This document describes a longitudinal study of the role of sports in the lives of minority youth during the 1980s. Data were analyzed from the High School and Beyond study and all findings were proven to be statistically significant after multiple regression analyses. The term "athletes" refers to those individuals who reported participating on varsity athletic teams both in their sophomore year (1980) and in their senior year (1982); "nonathletes" refers to individuals who either participated only in the sophomore year or not at all. The following findings are discussed: (1) minority athletes are more active in the affairs of their schools and communities than nonathletes; (2) Black and Hispanic athletes scored higher on standardized tests than nonathletes; (3) athletic participation was significantly related to lower dropout rates for Black males and Hispanic females in rural schools and for Whites in suburban school, but demonstrated no "holding power" in urban schools; (4) the upward mobility of minority athletes after high school is limited compared to that of Whites, with the exception of Hispanic female athletes; (5) females benefit from sports much the same as males; and (6) high school athletes stay involved with sports as young adults. Recommendations for educational policy are included. The appendices provide statistical data on 14 graphs, a discussion of the research methodology, and a list of the members of the policy advisory board. (FMW)
THE WOMEN'S SPORTS FOUNDATION REPORT:

MINORITIES IN SPORTS

The Effect of Varsity Sports Participation on the Social, Educational, and Career Mobility of Minority Students

with policy recommendations from

The Center for the Study of Sport in Society
Northeastern University

August 15, 1989
The Social Science Advisory Panel played a vital role in the formulation of the final report, especially interpretation and presentation of findings in a non-biased manner.
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The Women's Sports Foundation, established in 1974, is a non-profit, educational organization dedicated to promoting and enhancing the sports experience for all girls and women. By encouraging participation in sports, the WSF seeks to improve the physical, mental and emotional well-being of all females. Representing a constituency of 37 million, the WSF actively advocates equal opportunity for women in sports.

Northeastern University’s Center for the Study of Sport in Society’s mission is to increase the awareness of sport and its relation to society and to develop programs which identify problems, offer solutions and promote the benefits of sports. The Center, together with its Consortium of 38 colleges and universities, has developed a national program which focuses on the educational needs of student-athletes.

Acknowledgements

This comprehensive report is the third major research project on sports funded by Miller Lite. These efforts have opened new issues for discussion and have added significantly to the body of sports knowledge in the United States.

The first benchmark study, the Miller Lite Report on American Attitudes Toward Sports, published in 1983, clearly showed that most Americans have embraced sports as an essential component of their daily lives. A 1985 follow-up study, the Miller Lite Report on Women in Sports, developed in cooperation with the Women’s Sports Foundation, revealed that a generational shift in attitudes may be occurring as an increasing number of athletic women choose to engage in athletic competition with men. The report further revealed a strong link between coeducational experiences in childhood and adult sports involvement.

We are especially grateful to Miller Lite for awarding the research grant that made this study possible. This grant was provided as a goodwill gesture to aid the Foundation in its ongoing effort to learn more about important issues affecting Americans in sports.

We acknowledge Willye White, Olympian and Board Member of the Women’s Sports Foundation, for her contributions to the planning of this study. Drafts of the final report were reviewed by Dr. Jay Coakley, University of Colorado, and Dr. Gary Sailes, University of Delaware.
INTRODUCTION

Americans believe that sport is a training ground for life. The formula, “Succeed in sport, succeed in life” is at the heart of the American sports creed. Athletics are seen as a social theater in which youth learn to aspire higher, work hard and sacrifice, perform with a team and overcome defeat in their pursuit of the American dream. Yet, inside and outside the arena of sport, the record shows that not all Americans enjoy equal access to realizing that dream. In a nation in which one of every three people will be a member of a racial or ethnic minority by the year 2000, African-Americans and Hispanics still lag far behind whites in their efforts to enter the American mainstream.

This is the most comprehensive study ever undertaken of the effects of athletic participation on the lives of American minorities. While a handful of social scientific studies have examined the effects of high schools sports on black youth — most of them focusing on males — there has never been even a single study of sport and Hispanic youth in the academic setting. The Women’s Sports Foundation recognizes that, along with minority men, women have faced numerous obstacles to athletic opportunity. Hence, the treatment of both women and men in this study is especially instructive.

In order to convert the research findings into responsible social action, the Women’s Sports Foundation actively collaborated with the Center for the Study of Sport in Society (CSSS) to devise the policy recommendations attached to this report. CSSS is a leading advocacy organization for minority student-athletes.

This panel study followed a national representative sample of African-American, Hispanic, and Caucasian youth from their sophomore year in high school in 1980 through 1986, four years beyond high school. We analyzed the responses of a highly stratified national probability sample of over 14,090 sophomores enrolled during 1980 in 1,015 public and private schools across the United States. Subsamples of these same students were then contacted for follow-up testing in their senior year (1982), and again two years (1984) and four years (1986) after high school.

Our analysis focused solely on African-Americans, Hispanics, and whites; we regret that limitations in the data set precluded consideration of Asian-Americans, Native Americans, and other minority groups. Please note that research subjects identified themselves as members of a specific racial or ethnic group. Comparisons are generally made between athletes and nonathletes in six groups: Hispanic female, Hispanic male, black female, black male, white female, and white male. When statistically significant, findings are further categorized according to the settings of students’ high schools: urban; rural; or suburban.

The report begins with an executive summary of key conclusions followed by a synopsis of methods and procedures. The findings are then presented in three sections: those that pertain to the high school years (1980-82); those that deal with mobility after high school (1984-86); and those that pertain to community leadership and adult athletic involvement. Next, some general implications of the findings are discussed. Finally, policy recommendations are detailed. The appendices contain tables, a methodological overview, and a list of the organizations and leaders who helped formulate the policy recommendations.
Was high school sport a help or hindrance to minority youth during the 1980s? On one hand, sport was touted as a powerful resource for minority athletes, part of the solution, not the problem. On the other hand, sport was accused of being a “treadmill to oblivion” for minorities, a dead end rather than a road to success. This report shows that neither of these views adequately explains the complex ways that high school sport shaped the life paths of American minorities. Two general conclusions emerged from our analyses.

On the positive side, we found that athletic participation enhanced involvement in school and community, heightened popularity among peers, and inspired leadership aspirations. The “dumb jock” stereotype also proved to be false. Minority athletes actually fared better academically than nonathletes, but for reasons that lay outside of high school sport. Sport involvement lowered the dropout rate among some minorities in suburban and rural schools, but not in urban schools.

On the negative side the data show that high school sports have been oversold as a vehicle for upward mobility among minorities. We unearthed only meager evidence that sports help minority youth to climb the ladder of success in college or the work force during the four years following high school. Consistent with patterns of racial and ethnic inequality elsewhere in America, it was mainly whites, not Hispanics or African-Americans, for whom athletic participation proved to be related to upward mobility after high school. With some exceptions, high school sport served as reinforcer of white privilege, giving advantage to those who were already advantaged.

Some specific findings documented by this study include:

1. Minority Athletes Are Socially Involved.

High school minority athletes are not narrow “jocks” interested only in sports, but are active in the affairs of their schools and communities. Compared to nonathletes, athletes reported being more popular in school, more involved in extracurricular activities, and more apt to want to become leaders in their communities after leaving high school.


African-American and Hispanic athletes scored higher on standardized reading, vocabulary, and mathematics tests than their nonathletic counterparts. Minority athletes also reported getting better grades than their nonathletic peers.


This is the first national study to link athletic participation with high school retention. Athletic participation was significantly related to a lower dropout rate in certain school settings.

*In rural schools, black male athletes were over four and a half times less likely to drop out than their nonathletic counterparts. Hispanic female athletes were three times less likely to drop out than nonathletes.

*White athletes (female and male) had lower dropout rates than nonathletes in suburban and rural schools.

*In urban schools, athletic participation exerted no “holding effect” on any of the subgroups—African-Americans, Hispanics, or Caucasians.

