What Works Clearinghouse

U.S. DEPARTMENT OF EDUCATION



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WWC Quick Review of the Article "Outcomes of a Prospective Trial of Student-Athlete Drug Testing: The Student Athlete Testing Using Random Notification *(SATURN)* Study"[†]

What is this study about?

This study examines whether the Student Athlete Testing Using Random Notification *(SATURN)* program affects illicit drug and alcohol use among student athletes.

About 1,400 freshman and sophomore student athletes in 18 Oregon high schools participated in the study.

Nine high schools were randomly assigned to implement *SATURN* immediately, and the other nine were assigned to a control group that deferred *SATURN* implementation until after the study period.

Self-reported rates of illicit drug and alcohol use were collected through multiple rounds of surveys that occurred over a two-year period.

What is the SATURN Drug Testing Program?

Random testing for illicit drug and alcohol use among student athletes

Student athletes are randomly selected for unannounced drug tests

Each athlete is tested about once a month throughout the school year

Students who test positive are referred to mandatory counseling and their parents are notified

Students who refuse counseling are barred from participating in sports

WWC Rating

The research described in this article is not consistent with WWC evidence standards

Cautions: The study experienced high rates of sample attrition. Seven of the 18 study schools (39%) left the study and were not included in the analysis. Some students at the remaining schools were excluded for not completing consent forms; the study authors do not report how many. Of the students who provided consent, 29% of *SATURN* students and 19% of control students did not complete a survey the following spring, and attrition rates were higher in later rounds of data collection.

In addition, the *SATURN* and control students were different at baseline. *SATURN* students were older, more likely to be male, and more likely to have used steroids in the past year. These differences could bias the results. The study authors did not report adjusting for these differences when estimating *SATURN's* effects.

What did the study authors report?

The study authors report lower rates of prior-year drug use among *SATURN* students relative to control students at two of the four follow-up points. They find no statistically significant differences in past-month use at any follow-up.

However, the WWC does not consider these results to be conclusive because of the high rate of sample attrition and because of initial differences between the research groups that may bias their results.

[†]Goldberg, L., Elliot, D., MacKinnon, D. P., Moe, E. L., Kuehl, K. S., Yoon, M., Taylor, A., & Williams, J. (2007). Outcomes of a prospective trial of student-athlete drug testing: The Student Athlete Testing Using Random Notification (*SATURN*) Study. *Journal of Adolescent Health*, *41*, 421–429.

WWC quick reviews are based on the evidence published in the report cited and rely on effect sizes and significance levels as reported by study authors. WWC does not confirm study authors' findings or contact authors for additional information about the study.