

The Case for Human Ingenuity: How Adderall Has Sullied the Game

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*Thinking is the hardest work there is, which is the probable reason why so few engage in it.*¹

I. INTRODUCTION

Human innovation has moved at an incredible pace in the last century. Instant messaging has changed how society communicates, while new medicines have made once-deadly viruses nearly obsolete.² Unfortunately, some innovations have fallen victim to unforeseeable abuse. One such innovation is human growth hormone (HGH).³ Scientists first developed HGH to treat children with growth hormone deficiency.⁴ In recent years, however, professional athletes have used HGH to gain muscle mass and rapidly heal injuries.⁵

Traditionally, professional sports organizations have vigilantly monitored athletes for performance-enhancing drug abuse.⁶ Most re-

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1. Henry Ford, <http://www.quotedb.com/quotes/2775> (last visited Sept. 23, 2008).

2. See, e.g., Anabel Quan-Haase, *Instant Messaging on Campus: Use and Integration in University Students' Everyday Communication*, 24 INFO. SOC'Y 105 (2008), available at http://www.allacademic.com/meta/p_mla_apa_research_citation/1/7/7/1/9/pages177193/p177193-.php; Bonnie A. Maybury Okonek, *Development of Polio Vaccines*, <http://www.accessexcellence.org/AE/AEC/CC/polio.php> (last visited Sept. 23, 2008).

3. The pituitary gland produces growth hormones that stimulate the growth of the muscular and skeletal systems. Tom Fordyce, *Human Growth Hormone Explained*, BBC, July 27, 2003, http://news.bbc.co.uk/sport2/hi/front_page/3101343.stm (last visited Sept. 23, 2008). Prior to the creation of synthetic HGH, the only method of obtaining HGH was by removing the pituitary glands from corpses. *Id.*

4. Somatropin, *Human Growth Hormone History*, <http://www.somatropin.net/hgh-history.htm> (last visited Sept. 23, 2008). Growth hormones are the primary chemicals that help people grow at a normal rate. Patricia A. Rieser, *Human Growth Deficiency*, http://www.hgfound.org/pub_growth.html (last visited Sept. 23, 2008). Typically, doctors diagnose a child with growth hormone deficiency when the pituitary gland produces little or no growth hormones. *Id.*

5. GEORGE J. MITCHELL, REPORT TO THE COMMISSIONER OF BASEBALL OF AN INDEPENDENT INVESTIGATION INTO THE ILLEGAL USE OF STEROIDS AND OTHER PERFORMANCE ENHANCING SUBSTANCES BY PLAYERS IN MAJOR LEAGUE BASEBALL (Dec. 13, 2007), <http://files.mlb.com/mitchrpt.pdf>.

6. See Sal Ruibal, *Tackling Longtime Issue of Drugs No. 2 on Sports Changes Wish List*, USA TODAY, Sept. 9, 2004, http://www.usatoday.com/sports/2004-09-09-ten-changes-drugs-testing_x.htm.

cently, Senator George Mitchell released a 409-page report detailing the findings of his twenty-month investigation into the use of steroids and HGH in Major League Baseball.⁷ The day after Senator Mitchell released his report, President Bush—a former co-owner of the Texas Rangers—said, “[W]e can jump to this conclusion: that steroids have sullied the game.”⁸ The performance-enhancing drug epidemic is not restricted to the baseball diamond. Unfortunately, the problem has leaked into the classroom where students are abusing Adderall and other similar cognitive enhancers to raise their grades artificially.⁹

Adderall is a stimulant medication prescribed to help individuals with Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD).¹⁰ Adderall has become a study drug primarily because of its potential to increase an individual’s ability to focus and concentrate on a single task.¹¹ In the last decade, Adderall abuse—taking the drug without a legal prescription—has significantly risen on college campuses.¹² As such, Adderall abuse on college campuses has the potential to taint collegiate academics just as the abuse of performance-enhancing drugs has tainted Major League Baseball.¹³

7. Mitchell, *supra* note 5. Senator Mitchell’s report specifically named eighty-six former and current baseball players who violated Major League Baseball’s performance-enhancing drug ban. ESPN, *Mitchell Report: Baseball Slow to React to Players’ Steroid Use*, Dec. 14, 2007, <http://sports.espn.go.com/mlb/news/story?id=3153509>. Of the eighty-six individuals mentioned, Roger Clemens has become the athlete most associated with the Mitchell Report. Ronald Blum & Howard Fendrich, *Mitchell Report: Clemens to be Focus of Drug Hearing, Pettite Spared*, HUFFINGTON POST, Feb. 12, 2008, http://www.huffingtonpost.com/2008/02/12/mitchell-report-clemens-_n_86197.html.

8. *Bush Says Steroids Have ‘Sullied’ Baseball*, FOX NEWS, Dec. 14, 2007, <http://www.foxnews.com/story/0,2933,316849,00.html>.

9. Brittany Levine, *Weekly Check Up: Adderall Abuse*, THE GW HATCHET, Dec. 11, 2006, <http://media.www.gwhatchet.com/media/storage/paper332/news/2006/12/11/Life/Weekly.Check.Up.A.dderall.Abuse-2531741.shtml>. Typically, students who abuse Adderall will neglect their studies throughout the semester and take Adderall to help them cram the night before an exam. *Id.*

10. PHYSICIANS’ DESK REFERENCE 3164 (Thompson PDR, 61st ed. 2007). ADHD is the most common behavioral disorder in children. Department of Health and Human Services: Centers for Disease Control and Prevention, *What is Attention-Deficit/Hyperactivity Disorder (ADHD)?*, Sept. 20, 2005, <http://www.cdc.gov/ncbddd/adhd/what.htm>. Doctors typically diagnose an individual with ADHD if they exhibit a high “level of inattention, impulsive hyperactivity, or both” at a level higher than normal. *Id.*

11. *See Adderall Abuse on the Rise*, THE SHIELD, Aug. 9, 2008, <http://media.www.usishield.com/media/storage/paper605/news/2007/12/06/AssociatedPress/Adderall.Abuse.On.The.Rise-3134861.shtml>. As a stimulant, Adderall increases the level of dopamine in the brain. Julie Dear-dorff, *Revvng up the Brain*, CHI. TRIBUNE, Mar. 7, 2004, http://www.cognitiveliberty.org/neuro/ritalin/revvng_the_brain.html. Dopamine is the chemical that controls movement, attention, and other important cognitive functions of the brain. *Id.* As a result, stimulants like Adderall help the brain work more efficiently. *Id.* As one expert put it, “[T]he effects can be as dramatic as finding the right pair of eyeglasses for nearsightedness.” *Id.*

12. *See* Andrew Jacobs, *The Adderall Advantage*, N.Y. TIMES, July 31, 2005, <http://www.nytimes.com/2005/07/31/education/edlife/jacobs31.html>. According to statistics from Drug-Free America, about ten percent of the twenty-two million students in grades seven through twelve have used stimulants like Ritalin and Adderall without a prescription. Joel Garreau, *A Dose of Genius*, WASH. POST at D01 (June 11, 2006), *available at* <http://www.washingtonpost.com/wp-dyn/content/article/2006/06/10/AR2006061001181.html>.

13. On August 7, 2007, Barry Bonds hit his 756th homerun and eclipsed Hank Aaron as the number one slugger in baseball history. Dave Sheinin, *Bonds Sets Baseball’s Home Run Record*, WASH. POST at A01 (Aug. 8, 2007), *available at* <http://www.washingtonpost.com/wp-dyn/content/article/2007/08/07/AR2007080702301.html>. Bonds’ feat, however, has been criticized

This Note has two sections: the background and the analysis. The background section is devoted to explaining the composition of Adderall and exploring essential drug-testing jurisprudence. The analysis section will use the information supplied in the background to make a rational argument for the implementation of a drug-testing procedure that will deter and punish Adderall abuse. The purpose of this Note is not to promote one form of regulation over another; rather, it is to give direction to administrators, teachers, and students who want to ensure an atmosphere of academic integrity on their campuses. The primary motive of this Note, legal theory aside, is to bring forward an important issue—the deterioration of human ingenuity.

II. BACKGROUND

The purpose of this section is fourfold. First, it will explain the general make-up of Adderall, its benefits, and its potential side effects. Second, the background will discuss the performance-enhancing properties of Adderall, and will explore the problem of over-prescription of ADHD medication like Adderall. Third, it will examine the recent trend of Adderall abuse in academia, both on college campuses and in high schools, and discuss whether schools should punish those who abuse it. Fourth, it will examine pertinent case law discussing the Fourth Amendment and the government's latitude to drug test students at both the college and high school levels. Finally, this section will conclude with an examination of the drug-testing policies employed in college and professional athletics.

A. Adderall

Adderall is an integral drug used in treatment programs to stabilize the effects of behavioral syndromes in individuals with ADD or ADHD.¹⁴ There are currently two commercial versions of Adderall:

based on allegations that he took performance-enhancing drugs to achieve it. Kate Ravilious, *Barry Bonds Steroid Debate Highlights History of Drugs in Sports*, NAT'L GEOGRAPHIC NEWS, June 22, 2007, <http://news.nationalgeographic.com/news/2007/06/070622-barry-bonds.html>.

A student at Ole Miss raised his GPA from 1.5 to 3.6 after he started taking Adderall. Steven Wright, *Use of Adderall Rising*, THE DAILY MISSISSIPPIAN, July 1, 2008, <http://media.www.thedmonline.com/media/storage/paper876/news/2005/07/26/News/Use-Of-Adderall.Rising-1593437.shtml>. In a recent New York Times article the senior vice president of human resources for InterActiveCorp stated, "In his 15 years as a human resources professional . . . he has found that a young applicant's [GPA] is the best single predictor of job performance in the first few years of employment." David Koepfel, *Those Low Grades in College May Haunt Your Job Search*, N.Y. TIMES, Dec. 31, 2006, <http://www.nytimes.com/2006/12/31/jobs/31gpa.html?partner=rssnyt&emc=rss>. A National Association of Colleges and Employers survey found that sixty-six percent of employers screen potential hires by GPA, and that fifty-eight percent of employers "would be much less likely to hire" an applicant with a GPA less than 3.0. *Id.* Companies that rely heavily on GPAs for hiring decisions believe higher GPAs "demonstrate a strong work ethic and smarts." *Id.*

14. PHYSICIANS', *supra* note 10. Treatment programs typically target symptoms like moderate to severe distractibility, short attention span, hyperactivity, emotional liability, and impulsivity. *Id.*

Adderall and Adderall XR.¹⁵ Adderall XR is the longer-lasting form of Adderall available as an extended release tablet.¹⁶

Adderall tablets are a mixture of d-amphetamine and l-amphetamine.¹⁷ The effects of Adderall reach their peak approximately three hours after a single dose—either ten or thirty milligrams—is taken by a healthy individual.¹⁸ Like all drugs, Adderall use has several potential side effects.¹⁹ Nursing mothers may excrete the drug in breast milk, and there have been documented cases of Adderall causing impotence in men.²⁰ Additionally, children taking Adderall may experience adverse growth effects including stunted growth.²¹ Although rare, sudden death is possible for individuals taking Adderall with structural cardiac abnormalities.²²

In addition to medication, the treatment of ADHD typically includes: (1) psychotherapy to help individuals with ADHD come to terms with the disorder; (2) behavioral therapy to help people suffering from ADHD work through immediate issues; (3) social skills training to aid in the development of relationships; and (4) support groups to connect with other people with ADHD. NAT'L INSTITUTE OF MENTAL HEALTH, ATTENTION DEFICIT HYPERACTIVITY DISORDER, <http://www.nimh.nih.gov/health/publications/adhd/nimhadhdpub.pdf>.

15. PHYSICIANS', *supra* note 10, at 3164, 3166.

16. *Id.* at 3166. Adderall XR works effectively for up to twelve hours. Shire, *How Adderall XR Works*, http://www.adderallxr.com/about_adderallxr/about-works.asp (last visited Sept. 23, 2008). The "XR" stands for extended release. Kristi Monson, *Adderall Abuse*, MEDTV, Feb. 2, 2007, <http://adhd.emedtv.com/adderall/adderall-abuse.html>.

In 2005, Canada temporarily banned Adderall XR. Bio-Medicine, *Canada Withdraws ADHD Drug Adderall XR*, Feb. 15, 2005, <http://www.bio-medicine.org/medicine-news/Canada-withdraws-ADHD-drug-Adderall-XR--3248-1/>. Canadian authorities believed that Adderall XR directly caused the sudden death of twenty people. *Id.* Adderall has been linked to twenty sudden deaths and twelve strokes, most occurring in children. Alan Greene, *Canada Bans Adderall Xr . . .*, Dec. 1, 2005, <http://www.webmd.com/add-adhd/canada-bans-adderall-xr>. After some inconclusive research, however, Canadian authorities reauthorized the distribution of the drug. Jim Rosack, *Canada Reverses Ban on ADHD Medication*, PSYCHIATRIC NEWS, Oct. 7, 2005, <http://pn.psychiatryonline.org/cgi/content/full/40/19/2>.