Our findings run counter to the popular view that sport provides an automatic pathway to upward mobility for minorities. First, high school sport was not at all associated with minority success in the work force after high school. Second, there was most evidence that high school sport involvement did contribute to educational achievement among some Hispanic and black youth, but not others. For example:

* Hispanic athletes from rural schools were almost five times more likely than their nonathletic peers to be attending four-year colleges in 1984 (two years after high school).

* Black male athletes from urban high schools were almost four times more likely than non-athletes to report having worked toward a Bachelor's degree before 1986.

* Hispanic female athletes were two to four times more likely than their nonathletic peers to attend and stay in college. Black female athletes fared no better or worse in higher education than their nonathletic peers.

In general, white male athletes, white female athletes from suburban schools, and Hispanic female athletes from rural schools were most likely to continue their formal education during the four years after leaving high school.

5. Girls Benefit From Sports Much The Same As Boys.

Girls, who comprised 37% of all varsity athletes during the early 1980s, benefited from athletic participation in many of the same ways boys did. Hispanic females — particularly those from rural high schools — were more likely than their nonathletic peers to score well on achievement tests, to report high popularity, to stay in high school, to attend college, to seek a Bachelor’s degree, and to make progress toward that degree. Similarly, white female athletes — particularly those from suburban high schools — were more likely than nonathletes to do well in high school and college, to feel popular, to be involved in extracurricular activities, to stay involved in sport as adults, and to aspire to community leadership.

6. High School Athletes Stay Involved As Young Adults.

Compared to former nonathletes, former athletes were two to eight times more involved with sports during the four years after high school.
The longitudinal design used in this study allowed for a refined analysis of the role of sport in the lives of America’s minority youth. This analysis was made possible by use of the U.S. Department of Education’s High School And Beyond (HS&B) study, a data base generated by the National Center for Education Statistics, Washington, D.C.

### Sampling Time Frame

<table>
<thead>
<tr>
<th>Year</th>
<th>High School</th>
<th>Seniors</th>
<th>Two Years</th>
<th>Four Years</th>
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<tbody>
<tr>
<td>1980</td>
<td>High School</td>
<td>N = 30,000</td>
<td>N = 25,500</td>
<td>N = 14,825</td>
</tr>
<tr>
<td>1982</td>
<td>Sophomores</td>
<td>(85% response rate of the 1980 sample)</td>
<td>(92% response rate of the 1982 sample selected for follow-up)</td>
<td>(91% response rate of the 1984 sample)</td>
</tr>
<tr>
<td>1984</td>
<td>Beyond H.S.</td>
<td>N = 14,825</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>Beyond H.S.</td>
<td></td>
<td></td>
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The findings presented in this report are based on one of the most advanced and thorough statistical analyses ever used by American sport researchers. Only those findings that proved to be statistically significant after multiple regression analyses are discussed here, unless otherwise noted (Beta = P < .05). Theoretically appropriate control variables were introduced in order to isolate the effects of athletic participation.

Project Director Dr. Don Sabo, Dr. Merrill Melnick and Dr. Beth Vanfossen were responsible for the development of the research design and data analysis. A detailed disclosure of our method and data analytic procedures appears in Appendix B.

### Definitions

Throughout this report, the term “athletes” refers to those individuals who reported participating on varsity athletic teams both in their sophomore year (1980) and in their senior year (1982). The term “nonathletes” refers to individuals who either participated only in the sophomore year or not at all. The findings are not broken down by specific sport (e.g., field hockey, basketball, football); we studied athletes across all sports. The classification of a school as “urban,” “rural” or “suburban” is based on how high school principals described their schools.
Our findings showed that athletic participation bestowed a variety of social and educational benefits on participants during the high school years. Equally clear, however, was the fact that not all racial and ethnic subgroups reaped the same benefits from involvement in athletic programs.

MINORITY PARTICIPATION IN SPORTS

The National Federation of State High School Associations found that about 5.25 million youth participated in varsity sports in 1987-88. Despite high school students’ widespread involvement in varsity sports, no national sports governing body has ever monitored racial and ethnic participation in high school sports. Hence, the national breakdown of minority student participation generated by this research is unique. It is also special because we measured athletic participation over time, that is, between the sophomore year (1980) and the senior year (1982). As Table 1 (Appendix A) shows, minority participation was extensive. African-Americans and Hispanics comprised 24.5 percent of all varsity athletes. Females of all racial/ethnic backgrounds comprised 36.6 percent of the total.

SOCIAL BENEFITS

Sport was a social resource for many minorities. Compared to nonathletes, athletes were more apt to see themselves as popular and to be more involved with community and extracurricular activities. These benefits accrued to girls and boys, and to black, Hispanic, and white athletes alike.

Popularity

Athletic participation helped young people be popular in school. High school senior athletes in each of our race/sex subgroups rated themselves as being more popular than comparable nonathletes. For example, 94 percent of black male athletes reported being highly popular compared to 71 percent of their nonathletic counterparts. For black females, 91 percent of the athletes and only 68 percent of the nonathletes reported high popularity. For Hispanic females, 93 percent of the athletes and 71 percent of the nonathletes claimed high popularity. See Table 2 (Appendix A) for all comparisons.

Extracurricular Involvement

High school athletes were also more involved than nonathletes in extracurricular and community activities. This finding debunked the popular belief that sport drained young people’s time and energy or narrows the range of their involvements in and out of school. While 74 percent of senior black female athletes were involved in extra school and community activities, only 59 percent of nonathletes were. The figures for black male athletes and nonathletes were 47 percent and 27 percent respectively. Among Hispanic females, 72 percent of the athletes reported high levels of involvement, compared to 52 percent of the nonathletes. The respective figures for Hispanic males were 37 percent and 18 percent. This pattern held for all race-sex subgroups. See Table 3 (Appendix A) for all comparisons.
ACADEMIC GAINS: THE “DUMB JOCK” MYTH

The notion that athletes — at least male athletes — are below average when it comes to academic achievement is embedded in American popular culture. This study demonstrates that the “dumb jock” stereotype has no basis in high school reality.

Grades

We found no evidence that sport participation was a detriment to getting good grades. In fact, as a group, varsity athletes reported achieving higher averages than nonathletes. See Table 4 (Appendix A).

Additional analyses revealed that these differences were not so much due to sport itself, but to a history of good grades before the sophomore year and to athletes having come from higher socioeconomic backgrounds than nonathletes. Sport participation was significantly associated with higher grades for suburban black males and rural Hispanic females. Among rural Hispanic females, 26 percent of the athletes reported high grades as compared to 10 percent of the nonathletes. Suburban black males also benefited: 22 percent of the athletes and 11 percent of the nonathletes reported receiving high grades. See Table 5 (Appendix A).

Achievement Tests

Compared to their nonathletic peers, minority athletes had the edge on achievement tests, which measured mathematics, reading, and vocabulary. As Table 6 (Appendix A) depicts, the percentage of minority athletes in the top quarter of test scores surpassed that of nonathletes in all of the race/sex subgroups. Further analysis showed that these differences were due more to socioeconomic background and previous academic performance than to sport itself — but not in all cases. Athletic participation did significantly influence the test performance of rural Hispanic females and urban black males. Among rural Hispanic females, 43 percent of athletes scored in the top quartile compared to 14 percent of nonathletes. Among urban black males, 28 percent of the athletes as compared to 22 percent of the nonathletes scored high. See Table 7 (Appendix A).

There are several possible explanations why minority athletes performed as well as or better than nonathletes in the classroom. Our findings showed that athletes were more socially grounded in the school. They may have worked harder simply because they had a sense of “fitting in.” Also, many schools may have imposed academic eligibility requirements in order for students to participate in sports. In effect, sport involvement may have become an academic motivator, a “carrot in front of the noses” of enthusiastic athletes. Athletic fervor was thus transformed into academic achievement.

