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COMMENTARY

“Study Finds No Sign That Testing Deters Students’ Drug Use”

New York Times

*Page One, May 17, 2003*¹

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The study featured in the article: “Relationship between student illicit drug use and school drug-testing policies” By Yamaguchi, Royoko, Johnston, Lloyd D and O’Malley, Patrick M. Published American School Health Association Journal of School Health.

*April 1, 2003*²

The research on student drug testing reported in “Study Finds No Sign That Testing Deters Students’ Drug Use,” on page one, May 17, 2003, made an important point, a point that was completely overlooked in the related *New York Times* article.

A Summary of the Study

The authors of this study compared the drug-using rates of students in the 8th, 10th and 12th grades from a sample of 722 of the nation’s middle schools and high schools for the years 1998 to 2001. These schools were categorized on the basis of each principal’s answer to this question: “In the school year, did your school test any students for illicit drug use?” About 18% of the schools said “yes” and 82% said “no.” Those schools that said “yes” were further subdivided into schools that conducted either random testing or “suspicion-based” testing. Principals were asked which groups of students at their schools were tested: students participating on an athletic team, students in other extracurricular activities, students selected on the basis of suspicion or cause, students on school probation, students who volunteered to be tested, all students, and “other.” Principals checked as many of those categories as applied to the drug tests conducted each year at their schools. The principals were then asked to describe the reasons for drug testing at their school with these options: based on suspicion or cause, routine drug testing, students or their parents volunteered, mandated testing, and “other.”

Data was obtained about the school, including size, grade-levels taught, service area population density, student socio-economic level and various other attributes of the school population.

Drug use rates were compared between 18% of the schools reporting that they tested “any students for illicit drug use” and the 82% of the schools that did not. The results showed no consistent difference between the schools that did test and those that did not.

Flawed Test Design

It is not surprising that no difference in drug use rates was found between these two heterogeneous groups. In fact, it is almost inconceivable that there would be any difference based on this question because the study’s design is fundamentally flawed. There is no assessment of how many drug tests were done at each school or whether there was any sort of student drug testing program underway at each school. In this study, a school that did a single drug test in a year would be included in the “yes” category, along with a school that had a comprehensive drug prevention program that incorporated carefully structured student drug testing.

If the study had ended at that point, there would be no complaint and no story for the *New York Times*. However, this example of the reckless misuse of survey data went even further. The study contained this obligatory disclaimer,

*“This study explored the association between student drug use and drug-testing policies in schools. While lack of evidence for the effectiveness of drug testing is not definitive, results suggest that drug testing in schools may not provide a panacea for reducing student drug use as some (including some on the Supreme Court) had hoped.” **

This is the study’s point: When all the schools that did any drug testing at all were compared to the schools that did not, there was no consistent difference in rates of student drug use found between the two groups of schools.

Clearly, the study did not establish that “student drug testing was not effective in reducing drug use,” as claimed by the University of Michigan.³ That statement and the headline in the *New York Times* not only over-state the study’s modest conclusions, but they undermine the credibility of the study’s authors and sponsors. Worse yet, these unsubstantiated claims do serious harm to the efforts now being made across the country to use non-punitive, health-oriented student drug testing to deter and identify drug abuse problems. Used in this way, student drug testing is effective in preventing student drug use and in helping students and their families address existing problems..

The study in the *American School Health Association Journal of School Health* and the article in the *New York Times* will not further this important work because the study has serious flaws. Any

***Note:** The US Supreme Court has found in two landmark cases that mandatory, random drug testing in public school passes Constitutional muster. There never was a Constitutional question about private schools conducting drug tests or about public or private schools conducting “for-cause” drug testing. The only legal issue before the Supreme Court has been whether public schools could require large groups of students to take random drug tests without individualized suspicion that the students to be tested were drug abusers. To date, the answer to that question has been “yes,” if the tests are well-structured, health-orientated and reasonably administered.



data from it is inadequate to support the policy positions taken by the quoted experts and by the discussion in the article itself.

No one I know has ever claimed that student drug testing is “a panacea for reducing student drug use” or even that student drug testing alone is a sensible, let alone an ideal, drug prevention program for any school. The policy question facing schools today is whether well-structured, non-punitive student drug testing deters illegal drug use and helps reveal the need for

intervention earlier in the cycle of drug dependence. This study failed to address this important question.

The failure of this study is in its design, not in the number of schools studied or in the school years covered. Thus, it is no defense of the author’s exaggerated, politicized claims to extend the study into the 2002 school year. Nor can the study be defended by calling it a “study of how student drug testing is now conducted.” The authors did not study any of the wide variety of student drug testing programs now being conducted in the United States. They simply lumped all of the schools doing any form of testing together and compared them with schools that do not test. This study design is clearly insufficient as the basis for any conclusions about specific student drug testing programs. To imply otherwise is unreasonable.

The *New York Times* headline made clear just how far from this terribly limited data the quoted experts, including one of the authors of the study, have strayed. This study is the equivalent of taking a sample of all of the patients in the country over the period of a year who took one dose of a blood pressure medicine, and comparing them to patients who took no blood pressure medicine, and, finding no difference in the blood pressures in the two groups, concluding that antihypertensive medicines do not work.

