

## Study Drugs Are Becoming “Necessary” For Success At NYU

By Danielle Desmond

Audrey\*, 22, is a senior at New York University double majoring in psychology and economics, with a minor in biology. She is also working towards a certificate in editing. Between her 18-credit course load, she has two part-time jobs as a SAT tutor and as a babysitter, as well as an internship at a psychiatric ward. She has a social life too, and enjoys partying on the weekends. For her, the day is based on what she can physically and mentally accomplish in a 24-hour time period.

In order to keep up with the demands of her busy schedule and still function as a human being, she often takes a little orange pill called Adderall, a prescription drug that is used to treat attention deficit hyperactivity disorder (ADHD). Still, the pills are easy to get from her friends with the disorder.

“It’s a miracle drug,” she said. “These days, you have a limited supply of time and a shitload of stuff to do.” (Audrey, like other students interviewed for this story, requested to be anonymous due to the sensitivity of the subject.)

For the past decade, college students have been raving about the marvelous effects of “popping an addy” for a variety of purposes. Students at some party schools use Adderall as a cheap form of cocaine. But at highly competitive schools like NYU, the drug appeals to students looking for something to help them keep up with their intense workloads. This drug is similar to Oxycontin and Vicodin – it’s a drug that is struggling to find a balance of a need for legitimate medical use, and on the other hand, is still widely available and used illegally, despite a nationwide shortage that is effecting those who actually rely on it to get through the day.

Adderall is a stimulant drug composed of amphetamine salts – the same active ingredient used in methamphetamine and is commonly prescribed to control the symptoms of attention deficit hyperactivity disorder (ADHD). ADHD involves problems with impulsivity, concentration and over-activity. One of the few legal amphetamines in the United States, Adderall increases the amounts of certain neurotransmitters in the brain; mainly dopamine and norepinephrine, which deal with memory formation and attention.

This drug is typically taken orally, but can also be crushed and snorted, as well as chewed to enhance the effects. Generally one 10 or 20 milligram pill is enough to keep the average student focused for about seven hours. While Adderall is available in a slow release formula that works gradually over an eight-hour period, students prefer taking the pill in its immediate release form. Students report enhanced alertness, cognition, memory, concentration and productivity when using the study drug. Users may experience euphoria, or a high when taking the drug; therefore it carries the risk of addiction. The Drug Enforcement Administration classifies Adderall as a Schedule II controlled substance – the same category as cocaine and heroin.

Adderall prolongs the body's ability to stay awake by creating a chemical imbalance and making you think that you have more energy. But as the drug wears off, some students interviewed reported severe headaches and feeling jittery. Other typical side effects include difficulty sleeping, feeling thirsty, loss of appetite and restlessness, but nothing too serious. However, as with most stimulants, Adderall increases the risk of cardiovascular problems.

Adderall is the leader in amphetamines, but it isn't the only drug of its sort. Other types of stimulants like Vyvanse, Ritalin, and Concerta are circulating around but have varying side effects and are not as immediate as Adderall.

Recently, the Federal Drug Administration (FDA) added Adderall to a list of drug shortages. According to the FDA, too much demand and a limited supply of amphetamine, which is controlled and regulated by the Federal Drug Enforcement Administration, is the main reason behind the shortage. While this may be true, some think college students who are taking Adderall when they don't need it may be to blame.

Most students get their pills for free from other students who have prescriptions and pills to spare, or buy it for about \$5 a pop from a dealer— not much more than a latte at Think Coffee. James\*, 20, a junior, periodically shares his extras with friends when they are in need. "I have plenty of extra and I know how hard it can be to get pills," he said.

James is prescribed Concerta, which he says has relatively the same effects as Adderall. He first started taking it in the first grade, then stopped taking it for a while in high school, but keeps his prescription active. "I don't take it regularly anymore but I use it when I have exams and stuff," he said. "It's messed up but you have to tell them [doctors] you need it all the time to get it, even if you really don't. You can't go to a doctor and tell them that you only take it every now and then, it sounds really sketch to them," he added.

Adderall is consumed most frequently around midterms and finals, according to multiple students at NYU. "If you walk around Bobst around exam time, it's like a crack house because everyone's all amped up," said Chris Wytenus, 21, a senior studying political science and journalism, who commented on the rampant use on campus.

