

**Relationships between Student Substance Use, Risk, and Protection
in Kansas Schools and Students' Academic Test Scores
Summary of Findings and Implications**

This study examined relationships between the demographic characteristics of student populations, school building prevalence rates of student drug use, average levels of risk and protective factors reported by students in schools, and average reading and math test scores in Kansas schools each year from 2000 to 2003.

Results indicated:

- The percent of students eligible for free and reduced lunch and the percent of nonwhite students in schools were negatively related to average reading and math achievement test scores. Schools with higher proportions of students eligible for free and reduced lunch and schools with higher proportions of nonwhite students tended to have lower average test scores. These demographic factors accounted for an average of 17% to 31% (percent eligible for free and reduced lunch) and 6% to 27% (percent nonwhite) of the variation across schools in test scores. The percent of male students in a school was not related to test scores.
- The prevalence of student drug use in schools was negatively related to average reading and math achievement test score. Schools with higher prevalence of student drug use tended to have lower test scores. Relationships were stronger for current marijuana use and cigarette smoking than for current alcohol or smokeless tobacco use. Student substance use accounted for an average of 1% to 17% of the variation in test scores across schools.
- Higher levels of risk factors reported by students in a school were associated with lower average reading and math achievement test scores, accounting for an average of 1% to 25% of the variation across schools in test scores.
- Higher levels of protective factors reported by students in a school were associated with higher average reading and math achievement test scores, accounting for an average of 1% to 23% of the variation across schools in test scores.
- These associations were found even after controlling for the demographic characteristics of student populations. Moreover, substance use and levels of risk/protection reported by one grade of students in a school was related, in most cases, to the average test scores of students in another grade in the same school. This latter finding suggests that substance use and levels of risk and protection experienced by students on average affect all students in the school, not just those directly reporting substance use, risk and protection.

Implications:

- Universal prevention programs that reduce substance use and risk factors while increasing protective factors among students in a school are likely to increase the average test scores of students in that school.
- Schools should monitor levels of substance use and risk and protection among their students in order to inform strategic school improvement efforts.