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# A study of benefits derived from participation in high school activities programs

#### Abstract

The current strain on the public educational dollar intensifies the consideration of reducing or eliminating high school activity programs. However, the educational benefits derived from participation in interscholastic programs shout for public recognition, and the need for educators to further the public's awareness and support of high school activity programs is acute. Executive Director Brice B. Durbin of the National Federation of State High School Associations (1981) asserted, "Nationally over one-half of the high school student population participates in high school student activity programs for approximately one percent of the total school budget, obviously the best value in public education today" (p. 1). Among those who contend that the interscholastic program should be an integral part of the overall secondary school program is T. H. Bell, former U.S. Secretary of Education: "Interscholastic activities programs are essential to the education of most youth and, therefore are an integral part of high school curriculum" (cited in National Federation Memorandum, August 6, 1984, p. 1).

# A STUDY OF BENEFITS DERIVED FROM PARTICIPATION IN HIGH SCHOOL ACTIVITIES PROGRAMS

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The current strain on the public educational dollar intensifies the consideration of reducing or eliminating high school activity programs. However, the educational benefits derived from participation in interscholastic programs shout for public recognition, and the need for educators to further the public's awareness and support of high school activity programs is acute. Executive Director Brice B. Durbin of the National Federation of State High School Associations (1981) asserted, "Nationally over one-half of the high school student population participates in high school student activity programs for approximately one percent of the total school budget, obviously the best value in public education today" (p. 1). Among those who contend that the interscholastic program should be an integral part of the overall secondary school program is T. H. Bell, former U. S. Secretary of Education: "Interscholastic activities programs are essential to the education of most youth and, therefore are an integral part of high school curriculum" (cited in National Federation Memorandum, August 6, 1984, p. 1).

High school activities programs are often referred to as the "other half of education." Glen Potter, Thomas Wandyilak and James O'Hanlon (1978) maintained, "Interscholastic athletics have the potential for being an exceptional tool. The excitement, competition, and social opportunities they can

provide offer a special way to help adolescents of both sexes reach many of the goals commonly held for the secondary school" (p. 50).

The inherent values of high school activity programs are concisely highlighted by Durbin (1981):

There are several very vivid documented examples:

- (1) National surveys reveal that students participating in high school activities are more likely to have higher academic averages and far better attendance records:
- (2) of the students who drop out of high schools, ninety-four percent have not been involved in any school activities such as athletics, music, speech, student government, etc.; (3) the best predictor (according to ACT and SAT studies) of success in later life is previous participation in high school activity programs—not high school or college grade point average, test score or rank—in—class; (4) generally, participation in activity programs teaches values that make children happier and better citizens, builds strong minds and bodies, emphasizes that competition is not evil (but an American way of life), and that race, color, sex and economic status are not obstacles for participation, and finally, instills poise and confidence (p. 1).

Armed with this documentation, educators who recognize the values derived from participation in high school activity programs should respond aggressively to misguided talk of reducing or eliminating such programs.

It is apparent that a strong case can be made for the view that high school activities are in fact "the other half of education."

Nicholas T. Mannos (1980), a member of the Illinois High School Association board of directors with a long history of involvement in high school athletics, put the case well when he said, "I don't know of anything on the high school level-except perhaps theater, dramatics and debate-that has had such great influence for good as athletics" (cited in Hammel, 1980, p. 9).

Thus, the primary objective of this research paper is to provide a more specific examination of the values and educational benefits that result from participation in high school activities programs, with an emphasis on benefits derived from participation in high school athletics. The preponderance of research indicates that such benefits fall in the areas of academic achievement; persistence in school attendance; citizenship and success in later life; and educational aspirations, expectations and attainment.

Academic Achievement and Athletic Participation
Picou and Curry (1974) stated, "One of the most
consistent empirical findings in the everexpanding literature
of the sociology of sport reveals that participation in high
school athletics is conducive to higher levels of scholastic
achievement and educational aspiration" (p. 769).

Interest in the relationship between academic achievement and involvement in high school activity programs has generated a number of studies which demonstrate a positive relationship between academic achievement and athletic participation.

Two studies by Russell M. Eidsmore showed such a relationship. He found that male and female basketball players as well as male football players were "brighter students than their classmates based on a comparative analysis of grade point averages" (cited in Ballantine, 1981, p. 2).

