

# Comparing the Academic Performance of High School Athletes and Non-Athletes in Kansas in 2008-2009

Angela Lumpkin, University of Kansas, and Judy Favor, Baker University

## Abstract

The academic performance of students in grades 9-12 who did or did not participate in high school sports in Kansas during the 2008-2009 school year was analyzed. In addition to overall comparisons between athletes and non-athletes on GPAs, graduation rates, number of dropouts, ACT test scores, and state assessments, some gender, ethnicity, and grade comparisons were made. High school athletes earned higher grades, graduated at a higher rate, dropped out of school less frequently, and scored higher on state assessments than did non-athletes; results on ACT tests were mixed. Differences between athletes and non-athletes were found for males and females across all academic performance measures, with females contributing more to the differences between athletes and non-athletes on GPAs and not dropping out of school. Whites contributed more to the differences between non-athletes and athletes than did the other racial categories for GPAs, graduation rates, and not dropping out of school.

## Key Findings

- Of the 139,349 students enrolled in grades 9-12 in Kansas high schools during the 2008-2009 school year, 62,297 (44.7%) were athletes, 67,651 (48.5%) were females, and 103,493 (74.3%) were White.
- Among the 9,347 athletes who reported their GPAs on the ACT questionnaire, 80.1% reported a GPA of 3.0 or higher, as compared to 70.5% of the 9,221 non-athletes who reported a 3.0 GPA or higher. Additionally, 51.8% of athletes reported having a GPA of 3.5 or above, while 39.8% of non-athletes reporting this level of performance.
- Of the 17,249 non-athletes for whom data were available, 88.1% graduated with 2,323 failing to graduate. Of the 12,218 athletes, 97.6% graduated and 303 failed to graduate.
- The number of students who dropped out of Kansas high schools in 2008-2009 was 2,016 across grades 9-12; 94% were non-athletes.
- Differences between athletes and non-athletes were found for males and females across all academic performance measures, with female athletes contributing more to the differences between athletes and non-athletes on GPAs and not dropping out of school.
- Both male and female athletes reported higher GPAs than did non-athletes.
- Female athletes and non-athletes had higher GPAs than did male athletes and non-athletes.
- A smaller percentage of male non-athletes graduated than did female non-athletes, but male and female athletes graduated at almost identical rates and graduated at much higher rates than non-athletes.
- Female athletes scored significantly higher than did male athletes on the ACT in English and reading, while male athletes scored significantly higher than 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 (combination of all tests) score.
- Athletes across all ethnicities reported higher GPAs and were more likely to graduate than were non-athletes.
- Whites contributed more to the differences between non-athletes and athletes than did the other racial categories for GPAs, graduation rates, and not dropping out of school.
- White non-athletes performed significantly better than did White athletes in English and reading, while White athletes outperformed White non-athletes in mathematics and science.
- There were no significant differences found between minority non-athletes and athletes.

\*For a copy of the complete study or additional information, contact Angela Lumpkin, HSES, University of Kansas, Lawrence, KS 66045, [alumpkin@ku.edu](mailto:alumpkin@ku.edu), Telephone: 785-864-0778

## Executive Summary

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Using data from the Kansas State High School Activities Association and the 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, and scored higher on state assessments than non-athletes. Athletes significantly outperformed non-athletes on the mathematics test of the ACT, while non-athletes outperformed athletes in reading test of the ACT.

Differences between athletes and non-athletes were found for males and females across all academic performance measures, with female athletes contributing more to the differences between athletes and non-athletes on GPAs and not dropping out of school. Both male and female athletes reported higher GPAs than did non-athletes. Female athletes and non-athletes had higher GPAs than did male athletes and non-athletes. A smaller percentage of male non-athletes graduated than did female non-athletes, but male and female athletes graduated at almost identical rates and graduated at much higher rates than non-athletes. Female athletes scored significantly higher than did male athletes on the ACT in English and reading, while male athletes scored significantly higher than 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.

Athletes across all ethnicities reported higher GPAs and were more likely to graduate than were non-athletes. Whites contributed more to the differences between non-athletes and athletes than did the other racial categories for GPAs, graduation rates, and not dropping out of school. White non-athletes performed significantly better than did White athletes in English and reading, while White athletes outperformed White non-athletes in mathematics and science. There were no significant differences found between minority non-athletes and athletes. Very limited longitudinal Kansas state assessment data suggested that grade level of athletes performed significantly higher than did non-athletes in mathematics and reading before entering high school.

This study provided evidence that participation in high school sports is associated with higher academic performance across several measures. School administrators, coaches, and other educators can use this evidence to defend the allocation of limited financial resources to support high school sports. Though not directly examined, these 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 may contribute to some athletes taking their school work more seriously. Coaches and other educators could plausibly argue that high school sports can help teach and reinforce greater self-discipline that assists students in managing their time and fulfilling their academic responsibilities. While specific factors involved with a high school student's decision to drop out of school were unknown, data strongly suggested that participation in high school sports may positively affect persistence in school, especially for female 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.

Administrators at the Kansas State High School Activities Association, athletic directors, principals, coaches, and others throughout the state educational system now have empirical evidence to confidently state that participation in high school sports does not detract from academic performance. Instead, participation in high school sports is associated with higher academic performance. High school athletes in Kansas in 2008-2009 earned higher grades, graduated at higher rates, dropped out of school less, and scored higher on state assessments than did non-athletes.

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