COMPARING THE ACADEMIC PERFORMANCE OF HIGH SCHOOL ATHLETES AND NON-ATHLETES IN KANSAS IN 2008-2009

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Research Problem

Like other publicly funded entities, the economic recession has impacted school districts across the nation as state budget reductions have forced administrators in many districts to make hard decisions, including eliminating teachers, programs, and extracurricular activities to reduce operating expenses. One program area that often incites intense debate during these tough budgetary discussions is high school sports. Philosophical differences and opinions regarding the contribution that sports make or do not make to the academic performance of participants provide the impetus for this discussion. Empirical evidence has often been contradictory, and even though the Kansas State High School Activities Association emphasizes in its mission statement that participation in high school activities promotes student academic achievement, there is no empirical evidence to support this claim. The purpose of this study was to answer the long-debated question “Do high school sports detract from or contribute to the academic achievement of participants?” Athletic directors, coaches, principals, and administrators in school districts and state-level athletic associations can benefit from the empirical evidence from this recent, state-wide study, which provides evidence that the academic performance of athletes in grades 9-12 in Kansas exceeded the academic performance of non-athletes during the 2008-2009 school year.

Issues

Many individuals have claimed that students who participated in high school sports made higher grades than did non-participants and their participation in sports contributed to their overall education. To encourage students to achieve and stress that participation in high school sports is an earned privilege rather than a right, academic eligibility standards have been implemented in many high schools. Eligibility requirements range from being enrolled in a minimum number of courses to a combination of being enrolled in a minimum number of courses, passing all courses, maintaining a minimum grade point average, and meeting attendance policy requirements. Some proponents of academic eligibility requirements have suggested that sports participation has been a driving force behind students’ interest in attending school and has resulted in students earning higher grades, having higher attendance rates and fewer disciplinary problems, and dropping out of school at lower rates. On the other hand, opponents of academic eligibility requirements have argued that denying sport participation opportunities to academically deficient students could even further contribute to their academic difficulties.

Early studies about whether or not participation in high school sports was associated with higher grades offered little support. One early finding suggested that athletes began their high school years with higher GPAs and these differences in grades did not increase between athletes and non-athletes during the high school years. Others found that athletes either declined in their academic performance or experienced no positive changes relative to non-athletes while in high school.
More recent studies, however, have linked participation in high school sports with higher grades, higher graduation rates, and higher scores on the ACT and state assessments for athletes as compared to non-athletes. One suggested reason for these differences was that students who participated in high school sports reflected a deeper commitment to comply with school rules, resulting in more disciplined behavior, greater effort, and higher grades. Some studies also found that athletes were less likely to drop out of school than were non-athletes, possibly because involvement with teammates enhanced feelings of belonging, helped develop strong social networks, and increased engagement within schools, each serving as a deterrent to dropping out.

Summary

Using data from the Kansas State High School Activities Association and Kansas State Department of Education, this study provided evidence that the academic performance of students in grades 9-12 in Kansas who were athletes (N = 62,297) exceeded the academic performance of students who were non-athletes (N = 77,052) during the 2008-2009 school year. Athletes earned higher grades, graduated at a higher rate, were much less likely to drop out of school, significantly outperformed non-athletes in mathematics and science on the ACT test, and significantly outperformed non-athletes on all Kansas state assessment tests. Several gender and ethnic differences were noted as well.

For self-reported GPA from the ACT test, 80.5% of athletes reported having a 3.0 GPA or higher compared to only 69.5% of non-athletes. By gender, 87% of female athletes reported GPAs of 3.0 or above compared to 75% of female non-athletes. Among male athletes, 74% reported GPAs of 3.0 or above, compared to only 64% of male non-athletes. Across all racial groups, a higher percentage of athletes than non-athletes reported earning a 3.0 GPA or above, with double digit differences among American Indian (16%), Asian (12%), and White (11%) athletes.

Graduation rates revealed similar differences as 98% of athletes graduated compared to 88% of non-athletes. Female athletes graduated at an over 8% higher rate than did female non-athletes, but male athletes graduated at just over an 11% higher rate than did male non-athletes. Graduation rates by ethnicity revealed that athletes graduated at higher rates than non-athletes in all racial categories. Among Black/African Americans, only 79% of non-athletes graduated compared to 97% of athletes. Similarly, 81% of American Indian non-athletes graduated while 98% of athletes completed high school. Finally, 85% of Hispanic/Latino non-athletes graduated, but 95% of athletes earned their high school diplomas.

Athletes also tended to drop out of school much less frequently than did non-athletes. Non-athletes in Kansas were over 15 times more likely to drop out of school than were athletes as 1955 non-athletes dropped out during 2008-2009 compared to only 126 athletes. Male non-athletes were 12 times more likely to drop out of school than were male athletes, while female non-athletes were 24 times more likely to drop out than were female athletes. Likewise, Black/African Americans non-athletes were 16 times more likely to drop out of school than athletes and American Indian non-athletes were nearly 19 times more likely to drop out of school.