17. PHYSICIANS', *supra* note 10, at 3164. When amphetamines are synthesized it creates two molecules known as d-amphetamine and l-amphetamine. ALBERTA ALCOHOL AND DRUG ABUSE COMMISSION, BEYOND THE ABCS: AMPHETAMINES, http://www.aadac.com/documents/beyond_abc_s_amphetamines.pdf. D-amphetamine, also known as dextroamphetamine, is a psychostimulant that helps increase awareness and energy while decreasing fatigue and appetite. Karl Harrison, *Dextroamphetamine*, <http://www.3dchem.com/molecules.asp?ID=401> (last visited Sept. 23, 2008). Pharmacologically, d-amphetamine is 1.5 to 2 times more potent than the combination of d-amphetamine and l-amphetamine, and 3 to 4 times more potent than l-amphetamine. John E. Owen, Jr., *The Influence of Di-, D-, and L-amphetamine and D-methamphetamine on a Fixed-Ratio Schedule*, 3 J. EXPERIMENTAL ANALYSIS BEHAVIOR 293, 294 (1960), available at <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1404035>. L-amphetamine, also known as levoamphetamine, acts more on the cardiovascular system. ALBERTA ALCOHOL AND DRUG ABUSE COMMISSION, *supra*.

18. PHYSICIANS', *supra* note 10, at 3164.

19. See SHIRE, ADDERALL XR MEDICATION GUIDE, http://www.adderallxr.com/assets/pdf/prescribing_information.pdf.

20. PHYSICIANS', *supra* note 10, at 3165; see FDA PATIENT INFORMATION SHEET, ADDERALL AND ADDERALL XR EXTENDED-RELEASE CAPSULES, <http://www.fda.gov/CDER/Drug/InfoSheets/patient/AdderallPatientSheet.pdf>.

21. PHYSICIANS', *supra* note 10, at 3165. A study published in the August 2007 issue of the *American Academy of Child & Adolescent Psychiatry* concluded that children taking short-acting ADHD medication were about an inch shorter and weighed 4.4 pounds less than their peers. Terry Matlen, *Do Stimulants Stunt Growth?*, HEALTHCENTRAL, May 20, 2008, <http://www.healthcentral.com/adhd/c/57718/28350/stimulants-growth/2>. A 2008 study, however, found that children taking the extended release forms of ADHD medication exhibited normal growth but less than average body mass index. *Id.*

22. PHYSICIANS', *supra* note 10, at 3164-65.

Individuals who take an amphetamine, such as Adderall, are at risk of developing an intense dependency on the drug.²³ As a result, the Drug Enforcement Agency (DEA) has classified Adderall as a schedule II substance.²⁴ Extensive abuse may cause extreme fatigue and depression.²⁵ Additionally, Adderall abuse has the potential to lead to a form of psychosis indistinguishable from schizophrenia.²⁶ Adderall use may also lead to a myriad of nervous system anomalies including seizures, euphoria, headaches, and dizziness.²⁷

The amount of Adderall required to overdose varies widely.²⁸ Overdosing on this particular drug is very rare when an individual takes less than fifteen milligrams.²⁹ A dose of thirty milligrams, however, can lead to the above-mentioned side effects.³⁰ Depending on the individual, it may take up to 400 to 500 milligrams of the drug before the dose becomes fatal.³¹

B. Performance Enhancement Properties

A recent study has shown that ADHD symptoms—short attention span, distractibility, and hyperactivity—significantly affect academic performance.³² Although Adderall has the potential to help those suffering from ADHD perform better in the classroom, it, by itself, does not make an individual smarter.³³ The active reagents in Adderall work to balance two chemicals in the brain: dopamine and norepinephrine.³⁴ While Adderall may equalize the balance of dopamine and norepineph-

23. *Id.* at 3164. Like many other drugs, users eventually become accustomed to Adderall, which leads them to take higher doses before feeling the effects. Margaret Marrer, *Adderall Use and Abuse: Is Georgetown Part of a Growing Trend?*, THE GEO. INDEP., Nov. 10, 2004, <http://media.www.thegeorgetownindependent.com/media/storage/paper136/news/2004/11/10/News/Adderall.Use.And.Abuse-799443.shtml>.

24. 21 CFR § 1308.13 (2008). Typically, the Department of Justice labels a drug a schedule II substance if it has a high potential for abuse or if it may lead to severe psychological or physical dependency. United States Drug Enforcement Administration, *The Controlled Substance Act*, <http://www.usdoj.gov/dea/pubs/abuse/1-csa.htm#Schedule%20II> (last visited Sept. 23, 2008). Other examples of schedule II drugs include cocaine, morphine, methadone, and methamphetamine. *Id.*

25. PHYSICIANS', *supra* note 10, at 3165.

26. *Id.* Psychosis is a mental disorder that interferes with an individual's ability to perceive reality. STEDMAN'S MEDICAL DICTIONARY: FIFTH UNABRIDGED LAWYER'S EDITION 1166 (1982). Schizophrenia is a mental disorder that produces severe delusions and hallucinations. *Id.* at 1261.

27. PHYSICIANS', *supra* note 10, at 3165.

28. *Id.*

29. PHYSICIANS' DESK REFERENCE 3131 (Thompson PDR, 59th ed. 2005).

30. *Id.*

31. *Id.*

32. Thomas W. Frazier et al., *ADHD and Achievement: Meta-Analysis of the Child, Adolescent, and Adult Literatures and a Concomitant Study with College Students*, 40 J. LEARNING DISABILITY 49, 59 (2007).

33. Claire D. Advokat et al., *Licit and Illicit Use of Medications for Attention-Deficit Hyperactivity Disorder in Undergraduate College Students*, 56 J. AM. C. HEALTH 601, 602-03 (2008).

34. Shire, *supra* note 16. Dopamine is a neurotransmitter that influences attention span and cognition. Kristalyn Salters-Pedneault, *Dopamine*, <http://bpd.about.com/od/glossary/g/dopamine.htm> (last visited Sept. 23, 2008). Norepinephrine, on the other hand, is also a neurotransmitter, which regulates attention and impulsivity. Erin Johnston, *Norepinephrine*, [http://bpdglossary/g/norepinephrine.htm](http://bpd.about.com/od/bpdglossary/g/norepinephrine.htm) (last visited Sept. 23, 2008).

rine in individuals that suffer with ADHD, it also has the potential to shift the balance of those chemicals in non-ADHD individuals.³⁵ The increase in dopamine and norepinephrine in individuals without ADHD allows them to focus and concentrate on tasks better than normal.³⁶

Recent tests have confirmed the positive effect Adderall can have on cognition. A recent study reaffirmed that students taking stimulants like Adderall consistently performed better in school than their unmedicated counterparts.³⁷ ADHD stimulants, like Adderall, are also proven to contribute to better driving and improved performance on reaction tests.³⁸

Additionally, a recent study found that 591 of 1387 non-ADHD students surveyed had used a stimulant without a prescription.³⁹ When asked whether stimulants help academic performance, over seventy-five percent of the stimulant abusers said yes.⁴⁰ Ironically, the study showed that non-ADHD students who did not abuse stimulants had higher GPAs.⁴¹ The study, however, failed to prove that students abusing stimulants would have scored as high without the aid of stimulants.⁴² When asked why they abused stimulants, the students pointed to increased performance and concentration as their primary motive.⁴³

The advantage of Adderall becomes obvious in the context of the Law School Admission Test (LSAT). The LSAT examiners designed the test to measure a person's ability to read a question, pick out the relevant issue, and answer the question with the most appropriate response.⁴⁴ The LSAT requires an individual to process a lot of information in a very short span of time.⁴⁵ An individual illegally taking Adderall has the added advantage of being able to concentrate on the questions more closely than they normally could.⁴⁶ As a result, students

35. Brooke Daley, *Miracle Drug?*, DAILY PENNSYLVANIAN, Apr. 20, 2004, <http://www.vpul.upenn.edu/ohe/library/drugs/adderall.htm>. A person without ADHD taking Adderall starts functioning better than normal. *Id.* To put it in the words of an ADHD patient, "If both me and someone without ADD were both on Adderall, I could never outdo them." *Id.*

36. Interview with Dr. Iris Gonzalez, Physician, Washburn University, in Topeka, Kan. (Sept. 3, 2008) (interview on file with author). A person taking Adderall who has ADHD starts functioning normally. *Id.*

37. C. Thomas Gualtieri & Lynda G. Johnson, *Medications Do Not Necessarily Normalize Cognition in ADHD Patients*, 11 J. ATTENTION DISORDERS 459, 460, 464 (2008).

38. Porter Novelli, *Data Suggest Adderall XR Significantly Improved Stimulating Driving in Young Adults with ADHD*, SCIENCE BLOG, Nov. 2004, <http://scienceblog.com/community/older/2004/7/20046461.shtml>; Andrew L. Cohen & Steven K. Shapiro, *Exploring the Performance Differences on the Flicker Task and the Conners' Continuous Performance Test in Adults with ADHD*, 11 J. ATTENTION DISORDERS 49, 54-56 (2007).

39. Advokat, *supra* note 33, at 602.

40. *Id.* at 603.

41. *Id.*

42. *Id.* at 606.

43. *See id.* at 605.

44. Law School Admission Council, *About the LSAT*, <http://www.lsac.org/LSAT/about-the-lsat.asp> (last visited Sept. 23, 2008).

45. *See id.*

46. Shawn Romer, *Combating the Unfair Competitive Edge: Random Drug Testing Should Be*

who take Adderall for the LSAT will likely achieve higher scores than they would have absent taking the drug.⁴⁷

As such, Adderall is like the HGH of academics. Although taking Adderall does not automatically make students smarter, the added advantage of taking it—better concentration, reduced distractibility, and the energy to study exorbitant hours—provides students the means to achieve better grades.⁴⁸ In an academic sense, any individual taking Adderall improves his or her ability to focus and concentrate to the point where he or she becomes a “study machine[.]”⁴⁹

C. The Consequences of Over-Prescription

The sharp increase in demand for Adderall on college campuses has created a black market.⁵⁰ One factor behind the boost in demand for Adderall is the fact that prescription drugs have become easier to get than street drugs.⁵¹ Since 1990, sales of amphetamine-based ADHD medications have increased by 400%.⁵² The over-prescription of ADHD medication can be traced to zealous marketing by distributors.⁵³ As a result, drug makers pulled in over \$450 million in profits annually between 1990 and 1995.⁵⁴ Shire, the maker and promoter of Adderall, recently reported that it generates about 40% of its overall revenue from the sale of Adderall.⁵⁵ Shire also reported a 20% growth in the sale of Adderall in the span of one year.⁵⁶

Because it is a business whose bottom line will always be profit, Shire is unlikely to assume responsibility for escalating Adderall abuse. It becomes imperative, therefore, for doctors to be more conservative and cautious when prescribing Adderall.⁵⁷ Unfortunately, doctors constantly fail to protect patients from the serious side effects of ADHD

Implemented in Standardized Testing to Deter Illicit and Unfair Use of Prescription Stimulants, 21 J.L. & HEALTH 151, 152 (2008).

47. *Id.*

48. See Gualtieri, *supra* note 37, at 460, 464.

49. Gonzalez, *supra* note 36.

50. See Katherine Leone, *Adderall: The Amphetamine Replacing Your Morning Latte*, Sept. 24, 2007, <http://tnjn.com/2007/sep/24/adderall-the-amphetamine-repla/>. The typical going price for a pill ranges between one to six dollars, depending on the dosage and whether it is an extended release (XR) tablet. *Id.* Most people who abuse Adderall and use it for performance-enhancing purposes buy it from someone who has a prescription. Chris Kaufman, *Adderall: Under the Table Not Over*, <https://tv.ku.edu/news/2005/05/02/adderall-under-the-table-not-over-the-counter/>, May 2, 2005.

51. Richard A. Friedman, *The Changing Face of Teenage Drug Abuse—The Trend Toward Prescription Drugs*, Apr. 6, 2006, NEW ENG. J. MED. 2006 WL 5765976.

52. DEA, *At the Conclusion of the Conference on Stimulant Use in the Treatment of ADHD*, Dec. 12, 1996, <http://www.add-adhd.org/ritalin.html>.

53. *Id.*

54. *Id.*

55. Simon Bowers, *Shire Fends Off Threat to Adderall*, THE GUARDIAN, July 30, 2004, <http://www.guardian.co.uk/business/2004/jul/30/6>.

