-644
П	281	877,835	3,124	2.0	116
III	397	617,293	1,555	1.0	131
als or Net	986	4,173,747			-397

SOURCE: DeJulio (1999).

(e.g.,  $5.6 \times -115 = -644$ ), 2, and 1 for Divisions I, II, and III, respectively. As is obvious, the normalized, net opportunity for the more than one million men enrolled in Division I, just as Sabo reported for net offerings, decreased substantially. More conclusively, for all three divisions combined, net opportunity declined for men by nearly 400 program equivalents. Clearly, program opportunity per male student substantially decreased nationwide.

# Survey Validity

The third issue is that of the validity of the 71 percent survey yield. Sabo (1998: 28) reported that 767 of the 902 solicitations (or 85) percent) were returned and that of the 767 solicitations, 637 (or 83 percent) were used for analysis. He did not indicate the rationale for disregarding 130 of the returned surveys. Regardless of the reason, the reader might well assume that the immediately provided analysis that "unearthed several patterns" (p. 28) was based on an 83 percent return rate. This is, of course, false. The net yield was actually .85  $(returned) \times .83 (analyzed) = 71 percent. (Sabo's 637 schools repre$ sent 65 per cent of 1998 NCAA membership.) That approximately 300 schools were not represented does not by itself invalidate Sabo's findings. In fact, a 100 percent return rate might well have strengthened his conclusion. But readers should understand that Sabo's inferences are based on reports from 71 percent, and not 85 or 83 percent of NCAA schools solicited, and that the complementary 29 percent might have significantly altered his findings.

# More Penetrating Analysis

An inspection of the NCAA's programs during the 1997–98 academic year provides a further and more penetrating analysis of today's putative equality of current, mandated sports offerings (see NCAA 1998). As the entries in Table 3 suggest, female offerings outnumber male offerings for sports that are listed as offered to both sexes. (Baseball, football, water polo, ice hockey, and wrestling are anachronistically listed as offered only to men, to which we will return below; field hockey, rowing, and softball are listed as offered only to women.) For example, more Division I schools offer basketball to men (308) than to women (302); more Division I schools offer swimming to women (170) than to men (151). Of the 40 sports specifically offered to both sexes, there are 31 in which there are more college programs for females and only 9 for which the opposite is true. This polarity is statistically significant ( $\chi^2_{(1)} = 10.6$ , p < .001). The same trend holds within divisions: For Division I, (12) female programs surpass (2)

		Men's	n's			Women's	ien's	
Sport	I	П	III	Total	I	II	III	Total
Baseball	276	224	320	820	1	1	1	
Basketball	308	279	356	943	302	273	386	961
Cross Country	294	212	292	798	304	234	312	850
Fencing	19	c <sub>1</sub>	14	35	24	1	17	42
Field Hockey					72	26	135	233
Football	231	152	217	009				
Golf	276	171	224	129	169	55	98	310
Gymnastics	24	П	61	27	89	<b>!~</b>	9I	16
Ice Hockey	52	13	63	128				
Lacrosse	52	3I	105	188	59	22	118	66I
Rifle	ν	0	က	8	6	0	1	0I
Rowing	1	1	1	1	63	14	35	112
Skiing	11	<b>~</b>	20	38	I3	~	2I	42
Soccer	191	09I	335	989	229	153	339	721
Softball					226	228	325	779
Swimming	151	51	169	371	071	99	206	442
Tennis	273	192	305	770	296	220	343	859
Indoor Track	238	86	179	515	254	66	187	540
Outdoor Track	259	138	229	626	569	138	243	650
Volleyball	22	14	32	89	294	258	368	920
Water Polo	25	Ю	14	44				
Wrestling	95	46	105	246				
Totals	2,802	1,796	2,984	7,582	2,821	1,802	3,138	7,761

male programs ( $\chi_{(1)}^2 = 7.14$ , p < .01); for Division II, (7) female offerings outnumber (5) male programs ( $\chi_{(1)}^2 < 1$ ); and for Division III, (12) female programs exceed (2) male programs ( $\chi_{(1)}^2 = 7.14$ , p < .01). (Note: Application of the inferential statistical test assumes, of course, that the data are a sample and not the population itself.) Golf is the only program for which there are more offerings for men in each division and in total.