Eidsmore's first study (1961) dealt with male and female basketball players in the State of Iowa. His methodology involved analyzing the grade point averages (G.P.A.) of the twelve members of each of the sixteen teams participating in the Boys' Substate Basketball Tournament and the twelve members of each of the sixteen teams participating in the Girls' State Tournament. Eidsmore asked the schools to report the G.P.A. at the end of the first semester of the 1960-61 academic year for every player in each course in which he or

she was enrolled. The schools were also asked for the G.P.A.s for the rest of the members of the class.

Of the sixteen boys teams, fourteen responded. The grade point average (G.P.A.) for those boys participating in basketball was 2.566, as opposed to the entire class G.P.A. of 2.186. Of the sixteen girls' teams, eight responded. The G.P.A. for those girls participating in basketball was 2.882, whereas the entire class G.P.A. was 2.288. It is evident that the basketball participants in Eidsmore's study achieved higher grade point averages than their classmates who did not participate in basketball.

Eidsmore's study of participants and non-participants in varsity football teams from twenty-four of the top Iowa high school teams for the year 1962 revealed some equally startling results. He reported, "the total grade point average (G.P.A.) of the 592 players in all subjects carried was 2.523, whereas the grade point average (G.P.A.) of their non-participating classmates was 2.085" (p. 76). Eidsmore asserted, "The survey does show very clearly that athletes who are highly competitive in their chosen sport are also significantly above the average of their fellow students in academic performance" (p. 77).

A positive association between athletic participation and academic achievement has also been reported indirectly by

James S. Coleman. It is interesting that the tone of Coleman's <u>The Adolescent Society</u> suggests that participation in high school athletics is 'harmful to the athletes' educational pursuits, while the empirical evidence of Coleman's study suggests otherwise. Rehberg and W. E. Shafer (1968) in discussing Coleman's study maintain, "An inspection of the appropriate tables reveal that in six of the ten midwestern schools surveyed athletes, at least 'top athletes' had higher scholastic averages than the male student body as a whole" (p. 733).

Eitzen (1982) suggested that the significant contribution of Coleman's study was the "empirical verification of the importance of athletics in American high schools and in adolescent status systems" (p. 111).

W. E. Shafer and Armer's (1968) investigation of athletic participation and grade point averages reported evidence which replicated the findings of Eidsmore. Their methodology involved examining the complete high school records of 585 boys from two high schools in the midwest. They compared the G.P.A. and dropout rates of athletes with those of nonathletes. Shafer and Armer's research confirmed that athletes tended to have a higher G.P.A. than nonathletes. In their study the athletes achieved a mean G.P.A. of 2.35, whereas the mean G.P.A. of all other boys was 1.83. Shafer

and Armer (1968) stated, "Clearly the athletes obtained better grades. The athletes on the average, got over C, the nonathletes got less than C" (p. 24).

Shafer and Armer found that controlling for other, possibly causal factors did not alter the positive relationship between participation in athletics and academic achievement. Athletes continued to have higher G.P.A.s than nonathletes. Shafer and Armer's data also revealed that "the boys who would usually have the most trouble in school are precisely the ones who seem to benefit most from taking part in sports" (p. 25).

Phillips and Shafer (1971) summarized their evidence on differences between high school athletes and nonathletes:

- (1) Athletes generally receive slightly better grades and are more likely to aspire to and attain more education than comparable nonathletes from blue-collar homes.
- (2) There is some evidence to indicate that athletes are less likely than nonathletes to become delinquent [W. E. Shafer, 1969].
- (3) Athletes from blue-collar backgrounds are more likely to be upwardly mobile than nonathletes. This can be explained to a great extent by their greater educational attainment, but other factors such as

sponsorship and association may also bear on this mobility (p. 331).

In their concluding remarks, Phillips and Shafer maintained, "we have convincing evidence that American interscholastic athletes achieve educational goals more than do comparable nonathletes" (p. 336).

Several recent studies conducted by Athletic Directors from member schools of the Iowa High School Athletic Association (I.H.S.A.A.) provided data to indicate that students who participate in high school athletics generally have higher G.P.A.s than those students who do not participate.