To compound the problem of the study’s inadequate design, the article quotes experts who concluded from this study that drug education (not student drug testing) “is the most effective weapon against substance abuse.” Do the researchers at the University of Michigan think that a study comparing a sample of all schools in the country doing any sort of drug education with all the schools without drug education would be a reasonable test of drug education?

The best study design that could establish whether student drug testing produced a deterrent effect would be a randomized experimental design or an examination of longitudinal results from a “natural experiment” (such as studying the same school over time, before and after student drug testing). This study did neither. Instead, it was a simple “cross-sectional” design that merely compared schools to each other in two meaningless categories – those whose principals said “yes” and those whose said “no” to that single, simplistic question.

Here is the conclusion the authors of this study should have reached based on their published findings,

This study did not find a difference between a sample of schools that did any sort of drug testing with schools that did not do any testing at all. To answer the question of the deterrent effectiveness of student drug testing, we need a well-designed study conducted



in specific schools, using specific drug testing programs. Results in these schools should be compared to their experiences before conducting drug tests, as well as to matched schools without drug tests.

The University of Michigan study is not the last word on student drug testing as the authors appear to imply. It is a call for the sort of research needed to answer the important questions about both cost and effectiveness of student drug testing.

Designing an Effective Study of Student Drug Testing' Impact

To properly assess the value of student drug testing, we need a controlled study that is founded on solid research design principles. It would identify student drug use rates in schools using several different, adequately implemented student drug testing approaches and compare them with schools without student drug testing. All of the schools in both groups would use standard drug education approaches.

Not only would a well-designed study show whether student drug testing works to reduce student drug use, it would also show which of the several different approaches to student drug testing is the most cost-effective. Such studies are not difficult to conduct, but they require careful characterization of the specific student drug testing programs. Further, a good study would have to measure drug use rates “before” and “after” the implementation of each school’s student drug testing programs.

Three recent examples of studies which have shown encouraging, if preliminary, results about the effectiveness of student drug testing: the New Jersey study,⁴ the Indiana study,⁵ and the Oregon study⁶. These three studies examined specific school drug testing programs and their effects on the drug use rates in those schools both before and after the implementation of the SDT program. All showed that student drug testing reduced student drug use.

Last year, the Institute for Behavior and Health (IBH) concluded a pilot study for the U.S. Department of Education⁷ which also concluded that school drug testing programs are effective in decreasing student drug use. IBH’s study revealed another important finding:

“All of the SDT programs were based upon a health and safety rationale, with the purpose of prevention rather than punishment. In every school surveyed the SDT program was just one part of a larger, comprehensive initiative to keep students safe from drugs.”

Approaching student drug testing with this underlying principle provides a foundation on which schools can build their own effective and comprehensive SDT programs.



Conclusion: Asking the Right Questions

Posing the policy question for schools today as if schools face a choice of either drug education or student drug testing, as the study and the *New York Times* article does, is misleading. No one has claimed that student drug testing alone is the magic bullet to reduce the nation's lamentably high levels of teenage drug use, or that drug education is not effective. The question is this, "Does a well-designed student drug testing program enhance other school and community efforts to reduce teenage drug use?"

Drug testing has been successfully used for decades in drug treatment, the criminal justice system and in the workplace. Testing linked to consequences clearly does deter drug use in every setting where it has been studied. Hundreds of schools in the US have begun pioneering efforts to add student drug testing to their comprehensive efforts to reduce teenage drug use. The study reported in this article does a disservice to this important effort, an effort which holds the promise of dramatically reducing the recruitment of new users of illegal drugs in this country, most of whom are teenagers in schools.

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References

¹Study Finds No Sign That Testing Deters Students' Drug Use. (2003, May 17). *The New York Times*, p. A1.

²Yamaguchi R., Johnston L.D. & O'Malley P.M. (2003). Relationship between student illicit drug use and school drug-testing policies. *American School Health Association Journal of School Health*. No.4, 73:159-179.

³*Student drug testing not effective in reducing drug use*. University of Michigan News Service. Available at: <http://www.umich.edu/news>

⁴*The American Drug and Alcohol Survey* is available from RMBSI, Inc., 419 Canyon, Suite 316, Fort Collins, CO 80521, telephone 800-447-6354; the *Hunterdon Central Study* is available from David G. Evans, Esq. at the Drug-Free Schools Coalition at 203 Main St., PMB 327, Flemington, NJ 08822, telephone 908-284-5080, fax 908-284-5081.

⁵ *The Effectiveness of Legality of Random Drug Testing Policies*. Joseph R. McKinney, J.D., Ed.D., Chair and Professor, Department of Educational Leadership, Ball State University adjunct Professor of Law, Indiana University-Bloomington School of Law.
Available at: <http://www.studentdrugtesting.org/Effectiveness.htm>

⁶ Linn Goldberg, M.D. et al. (2003). Drug Testing Athletes to Prevent Substance Abuse: Background and Pilot Study Results of the SATURN (Student Athlete Testing Using Random Notification) Study. Oregon Health and Science University, Portland, Oregon. *Journal of Adolescent Health*. 32:16-25.

⁷*Report of a Preliminary Study: Elements of a Successful School-Based Student Drug Testing Program*. Robert DuPont, M.D., Teresa G. Campbell, Ph.D., and Jacqueline Mazza. Institute for Behavior and Health, Inc. 6191 Executive Blvd., Rockville, Maryland. Telephone 301-231-9010.
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