56. *Id.*

57. Friedman, *supra* note 51.

medication.⁵⁸ The most recent statistics suggest that 43% of physicians do not ask their patients whether they have ever abused prescription drugs.⁵⁹ Additionally, 33% of physicians do not consult a patient's previous doctor before prescribing addictive drugs.⁶⁰ It is essential that doctors always ask their patients about stimulant misuse because the possibility exists that the patient might be dealing with addiction or the early stages of a serious psychological problem.⁶¹

The over-prescription of Adderall has also led to what many college students call "pharming."⁶² A recent nationwide study found that 4.9% of eighth graders, 8.5% of tenth graders, and at least 10% of high school seniors have used amphetamines without a prescription in the previous year.⁶³ Additionally, a 2005 report found that 2.3 million young Americans—approximately one in ten—have used amphetamines without a prescription.⁶⁴ A Youth Radio broadcast in 2006 exposed the primary driving force of the Adderall black market: "So, you've got roughly 90 pills, and then you sell each one of those for \$5[,] [d]o the math[,] [t]hat's \$450 for a \$30 investment."⁶⁵

It is evident that selling Adderall can be a profitable enterprise. Therefore, it becomes imperative that doctors limit prescriptions of Adderall to individuals who need the drug and exhibit no signs of drug abuse. Otherwise, the over-saturation of Adderall in the black market will make any form of regulation impossible.

The government has started taking the dangers of amphetamine medications more seriously.⁶⁶ In February 2007, the FDA ordered all ADHD drug makers to include revised medication guides with all ADHD drugs.⁶⁷ The revised warnings have to notify the user that the medication may cause potential blood pressure and heart rate irregularities as well as the potential for stroke and heart attack.⁶⁸ Additionally, drug makers must notify the buyer of the potential to develop psychiatric problems like mania.⁶⁹ Recent government action and expert opin-

58. *Id.*

59. *Id.*

60. *Id.*

61. See generally Oliver Freudenreich et. al, *Stimulant Misuse in College for "Pseudo-Attention Deficit Disorder" During Schizophrenia Prodrome*, 163 AM. J. PSYCHIATRY 2019 (2006).

62. Evelyn J. Pringle, *Adderall Online: Black Market Profits in Plain Sight*, DISSIDENT VOICE, Mar. 3, 2006, <http://www.dissidentvoice.org/Mar06/Pringle03.htm>. "Pharming" refers to the use of prescription stimulants for recreational purposes. *Id.*

63. *Id.*

64. *Id.* Twenty-nine percent of those people reported getting the prescription amphetamine from a close friend. *Id.*

65. Michelle Jarboe, *Black Markets for ADD Drugs Exist on College Campuses*, YOUTH RADIO, Feb. 27, 2006, http://www.pbs.org/newshour/extra/speakout/mystory/add_2-24.html.

66. See Miranda Hitti, *FDA Highlights ADHD Drug Warnings*, WEBMD, Feb. 21, 2007, <http://www.medicinenet.com/script/main/art.asp?articlekey=79538>.

67. *Id.*

68. *Id.*

69. *Id.* Other psychiatric problems include hearing voices and becoming suspicious for no reason. *Id.* Stedman's dictionary defines the term "manic" as "an emotional disorder characterized by

ion suggest an overall reconsideration of the safety of Adderall. Consequently, this reassessment may provide an opening for more serious regulation.

D. Adderall Abuse on Campus

Soldiers once used amphetamines, the main ingredient in Adderall, to overcome battle fatigue.⁷⁰ Now, high school and college students use amphetamines to cope with escalating academic stress.⁷¹ Recently, non-medical use of prescription drugs has risen drastically.⁷² In 2006, the National Survey of Drug Use and Health found that 16.2 million people age twelve or older reported non-medical use of prescription medication.⁷³ The most recent report by Monitoring the Future indicated that 4.2% of eighth graders, 8% of tenth graders, and 7.5% of high school seniors admitted to using amphetamines without a prescription.⁷⁴ The same report dedicated a separate category to Ritalin—another drug used to treat ADHD—abuse, which showed that 2.1% of eighth graders, 2.8% of tenth graders, and 3.8% of high school seniors took Ritalin without a prescription.⁷⁵ Additionally, as many as 25% of college students surveyed admitted to taking Adderall to boost their performance on exams.⁷⁶

A recent study suggests that 8.3% of college students have used a prescription stimulant without a prescription at some point in their life, while 5.9% of students admitted to illegally using stimulant medication within the past year.⁷⁷ Astonishingly, three-fourths of the 5.9% of students taking a stimulant medication in the past year abused an amphetamine-dextroamphetamine substance—Adderall.⁷⁸ The same study confirmed that the most common motives for the illegal use of stimulant medication were improved concentration and aid in studying.⁷⁹

great psychomotor activity, excitement, a rapid passing of ideas, exaltation, and unstable attention.” STEDMAN’S, *supra* note 26, at 832.

70. Drug Scope, *Amphetamines*, Jan. 2007, <http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/amphetamines.htm> (last visited Sept. 23, 2008). “An estimated 72 million tablets were issued to British forces during the second World War.” *Id.* “Many German and Japanese forces also used amphetamines and Hitler” allegedly received daily injections. *Id.*

71. Christian J. Teter et al., *Illicit Use of Specific Prescription Stimulants Among College Students: Prevalence, Motives, and Routes of Administration*, 26 PHARMACOTHERAPY 1501, 1508 (2006).

72. Friedman, *supra* note 51.

73. National Institute of Drug Abuse, *Prescription Medications*, <http://www.drugabuse.gov/drugpages/prescription.html> (last visited Sept. 23, 2008).

74. MONITORING THE FUTURE, TRENDS IN ANNUAL PREVALENCE OF USE OF VARIOUS DRUGS FOR EIGHTH, TENTH, AND TWELFTH GRADERS, <http://monitoringthefuture.org/data/07data/pr07t2.pdf>.

75. *Id.*

76. See *College Adderall Abuse and Its Dangers*, Nov. 8, 2005, <http://www.adrugrecall.com/news/adderall-abuse.html>.

77. Teter, *supra* note 71, at 1504.

78. *Id.*

79. *Id.* at 1507.

At the root of the recent epidemic of prescription drug abuse is the goal of achieving more academic success with less work.⁸⁰ Many students who take Adderall as a study aid emphasize how well it helps them clear their minds, concentrate on the task at hand, and, in one student's own words "clear[] away [the] underbrush that had been obscuring my true capabilities."⁸¹ Although amphetamine is a schedule II substance equivalent to cocaine, amphetamine-based drugs like Adderall are legal to sell and purchase with a proper prescription.⁸² Unfortunately, a majority of the students who take Adderall for performance-enhancing purposes purchase the drug illegally.⁸³ It is apparent that Adderall abuse is a problem at all levels of education.⁸⁴ As such, educators would be justified in punishing the illicit use of Adderall.⁸⁵

80. See, e.g., Posting of Kristin Jenkins to Serendip Blog, Adderall: College Students' Best Friend—Or Worst Enemy??, <http://serendip.brynmawr.edu/exchange/node/366> (Apr. 17, 2007, 3:51 p.m.). In a recent study, twenty percent of scientists admitted to using cognitive enhancing drugs like Ritalin and Adderall to help them concentrate and perform better research. Posting of Alexis Madrigal to Wired Science Blog, *20 Percent of Scientists Admit Using Brain-Enhancing Drugs – Do You?*, <http://blog.wired.com/wiredscience/2008/04/20-of-scientist.html> (Apr. 9, 2008, 5:44 p.m.). The results were compiled from an online survey. *Id.* Most of the respondents were from the scientific community. *Id.* Sixty-two percent of the scientists that admitted to using cognitive enhancers listed Ritalin as their drug of choice. *Id.*

81. Jenkins, *supra* note 80.

82. Drug Scope, *supra* note 70.

83. See Jenkins, *supra* note 80. In *Schaerrer v. Stewart's Plaza Pharmacy, Inc.*, the Utah Supreme Court stated that, "[o]nly through a physician's prescription may any prescription drug sale occur." 79 P.3d 922, 929 (Utah 2003). Furthermore, federal law makes it illegal for anyone, other than doctors and pharmacists, to sell or give another person a prescribed schedule II substance. 21 U.S.C. § 829(a) (2006). Doctor Gonzalez, a Washburn University physician, stated that about two to three percent of the students on campus are prescribed Adderall, but five percent of students on campus take it. Gonzalez, *supra* note 36.

84. *Supra* notes 70-83 and accompanying text.

85. Two schools of thought normally dominate a discussion of punishment: utilitarianism and retributivism. The utilitarian theory of punishment advocates limiting government intrusion only to acts that affect society as a whole. See John Stuart Mill, *On Liberty* (1859), in *CRIME AND PUNISHMENT: PHILOSOPHICAL EXPLORATIONS* 3, 3 (Michael J. Gorr & Sterling Harwood eds., 1995). Mill specifically stated, "[T]he only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others." *Id.* Whether individuals were hurting themselves is not an issue. See *id.* A punishment would be unjust if it exceeded what was necessary to protect the interest it served. Cesare Beccaria, *The Origin of Punishment*, in *CRIME AND PUNISHMENT: PHILOSOPHICAL EXPLORATIONS* 285, 286 (Michael J. Gorr & Sterling Harwood eds., 1995). Furthermore, a punishment should be avoided when it can never prevent the crime, when the outcome would be worse than the crime, or when it is too costly. Jeremy Bentham, *The Utilitarian Theory of Punishment* (1970), in *CRIME AND PUNISHMENT: PHILOSOPHICAL EXPLORATIONS* 286, 288-89 (Michael J. Gorr & Sterling Harwood eds., 1995).

A retributive theory of punishment advances the idea of "restoring the moral balance." David Lyons, *Punishment As Retribution*, in *CRIME AND PUNISHMENT: PHILOSOPHICAL EXPLORATIONS* 317, 317 (Michael J. Gorr & Sterling Harwood eds., 1995). The basic concept can be summarized by the notion of "an eye for an eye." *Id.* at 318. Retributivists argue that the primary function of laws is to create rights immune from interference. Herbert Morris, *Punishment and Fairness*, in *CRIME AND PUNISHMENT: PHILOSOPHICAL EXPLORATIONS* 322, 322 (Michael J. Gorr & Sterling Harwood eds., 1995). Retributivists encourage punishment when rights are infringed because they believe it will lead to less crime. See C.L. Ten, *Is Punishment Fair?*, in *CRIME AND PUNISHMENT: PHILOSOPHICAL EXPLORATIONS* 324, 330 (Michael J. Gorr & Sterling Harwood eds., 1995). Fear of punishment, therefore, acts as a deterrent of future crimes. *Id.* Ten argues that individuals, left to their own accord, have a natural disposition to break the law. See *id.* Fear of punishment, therefore, forces them to comply with the law. *Id.*

Both utilitarianism and retributivism support punishing the abuse of Adderall. A utilitarian justification would rely on the disadvantage created between individuals taking Adderall illegally and

E. The Fourth Amendment

The Fourth Amendment to the United States Constitution protects an individual's right to be secure in his person against unreasonable searches and seizures.⁸⁶ Courts have typically invoked the protections of the Fourth Amendment when a state or its agent searches a person or that person's possessions.⁸⁷ In the last several decades, the United States Supreme Court has specifically applied Fourth Amendment protections to individuals in cases involving drug testing.⁸⁸ Generally, courts have required the state or its agent to show a particular, compelling reason to justify the drug test.⁸⁹ In some cases, it has been enough for the state to show an increase in drug abuse that warrants immediate and drastic action.⁹⁰ The following subsections will explore recent decisions that have shaped the current state of drug testing jurisprudence.

1. High School Drug Testing

One of the most important Supreme Court decisions related to the constitutional rights of high school students is *Tinker v. Des Moines Independent Community School District*.⁹¹ In *Tinker*, a group of students wore black armbands to protest the Vietnam War.⁹² Principals in the school district, aware of the protest, adopted a policy to suspend any student caught wearing a black armband.⁹³ In response to this policy, the *Tinker* Court established a fundamental constitutional principle: students do not shed their constitutional rights at the schoolhouse gate.⁹⁴ The Court ultimately held that the school district's actions were unconstitutional absent any reasonable belief that the protests would materially interfere with school activities.⁹⁵

those not taking it. *See* Mill, *supra*, at 4. A utilitarian, therefore, would find punishment to be appropriate because Adderall abuse affects society as a whole. *Id.* On the other hand, a retributivist would justify punishing Adderall abuse as a form of deterrence. *See* Ten, *supra*, at 330. A retributivist would argue that providing a mechanism to punish Adderall abusers would inevitably lead to a decrease in abuse. *Id.*

86. U.S. CONST. amend. IV.

87. *New Jersey v. T.L.O.*, 469 U.S. 325, 337 (1985).

88. *See, e.g.*, *Bd. of Educ. v. Earls*, 536 U.S. 822, 838 (2002) (holding that the school district's drug-testing policy was constitutional); *Vernonia Sch. Dist. v. Acton*, 515 U.S. 646, 666 (1995) (holding that the Vernonia drug-testing program was constitutional).