Jay Zwicker, Assistant Director of Public Safety for Strategic Planning, Crime Prevention and Clery Compliance, oversees every incident report filed at the University but hasn't dealt with any concerning prescription drugs. "It's a huge problem at universities all over," he said. "But in the six years that I've been here, I've never seen anything regarding study-enhancing drugs like Adderall on this campus." This is because the visible effects are subtle, not like being intoxicated or stoned, so it is hard to detect. "It's easily accessed and almost becoming something that's normal," said Connor\*, 21, a senior in the Stern School of Business. Stern is known as one of the most competitive schools within NYU – Connor estimated that over 50 percent of students in the program use Adderall periodically, himself included.

“I’m very focused when I take it and it’s not like it makes you any smarter, it just takes a bit of the struggle out of studying,” said Connor.

“Whenever it starts to kick in, you feel kind of energized and really talkative,” said Claire\*, 20, a junior studying sociocultural anthropology. “I get really thirsty, and since I’m a smoker it makes me want to smoke more. I am way more attentive in my reading, I can think better and clearer. But when it starts to wear off, I can feel myself not being able to think things through versus being able to blitz through my work.”

“I think about 95 percent of my friends take it,” said junior, Sean\*, 20, who is studying finance. “I might have a slight exception just because I know so many people with prescriptions and it gets passed around so frequently around my friends. I think that in most people’s friend base, it would be around 50 percent.”

“Everyone uses it,” said Sergio Lira, 20, a junior in Gallatin studying politics, history, and film. “I think at least half of the people that I know use it and people who haven’t always talk about wanting to try it.”

According to a 2010 report by the television show 60 Minutes, 50 to 60 percent of college juniors and seniors have reported using study-enhancing drugs. A 2005 study from the University of Maryland showed that Adderall is the third most accessible drug on campus, trailing behind alcohol and marijuana.

According to the Center for Disease Control, one in 12 Americans is diagnosed with ADHD and profits from Adderall have increased more than 30 times since that of 2001, leading many to question whether or not the medication is being over-prescribed.

Dr. Melissa Nishawala of the NYU Child Study Center specializes in disorders such as ADHD. She doesn’t think medications such as Adderall are overprescribed, but symptoms may not be looked at carefully enough. “People will go and talk to their primary care doctor, but they don’t do a full evaluation and look into the patient’s medical history,” she said. “Inability to concentrate may actually be caused by being overwhelmed by a task, and could actually be anxiety, not an attention deficit disorder.”

ADHD is a disorder that does not go away – people like Wendy\*, 20, a junior studying art history, have to deal with it their whole lives. Adderall helps her function regularly. “I’ve been prescribed Adderall since I was in second grade,” she said. “Since I have taken it before, I’ve grown up knowing how to manipulate it. Once I entered college, I stopped taking it regularly and would save it up to take it mainly around midterms and finals. It doesn’t hit me as strongly as people who rarely ever take it do though,” she said.

But Wendy has more pills than she needs. She is prescribed 90 pills a month, taking about three a day. “I don’t really like taking it because it makes me not able to sleep and I don’t have much of an appetite when I take it,” she said. She explains she doesn’t take it much anymore unless she has to use it to concentrate. “My doctor reprimands me for not taking it as often as I’m supposed to because I was honest when he asked,” she said.

While her mom knows that she doesn't take it regularly, the fact that she sells is not something that she wants her to find out.

Selling Adderall to someone without a prescription is a felony, but this doesn't bother most students. "Whenever hard times have hit me, I've sold it before, but only to people that I'm close friends with," said Wendy.

The shortage hasn't really affected students, not yet anyway. "I don't really think students have been seeking it out yet," said Sean. "But in two weeks, when finals begin, it will be ridiculous."

Some though are making preparations to get their pills in advance, like finance and accounting sophomore, Justin\*, 19. "I've been studying without it," he said, "but I've already got some for finals though. It's useful when you have to cram for something," he said.

"There is always a so-called 'shortage' around exam time," said Jessica, 21, a senior in Stern. "It will just be harder to find, and those that do have it will be selling it for higher prices. But if you know the right people, it's easy to find."

"Do I have a problem with people who take it to study? No. But I do consider it a problem that there is an Adderall shortage," commented Drake\*, 20, a junior studying anthropology. He gets the pills whenever he can from friends and says the shortage will probably make it more difficult for him to find pills, but he knows a lot of people who have access to prescriptions. "You know, I could have worked on my paper all weekend, but I didn't, and did it today under the influence of Adderall," he added.