Schafer's 1981 study of 6,635 juniors from 76 high schools throughout Iowa disclosed the mean G.P.A. for nonparticipants was 2.39; the mean G.P.A. of students who participated in one sport was 2.61 and the mean G.P.A. of students who participated in two or more sports was 2.82 (cited in Iowa High School Athletic Association Bulletin No. 413, 1984, p. 17). Schafer's study revealed that students who participate in high school athletics in the State of Iowa generally have a higher G.P.A. than those students who do not participate, and their G.P.A. increases when they participate in two or more sports.

Similar studies were conducted in 1982 by George Hindinger, Athletic Director at Jefferson High School in Cedar Rapids, Iowa; Harold Sweet, Coordinator of Athletics in Dubuque, Iowa; and Larry Munksgaard, Athletic Director at Cedar Falls High School in Cedar Falls, Iowa. These studies yielded data which replicated the finding of Schafer. In all three schools the mean G.P.A. of those students who participated in athletics exceeded the mean G.P.A. of nonparticipants (cited in Harty, 1982, pp. 4-5).

Other states sought evidence to confirm that participants in high school activities programs earn better grades than nonparticipants. Information based on a 1983 survey conducted by the Minnesota State High School League (M.S.H.S.L.) indicated, "participants in the extracurricular activity programs sponsored by the M.S.H.S.L. earn better grades and are absent from school less days than those students who do not participate in extracurricular activities" (I.H.S.A.A. Bulletin, No. 410, 1983, p. 16).

The M.S.H.S.L. study supported by the Minnesota Secondary Principals Association, was based on the responses from 305 of the 500 member schools contacted. The survey was significant in that it was the first study by any statewide organization to consider such a broad base of data. The study revealed that the G.P.A. of the composite student body was 2.68 while the G.P.A. for athletic participants was 2.84 and the G.P.A. for fine arts participants was 2.98 (Bulletin No. 410, 1983,

p. 16). Moreover, the M.S.H.S.L. study indicated participants in Minnesota's extracurricular activity programs were absent from school less days than those students who did not participate.

Persistence in School Attendance

There is evidence to substantiate the fact that high school activities programs keep students in school.

Schafer and Armer (1968) studied 585 boys from two high schools in the midwest to determine the percentage of athletes and nonathletes who dropped out of school before graduation. They found that two percent of the athletes in their study dropped out of school before graduation, whereas nine percent of their matched nonathletes dropped out (p. 26).

Sweet (1982) and Munksgaard (1982) reported evidence which indicated students participating in sports at Dubuque Hempstead High School, Dubuque Senior High School, and Cedar Falls High School do not drop out of school (cited in Harty, 1982, p. 5).

In 1979 the Kansas Activities Association conducted a study of 373 high schools in Kansas. The study represented 111,196 students in grades 10, 11, and 12. The data revealed, of the 7,023 dropouts, 6.2 percent were participants in activities, whereas 93.8% were not involved in activities

programs (Fawcett, 1979, p. 4). This illustrates activities programs do have holding power.

In 1979, the National Federation of State High School Associations surveyed fourteen school districts in seven sections of the United States. The survey's sample represented a cross section of districts from high income to low income. The schools were asked to report their total enrollment, total dropouts, and dropouts who had participated in high school activities programs for the 1977-78 school year. The survey yielded data from 45,443 students representing 24 high schools. Of the 45,443 students represented, 5.5 percent was the average dropout rate, and of the dropouts, 96% were not involved in activities programs (cited in I.H.S.A.A. Activities Report, 1981, p. 18). The data again indicated that students who were actively involved in high school activities programs did not drop out of school.

Richard Fawcett, (1979) Editor of the Interscholastic

Athletic Administrators Magazine, effectively summarizes this relationship:

The money spent on activities programs is well spent since it keeps students in school. Activities programs play a vital role in making education a meaningful and well-rounded experience for students.

No other school program has the ability to attract and hold so many students (p. 5).

In 1984 the Iowa High School Athletic Association

(I.H.S.A.A.) asserted, "the interscholastic athletic program is a classroom which teaches educational values such as desire, dedication, determination, discipline, respect, integrity, sacrifice, pride, dignity, responsibility and leadership . . . [to achieve] the ultimate goal of education - good citizenship" (Promoting Citizenship Sportsmanship in Iowa Schools for 80 years, 1984, p. 8).

Several other observers of the athletic scene agree that citizenship is a by-product of participation in high school activities programs. Charles Whitten, long time secretary of the Illinois State High School Athletic Association contended "that high school students acquired social ideals through exposure to academic subjects. No other activity came close to athletics in offering students the opportunity for the actual practice of those ideals" (cited in O'Hanlon, 1980, p. 94).