89. *See, e.g.*, *Earls*, 536 U.S. at 838; *Vernonia*, 515 U.S. at 660.

90. *See Earls*, 536 U.S. at 835.

91. 393 U.S. 503 (1969).

92. *Tinker v. Des Moines Indep. Cmty. Sch. Dist.*, 393 U.S. 503, 504 (1969). Every student the school caught wearing a black armband was to be sent home and suspended from school until after New Year's Day. *See id.* The school suspended two students on December 16, and John Tinker was suspended the following day. *Id.*

93. *Id.* The policy required the school to ask the students to remove the armbands. *Id.* The school could only suspend students if they refused to remove the armbands. *Id.*

94. *Id.* at 506. The actual quotation from the case reads, "It can hardly be argued that either students or teachers shed their constitutional rights to freedom of speech or expression at the schoolhouse gate." *Id.*

95. *Id.* at 514. The Supreme Court decision seems to suggest that the school district's actions may have been held constitutional if the district had a reasonable belief that the protesting would

Sixteen years after *Tinker*, the Court decided another crucial constitutional issue in *New Jersey v. T.L.O.*⁹⁶ *T.L.O.* involved the search of a high school student's purse by the school's vice-principal.⁹⁷ The search yielded several pieces of evidence linking the student to drug abuse and drug dealing.⁹⁸ The Court held that the Fourth Amendment applied to searches by school officials.⁹⁹ The Court required the school to show that the search was reasonable under the circumstances, rather than requiring proof that the search was grounded in probable cause.¹⁰⁰ After *T.L.O.*, a school search was constitutional if it was (1) justified at its inception, and (2) reasonably related in scope to the circumstances that originally justified the search.¹⁰¹

The Kansas Supreme Court applied *T.L.O.* in *In re L.A.*,¹⁰² which involved the search of a high school student (LA) after an anonymous informant advised school officials that LA possessed marijuana.¹⁰³ Before conducting the search, the principal called and acquired the consent of LA's mother.¹⁰⁴ Nevertheless, the court held that, under *T.L.O.*, school officials could constitutionally conduct a search based on an anonymous tip *without* obtaining parental consent.¹⁰⁵

In 1995, the United States Supreme Court decided *Vernonia School District v. Acton*.¹⁰⁶ *Vernonia* involved a high school's random drug-testing scheme that targeted athletes.¹⁰⁷ The Vernonia school district had a problem with rampant drug abuse.¹⁰⁸ To combat the abuse,

have caused "substantial disruption of or material interference[] with school activities." *Id.*

96. 469 U.S. 325 (1985).

97. *New Jersey v. T.L.O.*, 469 U.S. 325, 328 (1985). Prior to the search, a teacher found two girls, one of whom was the respondent, smoking in the bathroom. *Id.* The teacher took the two students to the assistant vice-principal, where TLO denied smoking. *Id.* The principal demanded to see the respondent's purse and began searching through it once it was in his possession. *Id.*

98. *Id.* In particular, the principal found, "marijuana, a pipe, a number of plastic bags, a substantial quantity of money in one-dollar bills, an index card that appeared to be a list of students that owed TLO money, and two letters that implicated TLO in marijuana dealing." *Id.*

99. *Id.* at 336-37.

100. *Id.* at 341. In reaching its decision to require only reasonable suspicion, the Court balanced the privacy interests of the students with the need of administrators and teachers to maintain order. *Id.*

101. *Id.* at 341-42.

102. 21 P.3d 952 (Kan. 2001).

103. *In re L.A.*, 21 P.3d 952, 955 (Kan. 2001). The school's Crime Stoppers organizer told the principal that LA had marijuana hidden in the headband of his baseball cap. *Id.* The Crime Stoppers organizer was the school librarian. *Id.* The search resulted in the discovery of marijuana in the baseball cap and a small bottle of tablets. *Id.* at 956.

104. *Id.* at 955.

105. *Id.* at 958-59. The Kansas court relied on *Martens v. District No. 220, Board of Education*, 620 F. Supp. 29 (N.D. Ill. 1985), *In re P.E.A.*, 754 P.2d 382 (Colo. 1988), and *T.L.O.* to rule that an anonymous tip is sufficient to establish reasonable suspicion. *In re L.A.*, 31 P.3d at 958-59.

106. 515 U.S. 646 (1995).

107. *Vernonia v. Acton*, 515 U.S. 646, 650 (1995). School administrators were particularly concerned for student athletes because drugs reduce response time. *See id.* at 649.

108. *Id.* at 648. In the mid-1980s, the school district observed a sharp increase in drug use. *Id.* In response, the administration held a meeting with parents to discuss implementing a drug-testing policy. *Id.* at 649-50. By the end of the meeting, the parents unanimously voted in favor of the policy. *Id.* at 650.

the school introduced a random drug-testing scheme.¹⁰⁹ The Court held that the testing scheme was constitutional, highlighting three specific factors that weighed heavily in the decision.¹¹⁰ First, the school demonstrated a need for the drug test.¹¹¹ Second, high school students, as a class, had a diminished expectation of privacy.¹¹² Third, the school board had narrowly defined the testing policy, which the school administered in a reasonable manner.¹¹³

The Supreme Court expanded the scope of *Vernonia* in *Board of Education v. Earls*.¹¹⁴ *Earls*, like *Vernonia*, involved a school district's random drug-testing scheme to deter drug use among high school students.¹¹⁵ Unlike *Vernonia*, however, the *Earls* scheme required any student who participated in any extracurricular activity to take a random drug test.¹¹⁶ In its decision, the Supreme Court held that randomly drug testing a student involved in any extracurricular activity was constitutional.¹¹⁷ Previously in *Vernonia*, the Court required the district to show a particular need for the testing.¹¹⁸ In *Earls*, however, the Court held that no such showing is required.¹¹⁹ The Court explained that all students, whether athletes or not, give up some of their privacy rights when they attend high school.¹²⁰ According to the *Earls* decision, the only re-

109. *See id.* The policy applied to all student athletes. *Id.* In order to play a sport, the student was required to sign a form consenting to random drug testing in addition to getting a parent signature. *Id.* Once the student was an active member of an athletic team, the school would place their name in a pool. *Id.* Once a week, a random student, supervised by two adults, blindly drew ten percent of the names. *Id.* A school monitor then escorted students selected through this method to an empty locker room where they produced a urine specimen. *Id.* The school sent the urine specimen to an independent lab for analysis. *Id.*

110. *Id.* at 666. The first factor the Court evaluated was the nature of the privacy interest at issue. *Id.* at 654. The second factor the Court considered was the character of the intrusion. *Id.* at 658. The final factor the Court defined was the governmental concern involved in this case. *Id.* at 660.

111. *Id.* at 661-62.

112. *Id.* at 654. At the heart of the Court's decision was the fact that the targeted group was "(1) children, who (2) have been committed to the temporary custody of the State as schoolmaster." *Id.*

113. *See id.* at 660. Prior to being tested, the school required a student to show documentation of any medication he or she was currently taking. *Id.* at 650. The Court held that requiring a student athlete to divulge medicinal information was reasonable because the consent form each student was required to sign permitted the school to ask for such information. *See id.* at 660.

114. 536 U.S. 822 (2002).

115. *Id.* at 826. The *Earls* drug-testing policy extended to all students involved in extracurricular activities. *Id.* Students were required to take a drug test prior to joining an extracurricular club, to consent to random drug testing while they were part of the club, and to agree to be tested when reasonable suspicion existed. *Id.*

116. *See id.* The *Earls* testing policy required all students involved in extracurricular activities to submit to drug testing including "Academic Team, Future Farmers of America, Future Homemakers of America, band, choir, pom-pom, cheerleading, and athletics." *Id.*

117. *Id.* at 838. The first factor the Court considered was the nature of the privacy interest. *Id.* at 830. The second factor the Court considered was the character of the intrusion. *Id.* at 832. Finally, the Court evaluated the government's interest in implementing the drug testing policy. *Id.* at 834.

118. *Vernonia v. Acton*, 515 U.S. 646, 661 (1995).

119. *Earls*, 536 U.S. at 835. The Court refused to establish a test to determine whether a school district has enough of a drug problem to implement a drug-testing policy. *Id.* at 836. The Court held that "the need to prevent and deter the substantial harm of childhood drug use provides the necessary immediacy for a school testing policy." *Id.*

120. *Id.* at 832 (citing *Vernonia*, 515 US at 657). The Court based its analysis particularly on the idea that students' privacy interests are diminished in a school setting. *Id.*

quirements for a constitutional drug-testing policy are: (1) a narrowly-drawn policy carried out in a reasonable manner; and (2) a showing that the drug problem has worsened.¹²¹ Prior to *Earls*, the United States Court of Appeals for the Seventh Circuit applied *Vernonia* in *Joy v. Penn-Harris-Madison School Corp.*¹²² The drug-testing policy in *Joy* specifically targeted five groups of students.¹²³ The Seventh Circuit applied the factors set forth in *Vernonia* to conclude that the policy was constitutional except as applied to testing student drivers for nicotine.¹²⁴ The court assessed the government's interest by asking two important questions: (1) whether there was any connection between the drug problem and the targeted audience; and (2) whether there was a connection between the drug problem and a government interest.¹²⁵

*Miller v. Wilkes*¹²⁶ is yet another case that echoed the holding in *Vernonia*.¹²⁷ In *Miller*, the United States Court of Appeals for the Eighth Circuit recognized that children attending public schools have a lower expectation of privacy than adults.¹²⁸ The court, in dicta, reasoned that the *Vernonia* decision was not limited to student athletes, but applied to all students who attend public schools.¹²⁹ According to the *Miller* court, “[S]imply being a student in a public school is ‘[c]entral’ to a lowered expectation of privacy.”¹³⁰

Not all drug-testing schemes, however, have been held constitutional. In *Willis v. Anderson Community School Corp.*,¹³¹ the Seventh Circuit overturned a drug-testing scheme that targeted disobedient students.¹³² According to the Seventh Circuit, the *Vernonia* Court based its decision on the fact that student athletes voluntarily joined an ath-

121. *Id.* at 838.

122. 212 F.3d 1052 (7th Cir. 2000).

123. *Id.* at 1055. The first students were those who participated in extracurricular activities. *Id.* The second students were those who drove to school. *Id.* The third students were those who “volunteer[ed] to be part of the random pool.” *Id.* The fourth students were those who were suspended from school for at least three consecutive days. *Id.* The final group of students were those for whom the school had reasonable suspicion to believe that they were under the influence of drugs or alcohol. *Id.* School officials selected students from all but the latter two groups at random. *See id.* The latter two groups were required to take mandatory drug tests. *Id.*

124. *Id.* at 1063-65, 1067.

125. *See id.* at 1059.

126. 172 F.3d 574 (8th Cir. 1999).

127. *Id.* at 576 (8th Cir. 1999). *Miller* involved a drug-testing policy that required students to sign a form consenting to random drug tests. *Id.* The school prohibited students that refused to sign the consent form from joining any extracurricular activity. *Id.* The respondent, in this particular case, was planning to participate in activities including the radio club, prom committee, and the quiz bowl. *Id.* at 577. The court, upheld the constitutionality of the drug policy based on its analysis of the government's interest in protecting students from drug abuse. *See id.* at 582.

128. *Id.* at 578.

129. *Id.* at 579.

130. *Id.*

131. 158 F.3d 415 (7th Cir. 1998).

132. *Id.* at 417. The school district adopted a policy that tested students based on individual suspicion, and tested students who possessed or used tobacco, who the school had suspended for at least three consecutive days, or who were habitual truants. *Id.*

letic club.¹³³ In *Willis*, however, the drug test was a direct consequence of a violation of school policy, and therefore lacked the voluntary consent applicable to student athletes.¹³⁴

Similarly, the Colorado Supreme Court held that drug testing of marching band members was unconstitutional in *Trinidad School District No. 1 v. Lopez*.¹³⁵ The Trinidad School District's drug-testing policy required all students in grades six through twelve to submit to a drug test prior to joining any extracurricular activity.¹³⁶ The respondent in *Trinidad* was a member of the marching band, for which he received school credit and a grade.¹³⁷ The court distinguished *Vernonia* by reasoning that the marching band members were not similarly situated to the group of student athletes targeted in *Vernonia*.¹³⁸ Furthermore, the court relied on the fact that participating in the marching band was not voluntary, but was required of every student enrolled in a band elective.¹³⁹

2. College

A state, when dealing with high school students, can typically justify a borderline constitutional search of students by invoking its *in loco parentis* power.¹⁴⁰ The *in loco parentis* justification, however, has never been applied to college students.¹⁴¹ By the time individuals apply to a university, they are old enough to enlist in the military, drive a vehicle, have a career, or have their own families.¹⁴² As a result, courts have to consider warrantless searches of college students under a traditional Fourth Amendment analysis.¹⁴³

133. *Id.* at 422. Most notably, student athletes had to take a pre-season physical exam, maintain a certain GPA, and attend practices. *Id.*

134. *See id.*

135. 963 P.2d 1095 (Colo. 1998).