SPORT AND SCHOOL DROPOUT: THE “HOLDING EFFECT”

Education Secretary Lauro Cavazos told a May 3, 1989, news conference that the high school dropout rate is “a national tragedy.” About 3,600 students drop out of school on an average school day. Though graduation rates among blacks and Hispanics have improved since the late sixties, the dropout rates for minority youth continue to exceed those for whites.
This is the first national study to examine whether athletic participation helps lower the high school dropout rate. Generally, minority athletes were no more or less likely to drop out of school than their nonathletic peers. But sport involvement did significantly lower the dropout rate for some minority subgroups. For example, in rural schools, only 8 percent of black male athletes dropped out compared to 37 percent of the nonathletes. The “holding effect” was most likely to exist in suburban and rural schools. The holding effect was nonexistent in urban schools for all race and gender groups. See Table 8 (Appendix A).

We speculate that a holding effect existed for some minorities because they found sport participation inherently fun and personally satisfying. In short, they stayed in school because they enjoyed sport and the friendships and popularity it fostered. They also may have, through sport, developed a greater sense of allegiance to their schools. For others, the hopes of getting a college scholarship or pro contract may have kept them on the educational track.

The absence of any significant holding effect in urban schools may be due to the fact that the social and personal rewards of sport could not counteract the problems of city schools and the urban environment (e.g., crime, poverty, drug abuse). This is doubly regrettable because large numbers of minorities live in cities, where the school dropout rate is highest, and where the options for success without a high school degree are almost nonexistent.
Adult socioeconomic status in America is determined by many factors, especially family background and education. In contrast to "rags to riches" folklore, the economic background of parents is one of the most powerful predictors of young people's adult status: the more advantaged the parents are, the greater is the likelihood that their offspring will attain affluence in adulthood. Educational attainment is also a powerful predictor of adult socioeconomic status.

Many Americans believe that sport involvement helps young people, particularly minority youth, to get ahead when they become adults. We wanted to know if high school sport actually helped minority youth in their pursuit of the American dream during the 1980s.

In order to answer this question, we followed our sample through 1984 and again in 1986, two and four years beyond their high school days. We compared the progress of athletes and non-athletes as they made their trek into either post-secondary education or the work force. By controlling for a number of factors including socioeconomic background, we were able to isolate the independent effects of high school athletic participation on the mobility of minorities as they ventured into young adulthood.

EDUCATIONAL MOBILITY AFTER HIGH SCHOOL

A college degree is one ticket to adult career advancement. Were former varsity athletes more or less likely to be in college two and four years after leaving high school?

College Attendance in 1984

No relationship between high school athletic participation and later college attendance (1984) appeared for African-Americans. Black former high school athletes were no more or less likely than former nonathletes to be attending a four-year college in 1984. In contrast, white male athletes were more likely than nonathletes to later attend college, followed by Hispanic males, Hispanic females and white females.

School setting made a difference. Hispanic female athletes from rural schools were almost five times more likely than nonathletes to later attend a four-year college (42 percent and 9 percent). Hispanic male athletes from rural schools were more than four times as likely (18 versus 4 percent) to attend a four-year college. Hispanic male athletes in urban schools also fared well: they were more than twice as likely (31 versus 15 percent) to attend college as their nonathletic peers. Table 9 (Appendix A) summarizes all significant findings.
Degree Goal In 1986

For another measure of educational mobility, we assessed the highest degree subjects reported working toward in 1986 (four years after high school). Subjects were asked “During the last month you attended, what kind of certificate, license, diploma or degree were you studying for?” Responses included “none,” “certificate or license,” “2-year academic degree or diploma,” “4- or 5-year Bachelor’s degree,” and “Master’s degree or equivalent.” Black male athletes from urban schools were four times more likely than non-athletes to report working toward a Bachelor’s degree (28 percent and 7 percent respectively. There was no relationship (positive or negative) between former sport involvement and the degree goals of black females. The degree goals of Hispanic former athletes (female and male) were significantly higher than those of former nonathletes in some school locations. Finally, among white males in all school locations and white females from suburban schools, former athletes were more likely than their nonathletic peers to have reported seeking Bachelor’s degrees in 1986. See Table 10 (Appendix A).

Actual Educational Progress in 1986

We measured the amount of formal education that former athletes and nonathletes had actually attained by the spring of 1986, or four years after high school. This enabled us to assess whether high school athletic involvement was related to later progress toward a college degree. No relationship (either positive or negative) was found between high school athletic participation and the actual educational progress of black males, black females, and Hispanic males. Among Hispanic females, however, former athletes from rural schools were more than five times more likely than nonathletes to have made educational progress (49 percent versus 9 percent). The figures for Hispanic females from suburban schools were 28 percent for athletes and 13 percent for nonathletes. Finally, depending on school location, white athletes had also made significant educational progress by 1986. See Table 11 (Appendix A) for all comparisons.

Summary

Overall, high school athletics did little to further the higher educational gains of minority youth. No higher education benefits were uncovered for black females. Though significantly more urban black male athletes than nonathletes reported working toward a Bachelor’s degree in 1986, their actual degree progress did not differ from that of nonathletes. Hispanic athletes were more likely than their black counterparts to receive some boosts in educational mobility. Generally, we found that athletic participation made its greatest contribution to the upward educational mobility of whites and Hispanic females. Table 12 (Appendix A) presents an overall comparison of the higher education benefits accrued by each of the race/gender subgroups. It depicts the total number of statistically significant findings that were generated by our analysis for each subgroup.
SPORT AND MOBILITY IN THE WORK FORCE

Not all young people go to college. Most high school graduates, particularly racial and ethnic minorities, either choose to enter or are pushed into the work force. We wanted to know if high school sports gave minority athletes a competitive edge after entering the labor force. Did athletes aspire to and find better jobs than the nonathletes? In order to answer these questions, we compared the job expectations and job status of former athletes and nonathletes who were not in college in 1986, four years after high school. Jobs were classified according to "high" or "low" status: examples of high-status jobs included management trainee, clerk, secretary, and mail carrier; examples of low-status jobs include unskilled workers and service workers.

Contrary to popular belief, high school sport participation exerted no significant positive influence on the success or aspirations of minorities who entered the labor force during their first four years after high school. Similarly, no differences between former athletes and nonathletes were found among whites. However, among urban black females, previous athletic participation actually eroded later advancement in the work force. The significant findings:

*Only 5 percent of the black urban female athletes held high status jobs compared to 59 percent of the nonathletes.

*Only 19 percent of the black urban female athletes had high job expectations compared to 50 percent of the nonathletes.

In summary, the high school sport experience did not appear to be powerful enough to favorably transform young people's struggles within the American economy. A high school diploma during the 1980s was, at best, an entry-level credential that often led to low-paying, low-status, dead-end jobs. For racial and ethnic minorities, who were overrepresented in lower socioeconomic sectors and who faced even harsher employment realities than did whites, the expectation that sport could make a critical impact on job mobility appears to be highly unrealistic.

The finding that sport participation nindered rather than helped urban black females in the work force is disheartening. A probable explanation is that while athletes devoted time and energy to sport, nonathletes were working part-time jobs. Also, the fact that many coaches, teachers, and parents catered to the needs of athletes might have further sheltered them from on-the-job experience. In short, we speculate that the lack of experience among black female athletes may have complicated their post-secondary entrance into the urban work force.
It is almost a cliche to say that sport "builds leadership" and "instills lifelong fitness habits." Our results showed that there is some truth to these beliefs.

SPORT AND COMMUNITY LEADERSHIP

Respondents were asked in 1986 to rate how important it was for them to be "a leader in your community." Former high school sport involvement was associated with community leadership aspirations for all males regardless of race and ethnicity. The same was true for white females. Among black and Hispanic females, however, no significant differences between athletes and nonathletes emerged. See Table 13 (Appendix A).

We speculate that the comparative lack of a "leadership effect" among black and Hispanic females may have been due in part to a lack of available role models. It is probably no accident that our results closely mirror the current leadership hierarchy within high school and intercollegiate sport, which is dominated by white males, followed by white females and black males. Black female or Hispanic coaches and athletic administrators are rare within the leadership hierarchy of sport.