Walter E. Schafer (1969) stated, "interscholastic athletics are supported by school administrators partly out of the belief that participation in sports is an effective deterrent to delinquency" (p. 70). To test that belief

Schafer developed six general theories of delinquency.
Schafer's six causal theories were:

- (1) Delinquency as a Result of Differential Association
- (2) Delinquency as a Result of Weak Social Controls
- (3) Delinquency as a Result of Rebellion Against the School
- (4) Delinquency as a Result of Boredom
- (5) Delinquency as a Result Need to Assert Masculinity
- (6) Delinquency as a Result of Labeling.

Schafer's hypothesis was "Stated in testable terms, athletes will have a lower delinquency rate than non-athletes, other things being equal" (p. 71).

Those boys who completed at least one full season in any interscholastic sport (varsity or junior varsity) during the three years of high school were classified as athletes.

Delinquency was measured by an examination of the juvenile court records of the county in which the two schools are located.

Schafer's results indicated that athletes were less likely to be delinquent than non-athletes. Seven percent of the athletes had a court record, whereas 17 percent of the non-athletes had a court record.

Schafer stated, "This finding suggests that participation in interscholastic sports might well have a deterring influence on delinquency" (p. 76).

Jennings and Nathan (1977) discussed an American College Testing (ACT) self-study which suggested the best predictor for success in later life is participation in high school extracurricular activities. Four factors were compared: 1) major achievement in extracurricular activities, 2) high grades in high school, 3) high grades in college, and 4) high scores on the ACT. They concluded that, "Three of the four factors were found to have no predictive value. The only factor which could be used to predict success in later life was achievement in extracurricular activities" (p. 569). In commenting upon a similar examination conducted by the College Entrance Examination Board (SAT), Jennings and Nathan stated, "the best predictor of creativity in mature life was a person's performance, during youth, in independent self sustained ventures. Those youngsters who . . . were active in extracurricular activities, were more likely to be successful in later life" (p. 569).

Educational Aspirations, Expectations, and Attainments

Several studies indicated that participants in

interscholastic athletics tended to have higher education

aspirations, expectations, and higher rates of college attendance than non-participants.

Phillips and Schafer (1971) stated, "There is strong evidence to indicate that athletes aspire to and succeed in attending college more than do non-athletes." Moreover, they found that blue-collar athletes (low-endowment) far exceed non-athletes in aspirations for college attendance. "We [Phillips and Schafer] contend that this difference can be attributed at least in part, to their experience as athletes" (p. 329).

Picou and Curry (1974) documented "that (rural) youth less predisposed toward college training [attendance] receive a substantial gain in education aspiration level through their participation in interscholastic athletics" (p. 733). They concluded that athletes from low socioeconomic backgrounds had higher level education aspirations than similarly classified non-athletes.

Rehberg and Schafer (1968) utilized data from 785 male seniors from six urban Pennsylvania high schools to investigate the athletic-participation/educational-expectation hypothesis. Their data, which controlled variables of status, academic performance, and parental encouragement, indicated a positive relationship between athletic participation and educational expectations. Sixty-two percent of the athletes

expected to enroll in a four-year college compared with only 45 percent of the non-athletes. They concluded, "We suggest . . . that the positive relationship between educational expectations and athletic participation is probably not spurious, that is, not produced by 'selection' variables but, rather, is 'true', that is, reflects the socialization consequences of participation in interscholastic sports" (p. 739).

It is important to note that Rehberg and Schafer found, "that the positive association between expectations and participation is strongest for those . . . respondents least positively disposed toward a college education" (p. 732). This finding is consistent with the findings of Schafer and Rehberg (1970), Phillips and Schafer (1971), Picou and Curry (1974), and Spreitzer and Pugh (1973).

Spreitzer and Pugh's (1973) research is an extension of Rehberg and Schafer's 1968 study. Spreitzer and Pugh introduced "perceived peer status and school value climate as intervening variables between athletic involvement and educational expectations . . . to relate athletic participation to educational goals while controlling for perceived status and school value climates" (pp. 171-172). They studied data from 5,236 high school seniors from thirteen high schools in five Connecticut cities. Their findings

revealed conclusive evidence that the positive relationship between athletic participation and educational expectations was not eliminated when controlling for parental academic encouragement, student grade average, perceived peer status and school value climate. The percentage of athletes who had plans for attending college exceeded the percentage of non-athletes with similar plans by large margins in all instances.