136. *Id.* at 1098. The policy also mandated testing when the school had reasonable suspicion to believe a student was under the influence. *Id.* Students who were on medication were required to inform school officials of that medication before being tested. *Id.* Furthermore, the school district's policy required both the parents and the student to sign a written form consenting to be tested. *Id.*

137. *Id.* at 1100. Trinidad High School offered two elective band courses for credit and grades. *Id.* at 1104-05. Both band courses required enrolled students to participate in marching band. *Id.* at 1105. Consequently, enrolling in either elective course required the student to participate in an extracurricular activity, thus subjecting band students to a mandatory drug test. *Id.*

138. *Id.* at 1107. The band members did not undress in locker rooms or take communal showers like student athletes. *Id.*

139. *Id.*

140. *See, e.g.,* Bd. of Educ. v. Earls, 536 U.S. 822 (2002); *Vernonia v. Acton*, 515 U.S. 646 (1995). The *in loco parentis* doctrine permits schools to discipline children in place of their parents. *Morse v. Fredrick*, 127 S. Ct. 2618, 2631 (2007).

141. *See Univ. of Colo. v. Derdeyn*, 863 P.2d 929, 938 (Colo. 1993) (citing *Morale v Grigel*, 422 F. Supp. 988, 997-98 (D.N.H. 1976); *Collier v. Miller*, 414 F. Supp. 1357, 1359, 1367 & n.11 (S.D. Tex. 1976)).

142. *See Drivers License Information: Teen Driving Information*, <http://www.ksrevenue.org/dmvteen.htm> (last visited Sept. 23, 2008); Rod Powers, *United States Military Enlistment Standards*, <http://usmilitary.about.com/od/joiningthemilitary/a/enliststandards.htm> (last visited Sept. 23, 2008).

143. *Infra* notes 144-175 and accompanying text.

Two cases are at the core of most adult drug testing jurisprudence. In 1989, the United States Supreme Court decided *National Treasury Employees Union v. Von Raab*,¹⁴⁴ which involved the suspicionless drug testing of United States Customs Service employees applying for promotion to positions either dealing with drugs or requiring the possession of a firearm.¹⁴⁵ The Court concluded that the suspicionless search was valid under the Fourth Amendment because of the government's interests in addressing national security hazards.¹⁴⁶

That same year, the Supreme Court decided *Skinner v. Railway Labor Executives' Ass'n*.¹⁴⁷ *Skinner* upheld the suspicionless drug testing of railroad employees who had been involved in an accident.¹⁴⁸ The Court found that the government's interest in preventing "great human loss" outweighed an employee's Fourth Amendment protections.¹⁴⁹ Both *Skinner* and *Von Raab* stand for the idea that suspicionless drug testing of adults is constitutional as long as the government's interest is sufficient.¹⁵⁰

The *Skinner* and *Von Raab* decisions have triggered several other important Fourth Amendment drug testing decisions. In 1991, the Seventh Circuit decided *Dimeo v. Griffin*,¹⁵¹ a class action against the Illinois Racing Board (IRB) for its randomized drug-testing scheme.¹⁵² The IRB justified its drug testing policy based on safety and financial

144. 489 U.S. 656 (1989).

145. *Id.* at 660-61. In 1986, the Commissioner of Customs implemented a drug-testing program applicable to employees in certain situations. *Id.* at 660. Although the Commissioner believed the United States Customs Service was virtually drug free, he also recognized the need to ensure the same organization involved in drug interdiction was not employing individuals with a drug problem. *Id.*

There were three specific groups of employees affected by this policy. *Id.* at 660-61. The first were those directly involved in drug interdiction. *Id.* at 660. The second group were employees carrying handguns because "public safety demands that employees who carry deadly arms and are prepared to make instant life or death decisions be drug free." *Id.* at 661. The final group of employees were those handling "classified" material. *Id.* The Commissioner felt that they would be susceptible to bribery and blackmail because of their illegal drug use, and therefore more susceptible to give away classified material. *Id.*

The drug-testing scheme in *Von Raab* used urinalysis because it was reliable and accurate. *Id.* at 660. Once notified of the test by an employer, the employee was required to arrive at the test center with photographic identification. *Id.* at 661. Employees could urinate either in a private bathroom or behind a partition. *Id.* The employer then sent the sample to a laboratory for analysis. *Id.* Employees who tested positive for drugs were subject to removal absent a valid explanation. *Id.* at 663.

146. *Id.* at 679.

147. 489 U.S. 602 (1989).

148. *Id.* at 634. The Federal Railroad Administration (FRA) noticed that on-the-job intoxication was a significant cause of railroad accidents. *Id.* at 607. Its findings were demonstrated in the number of fatalities—twenty-five—and cost of accidents—\$19 million—attributable to on-the-job accidents. *Id.* As a result, the FRA implemented a drug-testing program that required all employees involved in a major accident to take a drug test. *Id.* at 609. The FRA defined a major accident as any accident resulting in death, the release of hazardous material, or damage to railroad property. *Id.*

149. *Id.* at 628, 634.

150. *Von Raab*, 489 U.S. at 666; *Skinner*, 489 U.S. at 620.

151. 943 F.2d 679 (7th Cir. 1991).

152. *Id.* at 680-81. In this particular case, the IRB was concerned for the safety of those involved in the horse race, in addition to the negative effect the prevalence of drugs would have financially on the horse-racing industry in Illinois. *Id.* at 681-82.

concerns.¹⁵³ The court agreed with the IRB, holding that its interests were sufficient to outweigh the privacy interests of the jockeys.¹⁵⁴

Similarly, *International Union v. Winters*¹⁵⁵ was a class action suit challenging the state's plan to drug test employees with law enforcement powers.¹⁵⁶ The United States Court of Appeals for the Sixth Circuit noted that reasonableness, under a Fourth Amendment analysis, typically requires a showing of probable cause.¹⁵⁷ That requirement, however, is inapplicable to an administrative search that seeks to prevent the development of a serious problem.¹⁵⁸ As such, the court balanced the extent of the intrusion against the government's proffered interest, to reach the holding that the state's drug-testing program was valid.¹⁵⁹

*International Brotherhood of Teamsters v. Department of Transportation*¹⁶⁰ was yet another class action lawsuit brought in response to a drug-testing program.¹⁶¹ The United States Court of Appeals for the Ninth Circuit agreed with the government's argument that its program would sufficiently deter employees from using drugs.¹⁶² Additionally, the court felt that the strong public interest—ensuring that drivers of commercial vehicles drive drug-free—was sufficient justification to uphold the constitutionality of the program.¹⁶³

Not all drug-testing schemes have withstood Fourth Amendment scrutiny.¹⁶⁴ In 2008, the Ninth Circuit decided *Lanier v. Woodburn*,¹⁶⁵ which involved a policy requiring all recent hires to undergo a drug test.¹⁶⁶ Unlike *Teamsters*, the *Lanier* court felt that the state failed to establish a persuasive justification for its program.¹⁶⁷ In dicta, the court

153. *Id.* at 681-82.

154. *Id.* at 685.

155. 385 F.3d 1003 (6th Cir. 2004).

156. *Id.* at 1005. This case involved the drug testing of four groups of state employees. *Id.* at 1006. The first group were parole and probation officers primarily because of their law enforcement powers. *Id.* The second and third groups consisted of employees working for the Department of Corrections based on the frequency of contact they had with inmates. *Id.* The final group consisted of employees working for the Department of Community Health and the Department of Military and Veterans Affairs. *Id.* at 1006-07.

157. *Id.* at 1007.

158. *Id.*

159. *Id.* at 1013.

160. 932 F.2d 1292 (9th Cir. 1991).

161. *Id.* at 1294. The Federal Highway Administration (FHWA) implemented a drug-testing program because it believed the program would discourage substance abuse and reduce the number of accidents. *Id.* The FHWA aimed the program at bus and truck drivers. *Id.* The FHWA administered the tests to a random population of truckers equal to about fifty percent of the employee pool. *Id.* at 1295.

162. *Id.* at 1304-05.

163. *Id.*

164. *Infra* notes 165-175 and accompanying text.

165. 518 F.3d 1147 (9th Cir. 2008).

166. *Id.* at 1149. In this case, Lanier was offered a position at a library, contingent on her passing a drug test. *Id.* Woodburn based its policy on the presupposition that drug abuse directly affected job performance. *Id.* The court ultimately found that Woodburn's basis for the drug-testing program was not supported by facts. *See id.* at 1152.

167. *Id.* at 1152.

suggested that the state might have “shore[d] up” a claim of special need by proving that there was a problem of drug abuse among the class to be tested.¹⁶⁸

In 1993, the Colorado Supreme Court decided *University of Colorado v. Derdeyn*.¹⁶⁹ In *Derdeyn*, a student athlete challenged a mandatory drug-testing scheme at the University of Colorado.¹⁷⁰ The court held that the mandatory drug testing of a collegiate athlete, absent consent, was an unconstitutional search under the Fourth Amendment.¹⁷¹

The court’s holding relied on three specific factors.¹⁷² First, the University of Colorado failed to provide advance notice that it administered random drug tests to student athletes.¹⁷³ Second, the university failed to offer Derdeyn sufficient time to apply to another college.¹⁷⁴ Finally, the university failed to inform Derdeyn of the specific method used to administer the drug test.¹⁷⁵

F. What is a State Actor?

The Fourth Amendment only applies to the federal government, the states, and their agents.¹⁷⁶ Courts, when determining whether there is state action, typically look at: (1) whether the conduct occurred under color of state law; and (2) whether it deprived a person of a constitutionally protected right.¹⁷⁷ Generally, the courts have considered publicly-funded high schools, colleges, and universities to be state actors.¹⁷⁸

The National Collegiate Athletic Association (NCAA) is a private entity.¹⁷⁹ At least half its members are public institutions, which provide more than half of its revenues.¹⁸⁰ Even so, courts have typically considered the NCAA a private organization.¹⁸¹ Private entities like the NCAA, however, are not always immune from the state-action doctrine.¹⁸²

In *Arlosoroff v. NCAA*,¹⁸³ an Israeli student at Duke University

168. *Id.* at 1151.

169. 863 P.2d 929 (1993).

170. *Id.* at 930. The University of Colorado drug-testing policy included athletes, cheerleaders, and most student staff. *Id.* at 932. The final version of the policy allowed the university to test an eligible student only when reasonable suspicion of drug use existed. *Id.* Urine specimens were collected from tested athletes in an “enclosed area, while a monitor [waited] outside.” *Id.*

171. *Id.* at 949-50.

172. *Infra* notes 173-175 and accompanying text.

173. *Id.* University officials provided admitted students with general information about the drug-testing program prior to students enrolling at the university. *Id.*

174. *Id.*

175. *Id.*

176. See *NCAA v. Tarkanian*, 488 U.S. 179, 191 (1988).

177. *O’Halloran v. Univ. of Wash.*, 679 F. Supp. 997, 1001 (W.D. Wash. 1988).

178. See *Tarkanian*, 488 U.S. at 192.

179. *Arlosoroff v. NCAA*, 746 F.2d 1019, 1021 (4th Cir. 1984).

180. *Id.*

181. *Id.*

182. *Infra* notes 183-194 and accompanying text.

183. 746 F.2d 1019 (4th Cir. 1984).

challenged the NCAA's right to enforce an eligibility provision.¹⁸⁴ The court held that state regulation of a private entity alone is insufficient to prove state action.¹⁸⁵ What is required is a showing that the state, in its regulatory or subsidizing function, ordered or caused the private entity to perform an act traditionally reserved for the state.¹⁸⁶

Similarly, the United States Supreme Court held that NCAA was not a state actor in *NCAA v. Tarkanian*.¹⁸⁷ In that case, the Court determined that the NCAA did not have any help from the state during its investigation, and that its greatest authority was to expel the University of Nevada Las Vegas from the NCAA.¹⁸⁸ Additionally, the Court interpreted the fact that the NCAA could not directly punish Tarkanian as further proof that it was not a state actor.¹⁸⁹

In 1994, the California Supreme Court decided *Hill v. NCAA*,¹⁹⁰ which involved a student athlete suing the NCAA for its drug-testing program.¹⁹¹ In *Hill*, the court held that the NCAA was not a state actor under the federal constitution.¹⁹² Furthermore, the court found that the NCAA policy gave the athlete advance warning of the test and opportunity to consent to it.¹⁹³ The court also acknowledged that maintaining fair play and protecting the health of student athletes were sufficient reasons to justify the NCAA's drug-testing scheme.¹⁹⁴

G. Current Functional Drug-Testing Policies Aimed at Adults

This section of the Note will examine two practical drug-testing programs in use today: (1) the drug testing program used by the NCAA;

184. *Id.* at 1020. The plaintiff had participated in seventeen amateur tennis tournaments and was a member of Israel's Davis Cup team. *Id.* In 1981, he became the number one singles player on Duke's tennis team. *Id.* The NCAA, however, ruled his freshman year as his final year of eligibility because he played three years of organized tennis prior to attending Duke. *See id.*

185. *Id.* at 1022.