SPORT AND ADULT ATHLETIC INVOLVEMENT

Previous research shows that when individuals participate in sports as youngsters, they are more apt to continue involvement as adults. Until this study, however, little was known about whether this "carry-over" effect held for minorities.

Overall, 52.6 percent of all former athletes in this study reported being actively involved on teams or clubs four years after high school, compared to only 14 percent of former nonathletes. Similar percentages held for each of the race/gender subgroups. See Table 14 (Appendix A).

These findings strongly support the claim that organized sport involvement in high school leads to early adult participation. This news should be pertinent for public health officials who recognize that a "health gap" exists between whites and minorities in the United States. In short, high school sport participation may be contributing to the health of the nation because it engenders adult physical fitness. This is particularly important for minorities who are at greater risk for heart disease, cancer, high blood pressure, and stroke.
What have we learned from this study? We knew that athletic participation was a social and academic resource for many minority high school students during the 1980s. We have also learned that, contrary to the popular imagination, high school sport is not a pipeline to adult opportunity for the vast majority of African American and Hispanic youth. Indeed, the central irony unearthed by this study is that, while the immediate social benefits and academic potentials of high school sport have been underestimated, the long-range impacts on adult success have been overestimated. In a decade when the emphasis on high school sport has been rising, therefore, this study revealed that there are reasons to rejoice as well as causes for concern.

SPORT AS AN ACADEMIC RESOURCE: THE "DUMB JOCK" MYTH

Sport was not a cause of the academic problems that plagued many minority high school students during the 1980s. There were no minority subgroups in which athletes did not at least equal the academic feats of their nonathletic counterparts. In fact, for some minority subgroups, sport significantly contributed to better academic performance in high school and a smaller chance of dropping out. The evidence indicated that it is possible for academics and sport to coexist in American schools.

Since our findings debunked the "dumb jock" stereotype, there is an important message here for teachers. They may not be challenging athletes enough! The "dumb jock" stereotype has probably served to intensify existing racial prejudices about the intellectual inferiority of minorities. Because these two stereotypes have been mutually reinforcing, minority student athletes may be doubly short-changed in the classroom. Overlapping stereotypes place young minority athletes in double educational jeopardy! A harmful self-fulfilling prophecy is set into motion. This study should help teachers, coaches, parents, and the general public see minority student-athletes for who they really are and not what racial and athletic folklore have proclaimed them to be.

THE HISPANIC FEMALE ATHLETE: A SUCCESS STORY

The results were consistent: of all the minority subgroups, female Hispanics (particularly from rural schools) were most likely to reap benefits from participating in high school athletics. Hispanic female athletes were more apt than nonathletes to improve their academic standing while in high school, to graduate, and to attend college following high school.

We suggest one explanation for their success. The athletic experience may reflect and feed larger changes in women's roles within various Hispanic cultures. Historically, Hispanic culture has emphasized women's domestic and maternal duties. Recently, however, the emphasis on traditional "femininity" is being challenged and more parents are encouraging their daughters to combine educational and career goals with family plans. The entrance of young Hispanic females into the previously "masculine" world of sport, therefore, may be linked to changing definitions of femininity in Hispanic culture. One result may be an emerging sense of freedom among Hispanic female athletes, which helps them to explore newly emerging opportunities for women in American society.
SPORT AND MOBILITY AMONG AFRICAN-AMERICANS

The high visibility of African-Americans in the sports media has led to the false conclusion that sport is one social vehicle through which the black population can achieve significant upward social mobility. Michael Jordan soars across cereal box covers and television screens, Florence Griffith Joyner and Jackie Joyner-Kersee beam on the cover of Sports Illustrated, and Americans assume that sports provide an automatic gateway to mobility for minorities. The fact is, however, that only about 3,000 African-Americans make their living at professional sports (and this figure includes not only athletes but coaches and management personnel as well). Statistics also show that there is a greater probability for a black high school athlete to become a doctor or lawyer than a professional athlete.

This study focused on the entire spectrum of varsity athletes and not the elite handful of "superstars" on basketball and football teams who were more likely to be recruited for college scholarships. Our results suggest, overall, that high school sports participation did not provide a route to adult upward mobility for African-Americans. The mobility gains of minorities, especially when compared to whites, were clearly limited. Indeed, we found that athletic participation eventually held back those urban black females who entered the labor market.

Coaches and school administrators have been selling black youth on the merits of high school sports for decades. Based on this report, their enthusiasm may be justified but, ironically, for the wrong reasons. While they often extol sport because it purportedly leads to success in college or the job market after high school, the actual future benefits are limited to the few and not the many. In contrast, the immediate social and academic rewards and potentials of high school sport have often gone unnoticed or unheralded. This study shows that it was these latter, more immediate benefits that black athletes were more likely to glean from their sport participation.

In short, sport involvement can be more accurately understood as a means to social and academic ends during high school rather than a guarantee for upward mobility after high school. We believe that all minority athletes would be better served by this educational message than by the essentially false promises about job success and glory in the NFL, the NBA, or the Olympics.

THE URBAN AFRICAN-AMERICAN FEMALE ATHLETE

The finding that urban black female athletes experience difficulties entering the work force after high school points to a need for further research. It may be that the combined demands of sport, school, and family are particularly burdensome for these young women. Time and energy left for developing job strategies and experiences are minimal. Perhaps parents, coaches, and school counselors need to better inform athletes about the nature of the culture and the working world to which they must adapt if they are to succeed.

We recognize that urban schools are beset by problems such as violence, drug abuse, racial prejudice, and teacher burnout. Many urban students leave school only to return to poverty-stricken neighborhoods, scant employment opportunities, and bleak economic futures. The failure of urban schools to provide their female athletes with enough resources to facilitate their entrance into the workforce must be understood within this larger context.
THE "REINFORCEMENT" AND "CUMULATIVE ADVANTAGE" HYPOTHESES

White males derived the most benefits from sport, followed by white females, and then by racial and ethnic minorities. The evidence shows that high school sport reflects and reinforces the larger opportunity system of American society. According to the "Reinforcement Hypothesis," the high school athletic status quo tends to help those already advantaged (white males generally and suburban white females) more than the disadvantaged minority athletes.

The "Cumulative Advantage Hypothesis" says that, because whites were more likely than blacks or Hispanics to be advantaged in other areas of life (socioeconomic background, better-educated parents), they were also better able to take advantage of the opportunities within sport.

SPORT AS A MEDIATING INSTITUTION AND REFORM LOCUS

High school sport is only one of many institutional forces converging in the lives of American minority youth. Athletic programs by themselves cannot improve the opportunities of minority youth. Sport is best seen as a mediating institution in young people's lives. The minority athlete should be understood in the context of sport, sport in the context of the school, the school in the context of the community, and the community in the context of ever-shifting economic and political conditions.

Any policy agendas for reform and change need to reckon with these interdependencies. For example, according to Marian Wright Edelman, founder and president of the Children's Defense Fund, one-third of new workers in 1995 will be minorities who are disproportionately poor, undereducated, and untrained. She contends that the failure to enhance the prospects and productivity of minority youth will not only impoverish our children's spirits and erode family life, but it will also seriously undermine America's ability to successfully compete within the emerging world economy during the 21st century. In conclusion, those who aim to reform secondary education in America would do well to acknowledge and build on the social significance and academic relevance of sport among our African-American and Hispanic youth.
In collaboration with Northeastern University’s Center for the Study of Sport in Society

“If we continue to squander the talents of millions of our children, America will become a nation of limited human potential. It would be tragic if we allow this to happen. America must become a land of opportunity — for every child.” Committee for Economic Development. Children in Need: Investment Strategies for Educationally Disadvantaged (New York: CED, 1987).