The importance of Snyder and Spreitzer's (1977) study is their extension of previous research to include high school girls. Their findings paralleled earlier studies among high school boys which showed a positive relationship between participation in athletics and educational expectations.

Moreover, they reported a stronger relationship among respondents with lower grade averages (p. 53).

Luther B. Otto (1975) also investigated participation in extracurricular activities and educational attainments and found that participation in extracurricular activities played a significant role in educational attainment. Otto argued further "that participation in extracurricular activities provides socialization for attitudes and skills that have later life payoffs" (p. 171).

Otto and Alwin's (1977) study extended previous research in two ways:

by providing estimates for the effects of athletics on occupational aspirations, occupational attainment, and income; and by incorporating significant others [Parental educational encouragement, Best friend's educational plans, Girl friend's educational encouragement] influence as a mechanism for mediating the effects of athletics on aspirations and attainments (p. 110).

They found that participation in athletics had a positive effect on educational aspirations, occupational aspirations, and level of educational attainment. In addition they discovered "that participation in athletics in high school also has a positive effect on income fifteen years later" (p. 110).

Braddock's (1981) investigation of the relationship between athletic participation and educational attainment extended previous studies by examining race differences. He found that among black and white male adolescents, there was "a positive significant association of athletic participation with high school grades earned, academic self-esteem, educational plans, college enrollment, and college attainment . . . " (p. 348).

The research with regard to educational aspirations, expectations and attainments, generally shows a positive

relationship between participation in high school athletics and these aspects of education.

#### Summary and Conclusions

Evidence clearly demonstrates that a positive correlation exists between academic achievement in high school and participation in high school activities programs. In addition, studies at the local, state and national levels indicate that students involved in high school activities programs do not drop out of school.

The Iowa High School Athletic Association maintains that the interscholastic athletic program is a classroom in which the student derives values which ultimately lead to good citizenship. Supporting evidence indicates that students who participate in interscholastic athletics are less likely to be delinquent than non-athletes, and studies conducted by the American College Testing Service and the College Entrance Examination Board's Scholastic Aptitude Test reveal that achievement in extracurricular activities was the only factor which could be used to predict success in later life.

Several studies suggest that students who participate in high school activities programs tend to have higher educational aspirations, educational expectations, and higher rates of college attendance than non-participants.

It seems clear that participation in high school activities programs, particularly athletics, has significant educational benefits, a fact recognized at the highest levels of government. In 1983, the United States Senate and House of Representatives passed a joint resolution proclaiming the third week in October as National High School Activities Week. The preamble to that resolution noted:

WHEREAS more than half of the students in this nation's senior high school are involved in at least one extracurricular activity;

WHEREAS this other half of education plays a significant role in the total educational development of high school students;

WHEREAS participation in activities such as athletics, speech, music, debate, drama, and others generally leads to positive development for all and often leads to superior achievement;

WHEREAS participation and achievement in those areas often leads to superior achievement;

WHEREAS participation and achievement in those areas often contributes to increased interest and performance in strictly academic areas;

WHEREAS both academic and extracurricular achievement contribute greatly to the social development and

interaction of all high school students; WHEREAS that development directly benefits local communities by channeling young people's interests and talents into positive efforts, and by instilling in them an early sense of civic duty and community pride (Bulletin No. 415, 1984, p. 74).

That statement serves as an eloquent summary of the reasons why school activity programs deserve the support of all segments of the community.

#### REFERENCES

- Braddock, J. H. (1981). Race, athletics, and educational attainment, dispelling the myths. Youth and Society, 12, 335-349.
- Ballantine, R. J. (1981). What research says: About the correlation between athletic participation and academic achievement. Washington, D.C.: National Institute of Education, 1984. (ERIC Document Reproduction Service No. E.D. 233 994).
- Bulletin No. 410. (1983). Boone, IA: Iowa High School Athletic Association.
- Bulletin No. 413. (1984). Boone, IA: Iowa High School Athletic Association.
- Bulletin No. 415. (1984). Boone, IA: Iowa High School Athletic Association.
- Coleman, J. S. (1961). The adolescent society. New York: Crowell-Collier.
- Durbin, B. B. (1981). Why a national high school activities week: National Federation of State High School Associations, 1.
- Eitzen, D. S. & Sage, G. H. (1982). Sociology of american sport (2nd ed.). Dubuque, IA: Brown.