186. *Id.*

187. 488 U.S. 179 (1988).

188. *NCAA v. Tarkanian*, 488 U.S. 179, 197 (1988). The University of Nevada in Las Vegas (UNLV) hired Jerry Tarkanian as the head basketball coach in 1973. *Id.* at 180. Four years later, Tarkanian coached UNLV to a third-place finish in the NCAA tournament. *Id.* In 1976, the NCAA, with the help of Nevada's Attorney General, conducted an investigation that discovered Tarkanian violated NCAA rules on ten occasions. *Id.* at 185-86.

189. *Id.* at 197-98.

190. 865 P.2d 633 (Cal. 1994).

191. *Id.* at 637. At that time, the NCAA testing policy required randomly selected students participating in post-season bowl games to submit to a drug test. *Id.* To ensure fair competition and protect the health and safety of student athletes, the NCAA gave athletes advance notice of the testing procedures, monitored the collection of urine specimens to avoid substitution or contamination, and maintained a stringent chain of custody. *Id.*

192. *Id.* at 641. The NCAA is comprised of universities from all jurisdictions. *See id.* Its members govern all actions taken by the NCAA. *Id.* The court found that the NCAA, a private actor, could potentially violate the California Constitution because of the Privacy Initiative in article I, section 1 of the California Constitution. *Id.* at 645. Determining whether an individual or organization is a state actor requires examining whether "the . . . action[] may be 'fairly attributable to the state.'" *Wolotsky v. Huhn*, 960 F.2d 1331, 1335 (6th Cir. 1992).

193. *Hill*, 865 P.2d at 637.

194. *Id.*

and (2) the anti-doping guidelines used by the World Anti-Doping Agency.

1. The National Collegiate Athletic Association

The NCAA is a voluntary organization that most of the nation's colleges join to help regulate their athletic programs.¹⁹⁵ In 1986, the NCAA authorized random drug testing of athletes participating in post-season football games.¹⁹⁶ Following the passage of three more proposals in 1990, the NCAA established an all-sport drug-testing program to ensure a safe and equal playing field for all student athletes.¹⁹⁷ The NCAA's drug-testing scheme relies on the collection of athletes' urine, which it later sends to a laboratory for analysis.¹⁹⁸ The NCAA lab test seeks to identify whether an athlete has used a substance on the list of banned drugs developed by the NCAA Executive Committee.¹⁹⁹ The NCAA suspends athletes if the drug test discovers a banned substance in their system.²⁰⁰ The NCAA will reinstate an athlete only if that athlete tests negative on a subsequent drug test.²⁰¹ A college or university may appeal the duration of ineligibility to the Committee on Competitive Safeguards and Medical Aspects of Sports.²⁰²

The list of banned drugs ranges from street drugs to over-the-counter herbal medications.²⁰³ As a result, the NCAA has recognized several medical exceptions for banned substances.²⁰⁴ The student-athlete must show a prescription for legitimate medical purposes if a drug test reveals a banned substance.²⁰⁵ Once the NCAA receives the documentation, it will order a second drug test.²⁰⁶ The NCAA will only grant a medical exception if the second drug test returns positive for the same banned substance.²⁰⁷

195. NCAA, *About the NCAA*, <http://www.ncaa.org/wps/ncaa?ContentID=2> (last visited Sept. 23, 2008).

196. Timothy J. Lilley, *Modification of Initial-Eligibility Rule Approved*, 23 THE NCAA NEWS 1 (1986). Proposal No. 30 provides for the testing. *Id.*

197. NCAA, *DRUG-TESTING PROGRAM 2007-08*, at 2, http://www.ncaapublications.com/Uploads/PDF/2007-08_drug_testing_program948b5825-5871-464b-b5f0-7f4c2ee65668.pdf. The current drug-testing scheme was established by Proposal Nos. 52-54. *Id.*

198. *Id.*

199. *Id.*

200. *Id.* at 4. Bylaw 18.4.1.5.1 mandates the suspension of the athlete from any sport for a minimum of one year. *Id.* An athlete's suspension is for one season if competition in that athlete's sport has not yet begun, otherwise the NCAA will suspend the athlete for the equivalent of one full season. *Id.* An athlete that tests positive on a second occasion may lose all remaining eligibility in all sports. *Id.* at 6.

201. *Id.* at 4.

202. *Id.* The Committee, under its own discretion, may reduce the penalty by, at most, half. *Id.*

203. *Id.* at 6-7. Bylaw 31.2.3.4 lists all the drugs banned by the NCAA. *Id.*

204. *Id.* at 8.

205. *Id.*

206. *Id.*

207. *Id.*

2. The United States and World Anti-Doping Agencies

The purpose of the World Anti-Doping Agency (WADA) is to promote a dope-free athletic environment and ensure fairness for athletes worldwide.²⁰⁸ The United States Anti-Doping Agency (USADA) is a subdivision of WADA that administers drug tests and manages disputes by American Olympic athletes.²⁰⁹

WADA defines “doping” as the presence of one or more illegal substance in an athlete’s body.²¹⁰ The burden of proof is entirely on the WADA-approved anti-doping agency.²¹¹ The level of proof required to find a rule violation is more than a mere showing of probability, but less than beyond a reasonable doubt.²¹² The standard of proof required to rebut the showing of a violation requires a balance of probability.²¹³ WADA will disqualify any athlete found in violation of its drug policy.²¹⁴

Like the NCAA scheme, WADA has authorized a therapeutic use exemption for athletes taking a prohibited substance for authorized

208. WORLD ANTI-DOPING AGENCY, WORLD ANTI-DOPING CODE at 1 (2003), http://www.wada-ama.org/rtecontent/document/code_v3.pdf. The main elements in the WADA drug-testing scheme include: (1) the Code; (2) international standards; and (3) models of best practice. *Id.* The Code sets forth the specific anti-doping rules and principles that each relevant organization—including the USADA—is required to follow. *Id.* at 6. The purpose of the Code is to create a uniform policy that remains consistent in any jurisdiction. *Id.* at 1. WADA regulations apply to a wide range of athletes in virtually every country in the world. *See id.* Consequently, it is essential that every country adopt similar rules and regulations regarding anti-doping to ensure consistent implementation of the rules. *See id.* Although the Code is specific about what provisions must be included in every anti-doping agency’s guidelines, it still permits some dissent from its rigid rules. *Id.*

International standards refer to rules governing the different technical and operational areas within the anti-doping program. *Id.* at 2. WADA develops the international standards after consultation with WADA-approved signatories and governments. *Id.* Finally, WADA implements the models of best practice to provide innovative solutions at different stages of the anti-doping process. *Id.*

209. UNITED STATES ANTI-DOPING AGENCY, PROTOCOL FOR OLYMPIC MOVEMENT TESTING at 1 (2004), http://www.usantidoping.org/files/active/policies_procedures/2004%20USADA%20Protocol%5B3%5D.pdf.

210. World Anti-Doping Agency, *supra* note 208, at 8. Specifically, WADA defines doping as any violation of rules 2.1 through 2.8 of the Code. *Id.* Consequently, WADA’s definition of doping ranges from taking an illegal substance—article 2.1—to trafficking a prohibited substance—article 2.7. *Id.* at 8-12.

211. *Id.* at 12. Article 3.1 of the Code specifically defines the level of proof required to find a violation. *Id.*

212. *Id.* WADA may establish a rule-violation by any reasonable means, including a party admission. *Id.* One reasonable means that WADA may employ pertains to the use of laboratories. *Id.* at 13.

213. *Id.* at 12. “Balance of probability” is synonymous with “preponderance of the evidence.” *See* BLACK’S LAW DICTIONARY 1220 (8th ed. 2004). Both terms are defined as, “superior evidentiary weight that, though not sufficient to free the mind wholly from all reasonable doubt, is still sufficient to incline a fair and impartial mind to one side of the issue rather than the other.” *Id.*

214. World Anti-Doping Agency, *supra* note 208, at 25. WADA brands first-time offenders ineligible for two years. *Id.* at 27. A second violation, however, carries with it a lifetime ban from competition. *Id.* The Code allows athletes to reduce or eliminate the prescribed sanctions if they can show: (1) no fault or negligence; (2) no significant fault or negligence; or (3) that they provided substantial assistance in discovering anti-doping rule violations. *Id.* at 29-32. Furthermore, the Code permits athletes to appeal their case to the Court of Arbitration for Sport in accordance with the rules of that court. *Id.* at 38.

medical purposes.²¹⁵ In order to receive an exemption, athletes must make a request to their respective anti-doping agency.²¹⁶ The agency must then review the request and evaluate it in accordance with the international standards regarding therapeutic use.²¹⁷ The agency will then either accept or deny an athlete's request for an exemption.²¹⁸ If the agency denies an athlete's request for an exemption, the athlete may request that WADA review the denial.²¹⁹

The USADA's jurisdiction extends to any athlete who participates in a competition sanctioned by the United States Olympic Committee and to any foreign athlete present within the United States.²²⁰ Although a separate entity, the USADA prescribes to the same guidelines used by WADA.²²¹ Consequently, the USADA incorporates the same burdens, penalties, and procedures as those used by WADA.²²²

III. ANALYSIS

This section provides a constitutional argument for the testing of Adderall on all levels of academia. It will establish a constitutional basis for drug testing students at both the high school and college levels. The analysis will conclude with a discussion on how administrations can create a scheme that would comply with existing programs in the NCAA and WADA. Academia, like sports, should be an environment in which all participants have an equal chance of success. One way a school can level the playing field is by implementing a policy to catch those individuals who cheat.

A. High School

The Supreme Court has consistently stated that high school students have a lower expectation of privacy than adults.²²³ That does not mean, of course, that a high school has unfettered discretion to invade a student's privacy.²²⁴ To comply with case law, a school district must at least establish that there is a developing drug problem and that the pro-

215. *Id.* at 17.

216. *Id.* at 18.

217. *Id.*

218. *See id.* The agency approving the therapeutic exemption must report its finding directly to WADA if the agency approved an exemption to either a national or an international athlete. *Id.* Additionally, "WADA, on its own initiative, may review the [grant]" of any exemption to more prominent national and international athletes. *Id.*

219. *Id.* WADA may only reverse the denial if it finds that the denial did not comply with the international standards. *Id.*

220. UNITED STATES ANTI-DOPING AGENCY, *supra* note 209, at 1.

221. *See id.* at 2.

222. *See id.*

223. *Supra* notes 87-121.

224. *See, e.g.,* Vernonia Sch. Dist. v. Acton, 515 U.S. 646, 654 (1995) (holding that the doctrine of *in loco parentis* justifies treating students differently than adults).

posed policy is reasonable.²²⁵

Both the *Vernonia* and *Earls* decisions limited the scope of drug tests to students who voluntarily joined a school organization.²²⁶ In *T.L.O.*, the Supreme Court recognized the impracticability of requiring schools to obtain warrants based on probable cause whenever they wanted to perform a search.²²⁷ As a result, a search by school officials is valid as long as it is justified at its inception and reasonably related in scope to the circumstances.²²⁸ As such, a school district could proffer several reasons to justify a campaign against Adderall abuse. The most persuasive argument, however, should concentrate on the recent surge in the abuse of prescription medications and the potential side effects associated with those medications.

Recent surveys are discovering the emergence of a subculture of prescription drug abuse.²²⁹ Every year, more students are moving away from the sidewalk drug dealers and toward the medicine cabinet to look for the next high.²³⁰ Consequently, the statistics show an upward trend from year to year in the number of students that openly admit to taking prescription medication without a prescription.²³¹ As a result, the abuse of prescription medication is quickly becoming a serious problem.

To make matters worse, some of these prescription drugs are just as dangerous and addictive as opium, cocaine, and methamphetamine.²³² Adderall, for instance, has recently been classified as a schedule II substance by the DEA.²³³ Additionally, Shire, the producer of Adderall, openly discloses that taking Adderall can lead to a serious addiction.²³⁴ Furthermore, Adderall has the potential to cause serious psychotic disorders like psychosis and schizophrenia.²³⁵ Based on the upward trend in the abuse of prescription medication and the serious health problems that can result from it, schools should have the power to test for Adderall abuse.

Opponents of testing all high school students will likely argue that this proposal falls in line more with *Lopez* and *Willis*—which limited the

225. Bd. of Educ. v. Earls, 536 U.S. 822, 837 (2002); *Vernonia*, 515 U.S. at 665.

226. *Earls*, 536 U.S. at 838; see also *Vernonia*, 515 U.S. at 660.