The Women’s Sports Foundation Report: Minorities In Sports has generated unprecedented insights into how high school sports affect the lives of America’s black and Hispanic students. The Center for the Study of Sport in Society (CSSS) has worked closely with the Women’s Sports Foundation to prepare the following policy recommendations, which, if implemented, we believe would help make the nation “a land of opportunity for every child.” These seven policy recommendations focus on athletes, but many are applicable to all students engaged in extracurricular activities. An array of nationally recognized minority leaders from government, education, and sport were invited to review an early copy of this report and to recommend guidelines for future planning and action. We gratefully acknowledge their input and expertise. A complete list of the Policy Advisory Board appears in Appendix C.

1. TELL IT LIKE IT IS: THE MESSAGE IS ACADEMIC

We recommend that coaches, educators, and the media encourage minority athletes and their parents to place a greater emphasis on educational achievements than on athletic ones. Minority student-athletes need to receive sound information about educational and career options and not false promises of athletic glory and profit. Specifically:

* Spread the word that the “dumb jock” image is false. The message should be that, in the classroom, athletes perform as well as or better than nonathletes.

* Hold educational forums and assemblies for student-athletes, students, coaches, teachers, and parents to sensitize them to the academic potential of athletes. Use high-profile athletes or successful former high school athletes to capture young people’s attention and to serve as role models. Such programs should take place throughout the school year so the message is reinforced.

2. INCREASE ACADEMIC ASSISTANCE AND STANDARDS FOR STUDENT-ATHLETES

Schools are beginning to expect as much from athletes in the classroom as they do on the playing field. Studies of schools that have raised standards show the athletes respond to the challenge by bettering their academic output. In other words, when asked to do more, athletes prove they are capable of doing more. We recommend that increased “pass to play” standards be implemented across America. Specifically, schools should:
*Tie athletic eligibility to concrete standards of academic performance. For example:

(a) require student-athletes to maintain a “C” average, and

(b) require student-athletes to take courses that are on a track for graduation and to make normal progress toward graduation.

*Provide the incentives and the institutional means for students to retain or regain their athletic eligibility. For example:

(a) teachers, parents, administrators, and coaches should monitor the grades of student-athletes,

(b) adequate warning periods should be created in order to allow students to improve their grades before losing eligibility, and

(c) students who are experiencing academic difficulty should receive remedial help prior to loss of eligibility.

*Once ineligible, athletes should receive academic help in the form of mandatory study halls and tutorial programs.

*Establish high academic standards early in the high school career, i.e., during junior high school or the freshman year. If they fall below standards, junior high or middle school students should receive warnings noting that, if they had been in high school, they would have become ineligible for sport.

*Finally, schools should take into account the diverse “ways of knowing” that characterize racially/ethnically diverse populations. Teachers should be trained to organize and present information not only in traditional ways such as lecture and drill, but in nontraditional ways — such as film, music, and discussion — that are sensitive to the values and experiences of non-white Americans.

3. USE SPORT AS A TOOL TO LOWER SCHOOL DROPOUT

The Women's Sports Foundation Report: Minorities in Sports shows that, in suburban and rural schools, varsity athletic programs provide incentives for many minorities to stay in school. A better understanding of the links between successful athletic and educational programs in rural and suburban schools might help administrators to create similar programs to keep urban youth from dropping out. Our recommendations:

*Study high schools with low dropout rates among minority athletes and use them as models for other athletic programs.

*Especially in urban settings, develop stronger ties between the school and the community in order to create a more supportive environment for student-athletes.
4. DEVELOP SPECIAL PROGRAMS FOR STUDENT-ATHLETES BEING RECRUITED FOR COLLEGE SCHOLARSHIPS

Most student-athletes do not beat the 100 to 1 odds and get a scholarship to play sports in college. Yet some of our most athletically gifted students will attract scholarship offers. To better serve the needs of gifted minority student-athletes, we recommend that schools:

* Create more systematic links between academic advisors, coaches, and parents in order to maximize academic achievement and informed college planning.

* Provide early (from the freshman year) and continuous information and education regarding the NCAA Proposition 48 standards and course requirements in order to insure eligibility for scholarship consideration.

* Give periodic workshops designed to help student-athletes attain the knowledge necessary to do well on standardized tests.

* Provide students and parents with information about NCAA recruiting regulations to prepare them to ask informed questions of recruiters.

* Provide workshops to aid in cultural assimilation of minority student-athletes who leave their familiar, often-homogeneous high school communities for college communities that may be completely foreign to them.

5. PROVIDE CAREER COUNSELING FOR STUDENT-ATHLETES

One important conclusion of this report is that athletic participation does not contribute to upward mobility in the work force after high school. Indeed, among urban black females, former athletes fell behind their nonathletic counterparts upon entering the labor force. While most minority athletes enter the work force rather than going on to college, it is the latter who normally receive attention from policymakers and researchers. If they are to succeed, minority student-athletes must be informed about the nature of the culture and the working world to which they must adapt. Emphasizing cross-cultural events and field trips to various businesses, professional offices, and cultural centers is one approach. To better serve the bulk of minority athletes who do not go on to college, we also propose:

* Parents and teachers should encourage student-athletes to participate in summer internship programs to gain work experience.

* Guidance officials and career counselors should work with area businesses and government to arrange for meaningful work experiences for student-athletes.

* Career counseling services should be redesigned to address the specific needs and life experiences of minority student-athletes.
6. MONITOR MINORITY PARTICIPATION IN ATHLETICS

Educational institutions and sport governing bodies should closely monitor minority participation in athletics. Though highly visible on the professional courts and playing fields, the lack of research on racial and ethnic minorities in high schools and colleges has, in effect, kept them invisible. Without essential information, the efforts of policymakers and reformers to initiate analysis and change remain seriously impeded. We recommend that:

* Organizations such as the National Federation of State High School Associations, the National Collegiate Athletic Association, and other sport organizations gather ongoing data on race, ethnicity, and gender.

* State legislatures survey the state institutions of higher education for expenditures and opportunities for women and minorities in athletic programs to determine if they are in compliance with Title IX of the Education Amendments of 1972 and other civil rights laws.

7. RECOGNIZE DIVERSITY AMONG HIGH SCHOOL ATHLETES

Large numbers of girls as well as African-American and Hispanic boys are now active in high school sports. The data show that the educational and athletic experiences of these groups vary significantly by school location and socioeconomic background. We recommend that:

* Coaches and educators make efforts to become more sensitive to this diversity without falling prey to categorizing all members of racial, ethnic, or gender groups by stereotypes.

* Opportunities be provided for minority women to be trained as coaches and athletic administrators. Talented minority women need to be identified and provided with the proper training and support to become coaches so that there can be more positive role models for young girls.

* Efforts be made to employ qualified professionals representative of the racial, gender and ethnic makeup of the student body to act as role models. Greater visibility and participation among women and minority men in leadership positions would more fully tap the potential of sport to instill leadership aspirations in minority youth. Minority youth — especially Hispanics and black females — need more adult role models. Minority coaches and administrators need greater opportunities to develop and apply their expertise.

* School systems hold system-wide sessions for coaches, parents, and athletic directors to help them assess their own effectiveness in working with minority students.
KEY AREAS FOR FUTURE RESEARCH

To date, most of the debate and research on race and ethnicity has focused on African-American males. Broader issues of race, ethnicity, and gender are likely to be central ethical issues in high school and college sports in the 1990s. While The Women's Sports Foundation Report: Minorities in Sports answers several long-ignored questions, it also raises some issues that should be addressed:

*The current debate and research focus on the black male athlete should be expanded to include women and other racial and ethnic groups.

*The relationship between athletic participation and the career patterns of urban black females should be investigated.

*Further research should examine the relationship between participation in specific sports and high school academic performance, educational aspirations, and mobility in the work force.

*Researchers should gather more data regarding athletes', in particular minority athletes', attitudes and perceptions of themselves, their high school experience, and the world in which they live, and how those perceptions mold their future plans.

*Further research is needed to identify the specific factors that influence the academic performance of minority athletes, especially for economically disadvantaged student-athletes.