- Eidsmore, R. M. (1961). The academic performance of athletes. School Activities, 32, 105-107.
- Eidsmore, R. M. (1963). High school athletes are brighter. School Activities, 25, 75-77.
- Fawcett, R. G. (1979). <u>Survival kit for athletic directors</u>.

  Kansas City: National Federation of State High School
  Associations.
- Hammel, B. (1980). Student athletes: Tackling the problem. Phi Delta Kappan, 62, 7-13.
- Harty, D. & Saggau, B. (1978). <u>Sportsmanship citizenship.</u>
  Boone, IA: Iowa High School Athletic Association.
- Harty, D. (1982). <u>Selling high school activities</u>. Boone, IA: Iowa High School Athletic Association.
- Harty, D. (1980). National high school activities week.

  National Interscholastic Athletic Administrators

  Association Magazine, 6, 7-8.
- I.H.S.A.A. activities report. (1981). Boone, IA: Iowa High School Athletic Association.
- Jennings, W. & Nathan, J. (1977). Startling/disturbing research on school program effectiveness. <a href="Philosophics.">Phi Delta</a> Kappan, 58, 568-578.
- Loy, J. W., McPherson, B. D. & Kenyon, G. (1978). Sport and social systems. Reading, MA: Addison-Wesley.

- Landers, D. M., Feltz, D. L., Obermeier, G. E. & Brouse, T. R. (1978). Socialization via interscholastic athletics:

  Its effects on educational attainment. Research Quarterly, 49, 475-483.
- National federation memorandum. August 6, 1984. Kansas City, MO: National Federation of State High School Associations.
- Otto, L. B. (1975). Extracurricular activities in the educational attainment process. <u>Rural Sociology</u>, <u>40</u>, 162-176.
- Otto, L. B. & Alwin, D. F. (1977). Athletics, aspirations and attainments. Sociology of Education, 42, 102-113.
- O'Hanlon, T. (1980). Interscholastic athletics, 1900-1940:

  Shaping citizens for an equal role in the modern industrial state. Educational Theory, 30, 89-103.
- Phillips, J. C. & Schafer, W. E. (1971). Consequences of participation in interscholastic sports. <a href="Pacific">Pacific</a>
  Sociological Review, 14, 328-338.
- Picou, J. S. & Curry, E. W. (1974). Residence and the athletic participation educational aspiration hypothesis. Social Science Quarterly, 55, 768-776.
- Picou, J. S. (1978). Race, athletic achievement, and educational aspirations. <u>Sociological Quarterly</u>, <u>19</u>, 429-438.

- Potter, G., Wandzilak, T. & O'Hanlon, J. (1981). Making interscholastic athletics a winner. N.A.S.S.P. Bulletin, 65, 50-55.
- Promoting citizenship sportsmanship in Iowa schools for 80
   years. (1984). Boone, IA: Iowa High School Athletic
   Association.
- Rehberg, R. A. & Schafer, W. E. (1968). Participation in interscholastic athletics and college expectations.

  American Journal of Sociology, 73, 733-740.
- Schafer, W. E. (1969). Some social sources and consequences of interscholastic athletics: The case of participation and delinquency. <u>International Review of Sport Sociology</u>, 4, 63-82.
- Schafer, W. E. & Armer, J. M. (1968). Athletes are not inferior students. Transaction, 5, 21-26. 61-62.
- Snyder, E. E. & Spreitzer, E. A. (1983). <u>Social aspects of</u> sport (2nd ed.). Englewood Cliffs, N.J.: Prentice-Hall.
- Snyder, E. E. & Spreitzer, E. A. (1977). Participation in sport as related to education expectations among high school girls. Sociology of Education, 50, 47-55.
- Spreitzer, E. A. & Pugh, M. (1973). Interscholastic athletics and educational expectations. <u>Sociology of Education</u>, <u>46</u>, 171-182.

# Summary by the unified high school activities federation.

(1984). Boone, IA: Iowa High School Athletic Association.

Williams, J. M. & White, K. A. (1983). Adolescent status systems for male and females at three age levels.

Adolescence, 28, 381-389.