As a group, Kansas high school athletes scored significantly higher on the ACT mathematics and science tests than did non-athletes, but non-athletes performed significantly better than athletes in reading. Female athletes scored significantly higher than did male athletes on the ACT in English and reading, while male athletes scored significantly higher than did female athletes on the ACT in mathematics and science. Male non-athletes scored significantly higher on ACT tests than did male athletes in English, reading, and on the composite (combination of all tests) score. Female athletes scored significantly higher on the ACT than did female non-athletes in English, mathematics, science, and on the composite score. White non-athletes scored significantly higher than White athletes in English and reading and White athletes scored higher than White non-athletes in mathematics and science. There were no significant differences between minority athletes and non-athletes.
Scores on Kansas state assessments showed that athletes outperformed non-athletes in all areas and in all years for which data were available. Athletes scored significantly higher than did non-athletes in math, reading, history/government, writing, and science each year since 2006.

Analysis

During a time of economic challenges and tough budget decisions in school districts in Kansas and across the nation, this study provides evidence that participation in high school sports is not detracting from the academic performance of students. Rather, participating in high school sports appears to be enhancing academic performance. Kansas students who participated in high school sports in 2008-2009 earned higher GPA’s, graduated at higher rates, and dropped out of school much less frequently than non-athletes. Additionally, athletes significantly outperformed non-athletes on the ACT math and science tests and Kansas state assessments in math, reading, history/government, writing, and science.

In addition to documenting that high school athletes outperform their non-athlete counterparts in several academic measures, this study suggests that participation in high school sports may be an especially useful means of improving the academic performance and decreasing the dropout rate for two specific groups of students: females and those from ethnic minorities.

Female athletes scored significantly higher in English, mathematics, science, and the composite score than did female non-athletes and 87% of female athletes reported earning a 3.0 GPA or above compared with 75% of female non-athletes. While there were no significant differences between athletes and non-athletes on ACT scores for ethnic minorities as a large group, across all ethnicities a higher percentage of athletes reported earning a 3.0 GPA or above.

Interesting differences also surfaced with dropout and graduation rates. While specific factors involved with a high school student’s decision to drop out of school were unknown, data strongly suggest that participation in high school sports may positively affect persistence in school for these two groups of students. Only 36 female athletes dropped out of school in 2008-2009 compared to 878 female non-athletes. Similarly, only 13 (.30%) Black/African American athletes dropped out of school compared to 213 (2.9%) non-athletes; 2 (.26%) American Indian athletes dropped out compared to 37 (3.2%) non-athletes.

Graduation rates revealed that among Black/African Americans, 97% of athletes graduated compared to only 79% of non-athletes. Similarly, 98% of American Indian athletes completed high school, compared to only 81% of non-athletes. Finally, 95% of Hispanic/Latino athletes earned their high school diplomas, compared to only 85% of non-athletes. Given the importance of education to each student’s future, graduating from high school can enable students to pursue additional education and improve their future earning potential.

Discussion

Despite estimates that high school sports and other extracurricular activity programs typically account for only 1-3% of a school district’s overall budget, some districts in Kansas and across the country have eliminated junior high or high school sport programs. Other school districts continue to evaluate sport programs as possible areas for budget reductions.

School district administrators, athletic directors, principals, coaches, and educators across Kansas can use this information to defend the allocation of limited financial resources to support high school sports within their local school districts. Participation in high school sports does not detract from academic performance. Instead, participation in high school sports is associated with higher academic performance, higher graduation rates, lower dropout rates, and higher scores on Kansas state assessments. Administrators at the Kansas State High School Activities Association and other state and national associations that support high school sports can use this recent evidence to battle for funding and against potential budget reductions.
Results from this study also have important policy implications. School district leaders considering adopting pay-to-pay policies for high school sports need to consider the ramifications these policies may have on their ethnic minority population, especially if a large percentage of students are from the urban core. Data from this study suggests that participating in high school sports helps ethnic minority students earn higher grades, stay in school, and graduate. Regardless of ethnicity, pay-to-play policies discriminate against students who do not have the financial resources to participate, possibly eliminating the only sports participation opportunity these students have.

Though not directly examined, results also suggest that the Kansas eligibility requirement that students must pass five units of credit each semester to retain eligibility to participate in high school sports appears to be successful. This policy may contribute to some athletes taking their school work more seriously.

This study provides baseline information for subsequent studies in Kansas and other states. The results of future studies, especially those using longitudinal data, could enable educators and proponents of high school sports to more confidently state that participation in high school sports is consistently associated with higher levels of academic performance across a variety of measures.