*According to One-Third of a Nation, a 1988 report by the Commission on Minority Participation in Education and American Life, enrollment of African-American and Hispanic youth in America's colleges and universities declined between 1980 and 1985. In order to encourage college attendance among minorities, more research is needed to identify the factors that influence college-going behavior among minority student-athletes.
## Key to Table Abbreviations

<table>
<thead>
<tr>
<th>School Location</th>
<th>Race</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>R - Rural</td>
<td>H - Hispanic</td>
<td>F - Female</td>
</tr>
<tr>
<td>S - Suburban</td>
<td>B - Black</td>
<td>M - Male</td>
</tr>
<tr>
<td>U - Urban</td>
<td>W - White</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 1
COMPOSITION OF ATHLETES*
BY RACE AND GENDER

<table>
<thead>
<tr>
<th>Race and Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic Males</td>
<td>8.8%</td>
</tr>
<tr>
<td>Black Males</td>
<td>8.1%</td>
</tr>
<tr>
<td>White Females</td>
<td>29.1%</td>
</tr>
<tr>
<td>Black Females</td>
<td>4.4%</td>
</tr>
<tr>
<td>Hispanic Females</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

TOTAL SUBSAMPLE N = 3,336
SUBGROUP PERCENTAGES ARE SHOWN
*The term athlete refers to those individuals who reported participating on athletic teams both in their sophomore year (1980) and in their senior year (1982).

TABLE 2
SPORT AND POPULARITY:
SIGNIFICANT FINDINGS BY RACE AND GENDER

PERCENT REPORTING HIGH POPULARITY

<table>
<thead>
<tr>
<th>Sport</th>
<th>Athletes</th>
<th>Nonathletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF</td>
<td>93</td>
<td>71</td>
</tr>
<tr>
<td>HM</td>
<td>86</td>
<td>67</td>
</tr>
<tr>
<td>BF</td>
<td>91</td>
<td>68</td>
</tr>
<tr>
<td>BM</td>
<td>94</td>
<td>71</td>
</tr>
<tr>
<td>WF</td>
<td>87</td>
<td>73</td>
</tr>
<tr>
<td>WM</td>
<td>92</td>
<td>70</td>
</tr>
</tbody>
</table>

N = 505  525  532  345  3,856  3,417
TABLE 3
SPORT AND EXTRACURRICULAR ACTIVITY
SIGNIFICANT FINDINGS BY RACE AND GENDER

PERCENT WITH HIGH EXTRACURRICULAR ACTIVITY

<table>
<thead>
<tr>
<th></th>
<th>Athletes</th>
<th>Nonathletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF</td>
<td>72</td>
<td>52</td>
</tr>
<tr>
<td>HM</td>
<td>37</td>
<td>18</td>
</tr>
<tr>
<td>BF</td>
<td>74</td>
<td>59</td>
</tr>
<tr>
<td>BM</td>
<td>47</td>
<td>27</td>
</tr>
<tr>
<td>WF</td>
<td>81</td>
<td>54</td>
</tr>
<tr>
<td>WM</td>
<td>50</td>
<td>25</td>
</tr>
</tbody>
</table>

N = 534
H = 579
B = 567
M = 449
W = 3,973
W = 3,559

TOTAL N = 9,682

TABLE 4
SPORT AND HIGH SCHOOL GRADES
BY RACE AND GENDER

PERCENT REPORTING HIGH GRADES

<table>
<thead>
<tr>
<th></th>
<th>Athletes</th>
<th>Nonathletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>HM*</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>BF*</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>BM*</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>WF</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>WM</td>
<td>20</td>
<td>11</td>
</tr>
</tbody>
</table>

N = 594
H = 675
B = 676
M = 532
W = 4,266
W = 3,939

*TOTAL N = 10,682

INDICATES THE FINDING IS NOT STATISTICALLY SIGNIFICANT AFTER REGRESSIONS
TABLE 5
SPORT AND HIGH SCHOOL GRADES:
SIGNIFICANT FINDINGS FOR MINORITIES

PERCENT REPORTING HIGH GRADES

<table>
<thead>
<tr>
<th></th>
<th>Athletes</th>
<th>Nonathletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural H Females</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>Suburban B Males</td>
<td>22</td>
<td>11</td>
</tr>
</tbody>
</table>

Athletic Participation Was Linked to Higher Grades for:
- Rural Hispanic Females
- Suburban Black Males
- Rural White Males

Athletic Participation Was Unrelated to Higher Grades for:
- Urban & Suburban Hispanic Females
- All Hispanic Males
- All Black Females
- Urban & Rural Black Males
- All White Females
- Urban & Suburban White Males

TABLE 6
SPORT AND ACHIEVEMENT TEST PERFORMANCE
BY RACE AND GENDER

PERCENT SCORING IN THE TOP QUARTILE RANGE

<table>
<thead>
<tr>
<th></th>
<th>Athletes</th>
<th>Nonathletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF</td>
<td>39</td>
<td>23</td>
</tr>
<tr>
<td>HM</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>BF</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>BM</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>WF</td>
<td>32</td>
<td>21</td>
</tr>
<tr>
<td>WM</td>
<td>29</td>
<td>20</td>
</tr>
</tbody>
</table>

These are descriptive comparisons only. Results do not reflect regression analyses.
TABLE 7
SPORT AND ACHIEVEMENT TESTS:
SIGNIFICANT FINDINGS FOR MINORITIES

PERCENT SCORING IN THE TOP QUARTILE RANGE

Breakdown of Findings by School Location

<table>
<thead>
<tr>
<th>Athletic Participation Was</th>
<th>Athletic Participation Was</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linked to Better Performance</td>
<td>Unrelated to Better Performance</td>
</tr>
<tr>
<td>on Achievement Tests for:</td>
<td>on Achievement Tests for:</td>
</tr>
<tr>
<td>Rural Hispanic Females</td>
<td>Urban &amp; Suburban Hispanic Females</td>
</tr>
<tr>
<td>Urban Black Males</td>
<td>All Hispanic Males</td>
</tr>
<tr>
<td>Suburban White Males</td>
<td>All Black Females</td>
</tr>
<tr>
<td></td>
<td>Suburban &amp; Rural Black Males</td>
</tr>
<tr>
<td></td>
<td>All White Females</td>
</tr>
<tr>
<td></td>
<td>Urban &amp; Rural White Males</td>
</tr>
</tbody>
</table>
TABLE 8
SPORT AND SCHOOL DROPOUT: SIGNIFICANT FINDINGS
BY RACE, GENDER, AND HIGH SCHOOL LOCATION

PERCENT DROPPING OUT BY SENIOR YEAR

<table>
<thead>
<tr>
<th></th>
<th>Athletes</th>
<th>Nonathletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHF</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>SHM</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td>RBM</td>
<td>37</td>
<td>8</td>
</tr>
<tr>
<td>RWF</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>SWF</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>RWM</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>SWM</td>
<td>14</td>
<td>6</td>
</tr>
</tbody>
</table>

N = 221
330
148
1,600
2,493
1,546
2,333

TOTAL N = 8,671

Breakdown of Findings by School Location

Athletic Participation Did Lower the Dropout Rate for:
- Rural Hispanic Females
- Suburban Hispanic Males
- Rural Black Males
- Suburban & Rural White Females
- Suburban & Rural White Males

Athletic Participation Did Not Lower the Dropout Rate for:
- Urban & Suburban Hispanic Females
- Urban & Rural Hispanic Males
- All Black Females
- Urban & Suburban Black Males
- Urban White Females
- Urban White Males

30
**TABLE 9**

**COLLEGE ATTENDANCE IN 1984: SIGNIFICANT FINDINGS BY RACE, GENDER, AND HIGH SCHOOL LOCATION**

**PERCENT ATTENDING 4-YEAR COLLEGE, 1984**

<table>
<thead>
<tr>
<th>Race and Gender</th>
<th>Former Athletes</th>
<th>Former Nonathletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHF</td>
<td>42</td>
<td>9</td>
</tr>
<tr>
<td>RHM</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>UHM</td>
<td>31</td>
<td>4</td>
</tr>
<tr>
<td>RWF</td>
<td>44</td>
<td>15</td>
</tr>
<tr>
<td>SWF</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>RWM</td>
<td>42</td>
<td>18</td>
</tr>
<tr>
<td>SWM</td>
<td>49</td>
<td>25</td>
</tr>
<tr>
<td>UWM</td>
<td>44</td>
<td>21</td>
</tr>
</tbody>
</table>