Currently, there are 17 (qualitatively) different sports offered for women, 19 for men. Although in fact already extant nationally, but not included in its table yet, the NCAA (1998) lists a category of *emerging* programs for women (archery, badminton, bowling, ice hockey, squash, synchronized swimming, team handball, and water polo) which (mutatis mutandis) adjusts net category offerings to 25 for women, i.e., 32 percent more than for men.

### Conclusion

One view of Title IX and its ambitions is that any public policy that aims to equalize access to resources or to manufacture equal outcomes is, ipso facto, fair. But it should be noted that political ambitions as embodied in public law, like Title IX, and their implementation consequences are not necessarily nor even reliably identical. Succinctly, there are often unintended consequences of well-intended law. Although Title IX requires equal offerings per school, its ambition was to provide equal *opportunity*—that is, to eliminate sex discrimination. Regardless of the true desideratum of Title IX—equal offerings, equal opportunity, or equal outcomes between the sexes—the law seems to be based on a faulty criterion. That is, it embraces as valid an abstruse standard by which colleges and universities should measure the *educational* value of male and female participation in competitive athletics: arithmetic parity between men's and women's sports offerings. Title IX's consequence is fallaciously measured by tallying its mechanisms.

Although Title IX was not the product of malevolence toward men, the consequence of its two-decade regime is nonetheless objectively clear: Men's access to sports programs realized *a net decrease*. In fact, in terms of current program offerings and per capita opportunity, the male-female valence has depolarized. In the aggregate, schools may now be out of compliance in reverse, although fair baselining should reflect that there are more women than men enrolled in higher education institutions today.

Proxy variables, like total programs offered, net real opportunity, and summary category offerings are not the only meaningful or exclu-

sively appropriate measures of Title IX consequence—in fact, these are only leading indicators. Sabo's analysis and our own may both have missed the real point. Actual participation—a concurrent indicator—may be more reflective of Title IX's most meaningful impact. Kocher (1998) reported that for every female added to athletic rosters nationally, four males have been dropped, and that this represents a 10 percent (or 20,000) net reduction in male participation nationally.

Women have been summarily enfranchised by Title IX, and this is a well-intended and positive outcome. The policy that successfully increased female participation was a supply-side ministration applied, however, to approximately half of its stake-holding constituency. This was necessitated by the zero-sum implications of Title IX and simple economics. We do not claim that Sabo has ratified the decidedly normative remarks of his fellow sociologist H. H. Fairchild, who claimed: "All social science writings ... involve certain ideological biases or political agendas. ... Social science has the mandate of applying its theories and methods to alleviate human suffering and inequality" (Fairchild 1991: 112, emphasis added). But the record should be stated correctly: Sabo's conclusion is invalid. Men have been disenfranchised—we contend, from a disregard of demand. Don Sabo's data compellingly confirm George Will's (1997) simple assertion that the growth of women's programs was accompanied by a diminution of opportunity for men.

#### References

DeJulio, M. (1999) Personal correspondence, 14 January.

Fairchild, H.H. (1991) "Scientific Racism: The Cloak of Objectivity." *Journal of Social Issues* 47: 101–15.

Funk, S., and McBride, D.K. (forthcoming) "Training in the 21st Century." In S. Tobias and D. Fletcher (eds.) *Handbook on Training*. New York: Macmillan.

Kocher, L. (1998) "The End of Sports in Schools? Legislation that Discriminates against Men." (H. Downs, Moderator, 29 May.) New York: ABC News.

NCAA (National Collegiate Athletic Association) (1998) Sports lists (http://www.ncaa.org/sponssummary.html).

Sabo, D. (1998) "Women's Athletics and the Elimination of Men's Sports Programs." *Journal of Sport and Social Issues* 22: 27–31.

Schick, A. (1995) *The Federal Budget*. Washington, D.C.: Brookings Institution.

Wildavsky, A. (1979) The Politics of the Budgetary Process. Boston: Little, Brown.

Will, G. (1997) "Title IX Still Missing a Proper Test of Equality." Buffalo Evening News, 29 April: B3.