227. See *New Jersey v. T.L.O.*, 469 U.S. 325, 341 (1985).

228. *Id.* at 347.

229. *Supra* notes 73-75 and accompanying text.

230. See IN EVERY MEDICINE CABINET IN THE NATION..., USA NOTES (Jan. 2008), <http://ag.udel.edu/extension/safety/trafficsafety/articles/USA%20Notes%20In%20Every%20Medicine%20Cabinet.pdf>.

231. See *supra* note 74 (particularly looking at the increase in use of OxyContin between 2006 and 2007 in tenth and twelfth grade, and increase in use of amphetamines in tenth graders in the same time frame).

232. See United States Drug Enforcement Administration, *The Controlled Substance Act*, <http://www.usdoj.gov/dea/pubs/abuse/1-csa.htm#Schedule%20II> (last visited Sept. 15, 2008).

233. 21 CFR § 1308.12 (2008).

234. See SHIRE, ADDERALL XR MEDICATION GUIDE, http://www.adderallxr.com/assets/pdf/prescribing_information.pdf.

235. PHYSICIANS', *supra* note 10, at 3164.

scope of constitutional drug testing to students in extracurricular activities—than with *Vernonia* and *Earls*.²³⁶ Such an argument, however, requires a very narrow reading of the United States Supreme Court decisions in *Vernonia* and *Earls*.

At the heart of *Vernonia* and *Earls* was the concept of *in loco parentis*, which provided the school districts a mechanism to protect students and maintain order.²³⁷ The same *in loco parentis* justification employed in *Vernonia* and *Earls* is broad enough to encompass drug testing any student, whether voluntarily participating in an extracurricular activity or not. Specifically, the *Earls* Court stated that prevention and deterrence of childhood drug use is a sufficient reason to justify a school-wide testing policy.²³⁸ As such, Supreme Court precedent seems to undermine the argument that it would be unconstitutional to drug test all students.

In addition to legal arguments, it is also important to examine possible methods to ascertain which students are abusing Adderall. Fortunately, some high schools in the United States have a functional drug-testing policy.²³⁹ If a student tests positive for amphetamines, determining whether the student is abusing Adderall would require only two additional steps. Representatives of the school district should ask students who test positive for amphetamines whether they took Adderall. If a student answers in the affirmative, the representative should then verify whether the student had a prescription.

It is crucial, when taking these additional steps, that an administration take every possible measure to ensure confidentiality.²⁴⁰ One precaution an administration can take to protect the privacy interests of the students is to limit the number of people involved in the process. This could entail hiring an individual not affiliated with the school or designating one or two current employees with the task of administering the drug test and following up with the results. Schools could also replace students' names with identification numbers, which would prevent lab technicians from knowing whose sample they are testing. These ideas are not exhaustive, but rather examples of how an administration can drug test students while also protecting their privacy interests.

Finally, it is essential that the drug-testing program is *not* performed for criminal prosecution.²⁴¹ One of the facts that the Supreme

236. *Willis v. Anderson Cmty. Sch. Corp.*, 158 F.3d 415, 424-25 (7th Cir. 1998); *Trinidad Sch. Dist. v. Lopez*, 963 P.2d 1095, 1110 (Colo. 1998).

237. *Bd. of Educ. v. Earls*, 536 U.S. 822, 830 (2002); *Vernonia Sch. Dist. v. Acton*, 515 U.S. 646, 654 (1995).

238. *Earls*, 536 U.S. at 824.

239. *See, e.g., Earls*, 536 U.S. 822; *Vernonia*, 515 U.S. 646.

240. *See Earls*, 536 U.S. at 833.

241. *Id.* at 828, 833-34. Drug-testing schemes administered for criminal prosecution require probable cause, rather than a showing of a serious problem. *See id.* at 828-29.

Court relied on in reaching its decision in *Earls* was that the drug-testing program did not lead to criminal prosecution.²⁴² The *Tinker* Court made it very clear that students do not shed their constitutional rights at the schoolhouse gate.²⁴³ Because drug testing is a search under the Fourth Amendment, courts would be highly unlikely to allow a school to drug test students without probable cause if the administration plans to pursue criminal action.²⁴⁴ Alternatives to criminal punishment for Adderall abuse could be verbal warnings, failing grades, or suspensions.

It is becoming more apparent that prescription drug abuse is a real and pervasive problem in high schools around the country.²⁴⁵ Fortunately, the Supreme Court has provided school districts the power to test all students for amphetamines and take reasonable steps to remedy the problem of abuse.²⁴⁶ As a result, testing for Adderall in high schools is compatible with the current law and is a natural progression for the current drug-testing schemes utilized by high schools around the country.

B. College Students

First, this section will examine whether Adderall actually plays a role in academic success. Second, this section will discuss whether colleges have any recourse available to them to combat the dangers of Adderall abuse, and how those measures mesh with current schemes used in the NCAA and WADA.

1. Does Adderall Make Students Smarter?

The first important question to consider is whether Adderall gives students an unfair advantage. At first glance, the answer seems simple. Most of the studies performed on Adderall suggest a correlation between it and improved performance in the classroom.²⁴⁷ Further investigation, however, leads to a more nuanced answer.

The primary purpose of Adderall is to balance the amount of dopamine and norepinephrine in an individual's system.²⁴⁸ Some studies have shown that an imbalance in those chemicals may lead students to underachieve in school.²⁴⁹ One reason for this is that any disparity in those chemicals may affect a person's ability to study and focus on an

242. *Id.* at 833-34.

243. *Tinker v. Des Moines Indep. Cmty. Sch. Dist.*, 393 U.S. 503, 506 (1969).

244. *See Earls*, 536 U.S. at 828.

245. *Supra* notes 73-75 and accompanying text.

246. *See, e.g., Earls*, 536 U.S. at 838 (granting the administration the power to test all students in extracurricular activities); *Vernonia Sch. Dist. v. Acton*, 515 U.S. 646, 665 (1995) (granting the school district the right to drug test student athletes).

247. *Supra* notes 37-38 and accompanying text.

248. SHIRE, *supra* note 16.

249. *See id.*

exam, which leads to below average grades.²⁵⁰ Consequently, what students are actually doing when they take Adderall is increasing the amount of dopamine and norepinephrine in their system.²⁵¹ This increase leads to an overall improvement in the ability to focus and concentrate.²⁵²

Those opposed to testing for Adderall would be correct in arguing that it does not make people smarter. That argument, however, fails to capture the bigger picture. Although Adderall does not make people smarter, it does give them the unnatural ability to study long hours without feeling fatigued. While not directly affecting cognition, the Adderall advantage indirectly helps students sit down and learn a lot of information within a short amount of time. To put it in the words of one medical professional, "Adderall makes people into study machines."²⁵³

Additionally, the increase in dopamine and norepinephrine may help students perform better on standardized tests. One such test would be the LSAT. Again, Adderall will not make students smarter, but it will make them more efficient. In cases like the LSAT where one question can make all the difference, the increase in efficiency can ultimately help a student obtain a better score and get into a better school.²⁵⁴

Those arguing that Adderall does not make people smarter are semi-correct. Adderall does not increase cognition. It does, however, affect the composition of dopamine and norepinephrine in such a way that it helps students stay awake, concentrate, and study for extraordinarily long hours. As a result, Adderall directly helps students prepare for exams and indirectly helps them absorb the information needed to succeed on those exams. The Adderall advantage, therefore, gives students abusing it an unfair advantage.

2. Can Adderall Be Regulated?

Colleges, unlike high schools, cannot rely on *in loco parentis* authority to justify potentially unconstitutional searches because most college students are no longer under the protection of their parents.²⁵⁵ Many of them are old enough to enjoy the right to vote, enlist in the military, drive, and drink alcohol.²⁵⁶ As a result, courts have generally

250. *See id.*

251. *See id.*

252. *See id.*

253. Gonzalez, *supra* note 36.

254. *See* The LSAT Scoring Scale, <http://www.powerscore.com/lSAT/help/scale.htm> (last visited Sept. 23, 2008).

255. *Morale v. Grigel*, 422 F. Supp. 988, 997 (D.N.H. 1976); *see Collier v. Miller*, 414 F. Supp. 1357, 1367 (S.D. Tex. 1976). *Morale* involved the warrantless search of a college student's dorm room for stolen goods. 422 F. Supp. at 991-92. In *Collier*, a Houston University student's purse was searched for alcohol without probable cause. 414 F. Supp. at 1359.

256. *Supra* notes 142-144 and accompanying text.

given college students the full protections of the Fourth Amendment.²⁵⁷ Therefore, to meet constitutional requirements, a college-level drug-testing scheme must either be (1) voluntary, or (2) administered in a reasonable manner in furtherance of an important government interest.²⁵⁸

The simplest solution would be to obtain the voluntary consent of all students.²⁵⁹ Such consent would preclude students from asserting a Fourth Amendment claim.²⁶⁰ As a result, one thing colleges can start doing is including a voluntary consent form within each acceptance application. While the consent of a student would eliminate many of the Fourth Amendment issues, it is highly unlikely that a college can successfully obtain the voluntary consent of every student. Therefore, it is essential to establish a valid constitutional framework for drug testing under the Fourth Amendment.

a. What Are the Government Interests?

In arguing for a drug-testing policy based on the Fourth Amendment, the state must assert an actual problem, rather than a symbolic one.²⁶¹ Therefore, the first step in developing a rational justification for drug testing college students is to identify the government interest.²⁶² In this case, there are two specific government interests: student safety and academic integrity.

i. Student Safety

Courts, from all jurisdictions, have repeatedly upheld drug-testing policies designed to prevent or deter dangerous drug use.²⁶³ Furthermore, courts have generally upheld broad drug-testing policies unless the state can never apply it in a constitutional manner.²⁶⁴ It is crucial, therefore, that the state provide concrete evidence of a drug problem and that the proposed state action be administered in a constitutional manner.²⁶⁵ Consequently, it is essential to discuss whether Adderall abuse is a significant enough problem to deserve attention.

Adderall is a significant factor in the treatment of individuals with

257. *See supra* notes 144-174 and accompanying text.

258. *See* *Univ. of Colo. v. Derdeyn*, 863 P.2d 929, 945-46 (Colo. 1993).

259. *See id.* at 946. Warrantless searches are typically reasonable if the individual has given consent. *Id.*

260. *Id.*

261. *See* *Lanier v. Woodburn*, 518 F.3d 1147, 1150 (9th Cir. 2008).

262. *See* *Nat'l Treasury Employees Union v. Von Raab*, 489 U.S. 656, 666 (1989); *Skinner v. Ry. Executives Ass'n*, 489 U.S. 203, 619-20 (1989).

263. *Dimeo v. Griffin*, 943 F.2d 679, 685 (7th Cir. 1991); *Int'l Bhd. of Teamsters v. Dep't of Transp.*, 932 F.2d 1292, 1309 (9th Cir. 1991).

264. *Lanier*, 518 F.3d at 1150.

265. *See id.*

ADHD, but it does not come without its dangers.²⁶⁶ Among the most serious side effects associated with the drug are depression, psychosis, stroke, and death.²⁶⁷ Individuals with a prescription tend to avoid these side effects by taking an appropriate dose.²⁶⁸ Those taking Adderall without a prescription, however, are at greater risk of developing these harmful effects because they may be taking doses well beyond what their bodies can handle.²⁶⁹

Unfortunately, the statistics suggest a recent upward trend in the number of college students taking Adderall without a prescription.²⁷⁰ Some studies report as few as 6% of students are abusing Adderall while others put the number near 40%.²⁷¹ In addition, the alarming rate of growth in the sale of Adderall may further lead to an increase in the number of students abusing it every year.²⁷² Whatever the number, the current studies show that enough students are taking Adderall, a schedule II substance, without a prescription to warrant some attention.

It is no wonder, therefore, that a very profitable black market for the drug has developed. As witnessed on one college campus, a student boasted on how he made \$420 in profit off one prescription of Adderall.²⁷³ While some students purchase Adderall to get high, a majority of them buy Adderall illegally under the impression that it will help them get better grades.²⁷⁴ As a result, both the opportunity for profit and the promise of better grades have the potential to lead to more students buying and selling Adderall on college campuses every year.

The abuse of Adderall is not something to take lightly. The harmful side effects can cause lifelong abnormalities that not only affect the student, but also their family and friends. Such side effects are inherent problems with the drug, but have the potential to manifest more frequently when individuals take improper doses. The presence of a black market and a chance at better grades will more than likely lead to more students abusing Adderall. As a result, it is imperative for colleges to confront the problem of Adderall abuse before it explodes into an unmanageable epidemic. Therefore, universities and colleges should be justified in protecting the health of the student population from the harmful side effects of Adderall.

266. *Supra* notes 14-31 and accompanying text.

267. PHYSICIANS', *supra* note 10, at 3165.

268. *Id.*

269. *See id.*

270. *See supra* note 71, at 1504; *College Aderall Abuse and Its Dangers*, *supra* note 76.