**Breakdown of Findings by School Location**

<table>
<thead>
<tr>
<th>Athletic Participation Did Contribute to Later College Attendance for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Hispanic Females</td>
</tr>
<tr>
<td>Rural &amp; Urban Hispanic Males</td>
</tr>
<tr>
<td>Rural &amp; Suburban White Females</td>
</tr>
<tr>
<td>All White Males</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Athletic Participation Did Not Contribute to Later College Attendance for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suburban &amp; Urban Hispanic Females</td>
</tr>
<tr>
<td>Suburban Hispanic Males</td>
</tr>
<tr>
<td>All Black Females</td>
</tr>
<tr>
<td>All Black Males</td>
</tr>
<tr>
<td>Urban White Females</td>
</tr>
</tbody>
</table>
TABLE 10

DEGREE GOAL IN 1986: SIGNIFICANT FINDINGS BY RACE, GENDER, AND HIGH SCHOOL LOCATION

PERCENT AIMING AT A BACHELOR'S DEGREE, 1986

<table>
<thead>
<tr>
<th>School Location</th>
<th>Former Athletes</th>
<th>Former Nonathletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHF</td>
<td>31</td>
<td>7</td>
</tr>
<tr>
<td>UHF</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>UHM</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>UBM</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>SWF</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>RWM</td>
<td>45</td>
<td>18</td>
</tr>
<tr>
<td>SWM</td>
<td>51</td>
<td>27</td>
</tr>
</tbody>
</table>

TOTAL N = 5,289

Breakdown of Findings by School Location

- Former High School Athletic Participation Was Linked to Degree Goal in 1986 for:
  - Urban & Rural Hispanic Females
  - Urban Hispanic Males
  - Urban Black Males
  - Suburban White Females
  - Suburban & Rural White Males

- Former High School Athletic Participation Was Unrelated to Degree Goal for:
  - Suburban Hispanic Females
  - Suburban & Rural Hispanic Males
  - All Black Females
  - Suburban & Rural Black Males
  - Urban & Rural White Females
  - Rural White Males
TABLE 11
EDUCATIONAL PROGRESS BY 1986: SIGNIFICANT FINDINGS BY RACE, GENDER, AND HIGH SCHOOL LOCATION

PERCENT HAVING MADE EDUCATIONAL PROGRESS TOWARD A BACHELOR'S DEGREE BY 1986

<table>
<thead>
<tr>
<th></th>
<th>RHF</th>
<th>SHF</th>
<th>RWF</th>
<th>SWF</th>
<th>UWM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleges with Athletes</td>
<td>49</td>
<td>28</td>
<td>48</td>
<td>55</td>
<td>39</td>
</tr>
<tr>
<td>Colleges with Nonathletes</td>
<td>9</td>
<td>13</td>
<td>24</td>
<td>31</td>
<td>23</td>
</tr>
</tbody>
</table>

N = 174
N = 200
N = 1,251
N = 1,967
N = 466

TOTAL N = 4,038

Breakdown of Findings by School Location

- Former High School Athletic Participation Was Linked to Actual Educational Progress in 1986 for:
  - Rural Hispanic Females
  - Suburban & Rural White Females
  - Urban White Males

- Former High School Athletic Participation Was Unrelated to Actual Educational Progress in 1986 for:
  - Urban & Suburban Hispanic Females
  - All Hispanic Males
  - All Black Females
  - All Black Males
  - Urban White Females
  - Suburban & Rural White Males
**TABLE 12**

**Educational Mobility Benefits: Comparison by Race and Gender**

<table>
<thead>
<tr>
<th>Race and Gender Subgroup</th>
<th>Number of Verified Mobility Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF</td>
<td>5</td>
</tr>
<tr>
<td>HM</td>
<td>3</td>
</tr>
<tr>
<td>BF</td>
<td>0</td>
</tr>
<tr>
<td>BM</td>
<td>1</td>
</tr>
<tr>
<td>WF</td>
<td>5</td>
</tr>
<tr>
<td>WM</td>
<td>6</td>
</tr>
</tbody>
</table>

There were a total of 18 hypothesis tests done for each group. The number at the top of each column equals the number of statistically significant, positive findings per group.
TABLE 13
HIGH SCHOOL SPORT PARTICIPATION AND ADULT COMMUNITY LEADERSHIP BY RACE AND GENDER

PERCENT WHO ASPIRE TO BE COMMUNITY LEADERS

<table>
<thead>
<tr>
<th></th>
<th>HF*</th>
<th>HM</th>
<th>BF*</th>
<th>BM</th>
<th>WF</th>
<th>WM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletes</td>
<td>38</td>
<td>44</td>
<td>58</td>
<td>42</td>
<td>48</td>
<td>56</td>
</tr>
<tr>
<td>Nonathletes</td>
<td>49</td>
<td>49</td>
<td>51</td>
<td>51</td>
<td>29</td>
<td>39</td>
</tr>
</tbody>
</table>

TOTAL N = 9,005
*INDICATES THAT REGRESSION ANALYSIS SHOWS: THE DIFFERENCES ARE NOT DIRECTLY OWED TO ATHLETIC PARTICIPATION. THE FINDINGS ARE NOT STATISTICALLY SIGNIFICANT.

TABLE 14
HIGH SCHOOL SPORT PARTICIPATION & ADULT INVOLVEMENT: SIGNIFICANT FINDINGS BY RACE AND GENDER

PERCENT WHO ARE ADULT TEAM/CLUB PARTICIPANTS

<table>
<thead>
<tr>
<th></th>
<th>HF</th>
<th>HM</th>
<th>BF</th>
<th>BM</th>
<th>WF</th>
<th>WM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former Athletes</td>
<td>34</td>
<td>48</td>
<td>32</td>
<td>53</td>
<td>48</td>
<td>59</td>
</tr>
<tr>
<td>Nonathletes</td>
<td>9</td>
<td>19</td>
<td>4</td>
<td>25</td>
<td>13</td>
<td>18</td>
</tr>
</tbody>
</table>

TOTAL N = 8,971
APPENDIX B: METHODS

Data for the report come from the federal High School and Beyond (HS&B) Study. The particular sample used in this analysis is based on questionnaires, transcript records, and school information for over 12,000 respondents who were high school sophomores in 1980, and who were subsequently re-interviewed in 1982, 1984, and 1986. To measure the influence of sports participation on high school experiences, the following dependent variables were used in multiple regression equations: perceived popularity; participation in extracurricular activities; high school grades; educational aspirations; and test scores.

Analyses of the impact of athletic participation on social mobility opportunities used the following dimensions of status outcome as dependent variables: academic performance; educational progress and attainment; and occupational expectations and attainment. The independent variable was a scale of sports participation in high school. Controls employed were parental socioeconomic status, urbanicity, and an early measure of the dependent variable. Multiple regression was used to estimate the coefficients. Regressions were run first for the total sample, and then for subgroups divided by race/ethnic status and gender. Interactions between sports participation and urbanicity were examined. When there were significant interactions, the regressions were run again for the race/ethnic and gender subgroups differentiated by school setting (urban, rural, or suburban).

SAMPLING PROCEDURE

The analysis used data from the first, second, and third follow-up panels of the High School and Beyond Study (HS&B). The HS&B Study employed a two-stage stratified probability sample. In the first stage, 1,100 schools were selected. In the second stage, 36 students within each school were selected. Over 30,000 sophomores enrolled in 1,015 public and private high schools across the country participated in the base-year survey. Certain types of schools were over-sampled, including public schools with high percentages of Hispanic students, Catholic schools with high percentages of minority group students, and private schools with high-achieving students. The student questionnaires focused on individual and family background, high school experiences, work experiences, and plans for the future. Cognitive tests measured verbal and quantitative abilities. School questionnaires were filled out by an official in each participating school.

The first follow-up sample consisted of approximately 25,500 students, and retained the multi-stage, stratified, and clustered design of the base-year sample. All students who had been selected for inclusion in the base-year survey, whether or not they actually participated, had a chance of being included in the first follow-up sample. The response rates for the first follow-up testing were between 81 and 89 percent. School transcripts were collected for about half of the 1980 sophomore cohort.

The sample for the second follow-up survey of the 1980 sophomore cohort was composed of approximately 15,000 cases selected from among 18,500 retained for the transcript study. A response rate of 92 percent was obtained for the second follow-up survey.

The third follow-up sample consisted of the same 14,825 persons selected for the second follow-up survey. Those with questionnaire data available number 13,481, constituting a 91 percent completion rate. While certain populations were oversampled, for all analyses reported here, a weighting factor was applied to approximate the distributions of relationships in the population from which the sample was drawn.
MEASURES AND EQUATIONS

The following procedures were used to operationalize concepts and test relevant hypotheses.

Athletic Participation

Athletic participation was measured by multiple questionnaire items that described the extent of the subject's participation in both the sophomore and senior years. Sophomores were asked (in HS&B Item BB032B), "Have you participated in athletic teams either in or out of school this year?" They could respond that they had or had not participated. During the senior year, students were asked (Item FY38A), "Have you participated in varsity athletic teams either in or out of school this year?" Responses allowed were "have participated as a leader," "have participated actively but not as a leader," and "have not participated." We reasoned that participation as a leader entails greater involvement than participation as a non-leader, and that participation in varsity sports yields greater levels of involvement than in non-varsity sports. Thus, seven subgroups were created that ranged along a participation-involvement continuum defining variations in athletic involvement.

Family Socioeconomic Status

Family socioeconomic status (SES) is a composite scale score (based on the sophomore and senior items, BYSES and FUSES). The composite measure of SES was calculated by the National Opinion Research Center, and is based on family income, father's education, mother's education, father's occupation, and eight household items such as the presence of newspapers, books, and typewriters. Scores are included for every student who gave information on at least two of the items. Only five percent of the sample were unindexed, so missing values were minimized.

Popularity in School

Perceived popularity in high school was measured by a composite index summing responses to two questions (Items YB053A and BB061D for sophomores, and FY74A and FY76D for seniors): (1) "How do other sophomores [seniors] in your school see you? As Popular?" Responses were "very," "somewhat," or "not at all." (2) "Are the following statements about yourself true or false? I am popular with other students in my class." (Responses were "True" or "False.") The answers were coded so that high scores indicate high popularity.

Extracurricular Involvement

Extracurricular involvement was measured by a composite index summing responses to a list of types of involvement. The question asked: "Have you participated in any of the following types of activities either in or out of school this year?" In the sophomore year, students responded either "have not participated" or "have participated." In the senior year, responses allowed were "have participated as a leader or officer," "have participated actively (but not as a leader or officer)," and "have not participated." The activities asked about in both the sophomore and senior year were debating or drama, band or orchestra, chorus or dance, hobby clubs, vocational education clubs, community youth organizations, church activities and Junior Achievement. (Items for the sophomore year were BB032C through BB032O; for the senior year were FY38D through FY38L.)
Test Performance

Students were tested in both their sophomore and senior years on reading, vocabulary, and mathematics performance. Composite indices of the scores on these tests were created for both the sophomore and senior measures (Items BYTEST and FUTEST).

The dependent variable was senior test scores, and the regression equation included socioeconomic status, the sophomore test performance, and the sports participation index.

Grades in Senior Year

Grades received during the senior year in high school were measured by the following question (Item BB007): “Which of the following best describes your grades so far in high school? Mostly A’s; About half A’s and half B’s; Mostly B’s; About half B’s and half C’s; Mostly C’s; About half C’s and half D’s; Mostly D’s; Mostly below D”. High scores indicate poorer grades.

The dependent variable in the grades regression was the self-reported grade point average of the respondent during the senior year. The regression equations included socioeconomic status, the self-reported grade-point average during the sophomore year, and the sports participation index.

Dropping out of High School

We examined whether athletes are more likely to remain in high school than nonathletes. The dependent variable used was a two-category variable determined during the follow-up survey (Item FUSTTYPE): did the respondent complete high school or not. The regression equations included socioeconomic status, sophomore grade-point average, and the sports participation index.

College Attendance, 1984

Does participation in high school sports encourage young people to attend college? To address this question, we used a measure that indicated whether respondents were enrolled in college in 1984, two years after most of them had graduated from high school (Item PSESFE84). The three-category variable was scored 1 if the respondent was not in college (54 percent), 2 if the respondent was attending college part-time (7 percent), and 3 if the respondent was attending college full-time (39 percent). As controls, the regression equations included socioeconomic status, sophomore educational expectations, high school grades as reported on the high school transcript, senior test scores, and whether or not the respondent had received a high school diploma.

College Degree Sought in 1986

In the 1986 survey, students who had attended a post-secondary school in the prior two years were asked (Items TY21H and TY22H): “During the last month you attended, what kind of certificate, license, diploma, or degree were you studying for?” Responses allowed were: None; Certificate; License; 2- or 3-year vocational degree or diploma; 2-year academic degree or diploma; 4- or 5-year Bachelor’s degree; Master’s degree or equivalent; Ph.D. or equivalent; M.D.; L.L.B.; J.D.; D.D.S., or equivalent; and Other. Regression equations included senior test scores, socioeconomic status, high school grade-point average, and educational expectations in the sophomore year.
Actual Educational Progress by 1986

The variable we call "educational progress by 1986" measures the amount of formal education obtained by those subjects no longer attending school in the spring of 1986, or the highest degree sought by those subjects still attending school in 1986. (It is a composite of Item EDATTAIN for those no longer in school, plus TY21D and TY22 D for those who were juniors or seniors in college at the time of the survey. It should be noted that when the third follow-up questionnaire of the HS&B Study was distributed and completed, many subjects were still seniors in college finishing their undergraduate degrees.)

The regression equations included controls for socioeconomic status, high school sophomore educational expectations, high school grade-point average (taken from the student's high school transcript), and senior test scores, as well as the independent variable of high school sports participation.

Occupational Status in 1986

The status of the jobs of those who had entered the labor force after high school rather than attending college (Item TY8A) was scored using the NORC Occupational Prestige Ranking. Controls included in the regressions were socioeconomic status, high school grade-point average, senior test scores, sophomore educational expectations, and occupational aspirations in the sophomore year. Regressions were run only for those subjects who were not in college in 1986.

Occupational Expectation in 1986

Because a large proportion of the sample was still in school in 1986 and thus was eliminated from the above regression, to look further into occupational attainment we used a question about the occupation the respondents expected to have by the age of 30. Subjects were asked, "Write in here the name of the job or occupation that you expect or plan to have when you are 30 years old. Even if you are not at all sure, write in your ONE best guess." The occupations were grouped into 17 categories (Item TY15A). The categories then were coded to reflect a hierarchy of occupational prestige. All respondents were included in the regressions. Controls in the regression equation included the variables listed above for occupational status, 1986.

Adult Sports Involvement in 1986

In the 1986 survey, respondents were asked (Item TY59H), "To what extent have you voluntarily participated in the following groups during the last 24 months? Sports teams or sport clubs." Responses allowed were "Active participant," "Member only," and "Not at all." The regression equations included socioeconomic status, sophomore educational expectations, high school grades, and high school test scores.

Importance of Being a Community Leader

In the 1986 survey, respondents were asked, "How important is ...the following to you in your life? Being a leader in my community." Responses ranged from "Not important" to "Very important." The regression equations included socioeconomic status, sophomore educational expectations, sophomore statement about importance of being a leader, high school grades, and high school test scores.
APPENDIX C: POLICY ADVISORY BOARD

Policy Recommendations Advisory Board

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