271. *Compare* Advokat, *supra* note 33, at 602, *with* Teter, *supra* note 71, at 1504.

272. *See supra* notes 52-56 and accompanying text.

273. *Supra* note 65 and accompanying text.

274. *Supra* note 71, at 1507.

ii. Academic Integrity

The government also has an interest in protecting the integrity of the academic system. Some courts have held that protecting the integrity of an institution and the public's confidence in it can be a valid government interest.²⁷⁵ Therefore, it would be advantageous to establish a link between academic integrity and the abuse of stimulant drugs like Adderall.

The primary purpose of institutions of higher education is to educate.²⁷⁶ Consequently, universities and colleges have a significant interest in maintaining academic integrity on campuses.²⁷⁷ In 2005, the Center for Academic Integrity reported that 70% of undergraduate students reported cheating in college.²⁷⁸ Furthermore, a Rutgers University survey found that 56% of business graduate students, 54% of engineering graduate students, and 45% of law students admitted to cheating.²⁷⁹ In the long term, students who cheat in college are more likely to engage in unethical behavior in the workplace.²⁸⁰

As it currently stands, employers primarily use GPA to distinguish between students.²⁸¹ Consequently, students abusing Adderall believe they are putting themselves in the most advantageous position to get the best jobs and make the most money.²⁸² Typically, in the college context, cheating includes using unauthorized study aids, downloading term papers, or looking at another student's exam. Adderall, however, is also a form of cheating because it has the potential to help students raise their GPAs without putting in the necessary work.²⁸³ Therefore, Adderall abuse, like copying a term paper, is another form of cheating that can cast doubt upon the academic system and place individuals who do not take performance-enhancing substances at a disadvantage.²⁸⁴

275. See *Dimeo v. Griffin*, 943 F.2d 679, 682 (7th Cir. 1991); *Shoemaker v. Handel*, 795 F.2d 1136, 1142 (3d Cir. 1986).

276. See *A Message from the President*, <http://www.purdue.edu/president/> (last visited Sept. 23, 2008).

277. See *Academic Integrity, Plagiarism, and Citing Sources*, http://www.uoit.ca/EN/library/main/17195/plagiarism_and_citing_sources.html (last visited Sept. 23, 2008). A current policy in line with that interest is the campaign against plagiarism, which punishes students for taking credit for something they did not create. See *id.*

278. Sharron M. Graves & Stephen F. Austin, *Student Cheating Habits: A Predictor of Workplace Deviance*, 3 J. DIVERSITY MGMT. 15, 15 (2008), <http://www.cluteinstitute-online.com/PDFs/571.pdf>.

279. Alan Finder, *34 Duke Business Students Face Discipline for Cheating*, THE N.Y. TIMES, May 1, 2007, <http://gcc.tamucc.edu/article.pl?sid=07/05/03/1734247>.

280. Trevor Harding et al., *Cheating in College and Its Influence on Ethical Behavior in Professional Engineering Practice*, AM. SOC'Y FOR ENG'G EDUC. (2006), <http://deepblue.lib.umich.edu/bitstream/2027.42/55273/3/2006%20ASEE%20Harding%20Ethics%20Final%20Paper.pdf>.

281. See David Koepfel, *Those Low Grades in College May Haunt Your Job Search*, N.Y. TIMES, Dec. 31, 2006, <http://www.nytimes.com/2006/12/31/jobs/31gpa.html?n=Top/Reference/Times%20Topics/Subjects/E/Education%20and%20Schools>.

282. See Pat Curry, *University Gets Tough on Cheating*, <http://www.uga.edu/gm/300/FeatTough.html> (last visited Sept. 23, 2008).

283. See *supra* notes 32-47 and accompanying text.

284. See Romer, *supra* note 46, at 177-78.

Opponents of drug testing will point to the study that shows individuals abusing Adderall generally have a B or lower GPA.²⁸⁵ While this argument may seem logical on its face, further examination of the study reveals its flaw. In that particular study, the researchers asked a sample of students whether they had abused Adderall.²⁸⁶ Astonishingly, researchers discovered that students abusing Adderall typically averaged below a B GPA.²⁸⁷ What the study failed to prove, however, was whether those students would have received the same GPA without Adderall.²⁸⁸

Deficiencies in the study aside, the argument that only students with less than a B average abuse Adderall misses the biggest point. The purpose behind testing for Adderall abuse is not just to protect those students with B+ or better GPAs. The main objective of the testing is to protect *all* students on the campus and ensure them, the public, and potential employers that everyone is playing on an equal playing field. Just because a majority of students taking Adderall are not at the top of the class does not change the fact that students on campuses are abusing the drug and getting better grades because of it.

It would be irresponsible for the courts to ignore the alarming statistics shedding light on cheating in higher education. It would be equally irresponsible for the courts to limit a university's power to punish individuals only for copying a paper or buying a term paper online. Adderall is a stimulant that increases students' alertness, allows them to concentrate beyond their normal capabilities, and gives them the needed boost to learn large quantities of information in a short amount of time.²⁸⁹ The purpose of testing for Adderall abuse is ultimately to ensure a fair atmosphere for academic competition, especially in a society where grades matter so much.

b. Reasonable Means

The second requirement for a valid college drug-testing scheme is the establishment of reasonable means.²⁹⁰ Courts measure reasonableness by weighing the intrusion against the proffered government interest.²⁹¹ The NCAA and WADA currently use urinalysis as the chief method of obtaining a sample.²⁹² Relying on urinalysis for campus drug

285. Advokat, *supra* note 33, at 603.

286. *Id.* at 602.

287. *Id.* at 603.

288. *See id.*

289. *Supra* notes 32-49 and accompanying text.

290. *Univ. of Colo. v. Derdeyn*, 863 P.2d 929, 958 (Colo. 1993) (Erickson, J., dissenting).

291. *Int'l Union v. Winters*, 385 F.3d 1003, 1007 (6th Cir. 2004).

292. WORLD ANTI-DOPING AGENCY, WORLD ANTI-DOPING CODE at 13 (2003), http://www.wada-ama.org/rtecontent/document/code_v3.pdf; NCAA, DRUG-TESTING PROGRAM 2007-08, at 2, http://www.ncaapublications.com/Uploads/PDF/2007-08_drug_testing_program

testing, however, would likely be too intrusive, expensive, and impractical.

The government always infringes upon an individual's Fourth Amendment privacy rights during a random, suspicionless drug test.²⁹³ The magnitude of the intrusion, however, differs depending on the circumstances.²⁹⁴ For example, the magnitude of the intrusion on student athletes is less severe because they normally change in same-sex locker rooms.²⁹⁵ Therefore, it becomes crucial to consider less intrusive alternatives for testing students not affiliated with extracurricular sports.

Fortunately, there are several less intrusive methods of testing an individual for illegal drugs including using hair, saliva, and sweat samples.²⁹⁶ Sweat and hair samples are less intrusive than a urine test and have a low risk of adulteration.²⁹⁷ Those tests, however, have a high risk of false positives and may end up costing more than a urine test.²⁹⁸

A convenient, accurate, and less intrusive alternative would be a saliva test.²⁹⁹ The collection of saliva is easier than urine and less prone to adulteration.³⁰⁰ The test would require the subject to saturate a cotton swab with saliva, which is then stored in a collection vial.³⁰¹ The saliva test will then be able to detect whether the subject has recently consumed illegal drugs.³⁰² The biggest disadvantage to a saliva test is its inability to detect drug use beyond the last few days.³⁰³ This disadvantage, however, would be an advantage for a university defending its drug-testing policy because it limits the amount of information the drug test can reveal. The limitations of the saliva test, therefore, limit the amount of intrusion and make the test more reasonable than urinalysis.

Those opposed to college drug-testing programs will undoubtedly wonder whose responsibility it is to pay for the program. Although there are several possible sources for funding, the burden will ultimately rest with the university and the student body. As such, colleges would most likely have to charge more for tuition to cover the expenses of the drug test. That said, the increase in tuition would most likely be no more than five to ten dollars per student.³⁰⁴

948b5825-5871-464b-b5f0-7f4c2ee65668.pdf.

293. *Derdeyn*, 863 P.2d at 937.

294. *Id.*

295. See, e.g., *Hill v. NCAA*, 865 P.2d 633, 665 (Cal. 1994).

296. Erowid, *Drug Testing Basics*, http://www.erowid.org/psychoactives/testing/testing_info1.shtml (last visited Sept. 23, 2008).

297. Neil Swan, *Sweat Testing May Prove Useful in Drug-Use Surveillance*, http://www.drugabuse.gov/NIDA_Notes/NNVol10N5/Sweat.html (last visited Sept. 23, 2008).

298. *Id.*

299. Erowid, *supra* note 296.

300. Craig Medical Distribution Inc., *SalivaScreen 5 Professional*, http://www.craigmedical.com/salivascreen5_drug_tests.htm (last visited Sept. 23, 2008).

301. *Id.*

302. *Id.*

303. Erowid, *supra* note 296.

304. The tuition increase this Note proposes is an educated estimate based on the price of a suit-

Next, reasonableness requires that colleges set up procedures to keep student information confidential. Colleges can do this by limiting the group of people involved in administering the test, analyzing it, and reading the results. Additionally, colleges can replace student names with identification numbers to ensure that lab technicians are blindly testing the samples.

The college will also need to decide on the method of collection. As discussed earlier, saliva testing is the least intrusive and most reliable alternative to urinalysis, with a limited capability to relay historic drug use.³⁰⁵ As a result, the use of saliva testing is probably the most likely drug test to pass a constitutional challenge.

Finally, colleges must decide when to collect samples. This decision will entail whether the test should be random or whether the school should test every student at a specific time—most likely before or after an exam. This decision will most likely vary depending on the size and demographic of a college. For instance, smaller colleges will have an easier time drug testing the entire student population, while larger schools will have to opt to drug test only a random selection.

In the end, the decision to crack down on Adderall abuse lies with colleges. The need to test for Adderall is apparent by the number of students abusing it, the unfair advantage it gives them, and its harmful side effects.³⁰⁶ Additionally, advancements in science have made drug testing a far less intrusive procedure. As a result, there is a compelling reason to begin testing college students for Adderall abuse.

3. Testing in Light of NCAA and WADA Schemes

The rationale behind current drug-testing schemes supports the proposed drug testing for Adderall abuse in higher education. Both the NCAA and WADA programs were developed to protect the integrity of sports and the safety of all participants.³⁰⁷ This rationale is no different in the context of testing for Adderall. Adderall is a dangerous drug that not only jeopardizes the integrity of academics, but it also has the potential to cause serious physical and psychological harm to students.

Additionally, both the NCAA and WADA have medical exceptions for drugs taken with proper prescriptions.³⁰⁸ This too is similar under the proposed college drug-testing scheme. The purpose of testing students for Adderall is not to catch students taking it legally, but illegally. While Adderall is a dangerous drug, it does help people suffering

able saliva test. *See* Craig Medical Distribution Inc., *supra* note 300.

305. Erowid, *supra* note 296.

306. *See supra* notes 14-81 and accompanying text.

307. *See supra* notes 195-222 and accompanying text.

308. *See supra* note 215 and accompanying text.

from ADHD live normal lives. As such, students taking Adderall should receive a medical exemption the same way an athlete would under the NCAA and WADA schemes.

Finally, both the NCAA and WADA do not criminally punish individuals caught with a prohibited substance in their system. Similarly, any proposed college testing scheme should provide that only the college can punish a student caught abusing Adderall. The distinction between criminal prosecution and in-house punishment could be crucial in deciding the constitutionality of the program. That is to say, courts would probably be more open to allowing a drug-testing scheme that does not include jail time.³⁰⁹

IV. CONCLUSION

It is not difficult to see that the problem of Adderall abuse poses a real danger to academics. If recent trends hold true, more students will begin taking Adderall as a study aid this year. Adderall abusers not only jeopardize academic honesty, but they also risk irreparable harm to their bodies.

Testing for Adderall abuse will be easiest in high schools primarily because of the current state of the law. A deeper examination of the case law reveals the necessary guidance to test all high school students, not just those in extracurricular activities. Finally, the only additional step those institutions need to take is to ask individuals testing positive for amphetamines if they are taking Adderall with a prescription.

The more difficult arena proves to be college campuses, which also happen to be where Adderall abuse is the worst. In order to implement a constitutional policy, universities need to establish a convincing argument that Adderall abuse is not only a problem but that it is endangering the academic institution. Furthermore, universities must implement the process through the least intrusive method possible.

Adderall has sullied the game. Whether the academic game is played in high school classrooms or on college campuses, Adderall has cast a growing shadow across academic integrity. In the end, colleges will choose to either act or sit back and watch. For the sake of everyone, it is time to act.

309. See *Vernonia Sch. Dist. v. Acton*, 515 U.S. 646, 653 (1995).