"People are always trying to find ways to be the best, if you aren't cheating, someone else is," said Nick\*, 22, a senior studying finance and accounting says he only uses Adderall when he has procrastinated. "The external pressure is so great and everyone just wants to do well. Then I think people resort to using it because it's available."

Holly\*, 19, is a sophomore majoring in journalism and politics. She first tried Adderall as a senior in high school to study for an AP test. She typically takes a 20 mg pill to help her study for exams and for when she has procrastinated. "I am an expert procrastinator," she said proudly. "I'm definitely aware that I can do all of these things on my own, but it's easier and more productive with Adderall. It's nice to know that you can pop a pill and get stuff done."

"I think that a lot of it has to do with the increase in availability, it's accessible. We've created a drug to fix something that we caused in the first place. It's a problem of overstimulation," she explained.

"I think there are bigger issues on campus than using another form of a stimulant to study," said Cho\*, 21, a senior studying economics and psychology. "I learned about it when I heard people openly talking about it one day and it didn't seem like it was very dangerous, more like a stronger version of caffeine."

But what many students don't realize is that even occasional use can greatly affect the brain. Adderall affects the mesolimbic pathway, the site of the brain that is associated with feelings of desire and reward. This pathway is also the basis of many theories of addiction.

"The brain area most stimulated is the nucleus accumbens in the midbrain," said Professor David Wolitzky, who teaches an abnormal psychology course at NYU. "It is rich in dopamine receptors. This area is sometimes called the 'pleasure center'. The drug also affects norepinephrine, a neurotransmitter also linked to arousal and attentiveness."

Dr. Efrain Azmitia, also a professor at NYU, specializes in neuroscience and explained that with any sort of amphetamine, there's the potential for addiction. "It causes a release of a neurotransmitter and the body gets used to high levels of the neurotransmitter, and thus the body will crave the drug that you take in order to produce a 'desired effect' that can last anywhere from four to six hours," he said. "This desired effect is when you are high on the drug; you feel an increased self-worth and confidence."

"The body goes through a period of experiencing the exact opposite of what you feel on the drug. This includes decreased energy, maybe not being able to go to class, sleepiness, and decreased appetite and can last anywhere from four to five days. It's a trade off of short term pleasure for long term pain," he added.

For some students, Adderall a magic pill. But for others like Kelsey\*, 21, majoring in journalism and psychology, it didn't help her learn anything. "I've only taken it twice and I've found that it was very ineffective," she said. "It gave me highs and lows. When I was on a high I could do work but when I was on a low I felt it was disruptive." Sometimes students may spend too much time researching a paper than actually writing it or reorganizing their iTunes libraries instead of studying.

"I've never used it," said junior Alexa Gordon, 20, who is studying sociology. "There's a chance that I would, but probably not because I am really afraid. I understand why people do it and if people don't go crazy with it then I don't really see there being a problem, but it's like not for me," she said.

Madison Back, 20, a junior studying journalism and politics, has never used Adderall but commented on the illicit-use at NYU, "Most people that I know take it as a study drug," she said. "But I would rather pay for answers to a test or something," she added jokingly.

Joseph Hunt, 20, a junior in Gallatin studying environmental studies and politics is against using Adderall, stating that, "I kind of think it's cheating to be honest," he said. "Mostly because it's a controlled substance that not everyone has access to, but people make it seem like it's on the level of coffee."

This year, Duke University added the unauthorized use of prescription medications, including Adderall, in its definition of cheating. The question is, how can you actually enforce that?

“At NYU, we strive to better understand the trends of prescription drug misuse among college students,” said Courtney Stein, Assistant Director of the Health Promotion Office regarding the misuse of prescription drugs such as Adderall.

She also mentioned “The Student Health Center providers who prescribe stimulants are well-informed around the current issues and take steps to educate students regarding proper and legal use of stimulants.”

NYU takes illegal drug use seriously, and according to the University’s 2011-2012 Wellness Paradigm, “Removal of a student from the residence halls and/or suspension or dismissal from the University are likely outcomes where it is determined that a student is engaged in the distribution of illegal drugs.”

It’s not a problem of using the actual drug, it’s the implications of constantly forcing your body to do more than is possible that upsets Kyra\*, 19, a junior at NYU studying anthropology who also uses Adderall to cram for exams. “Eventually you are going to need to get a prescription,” she said. “It’s a problem because of the fact that a lot of people are going to need it just because they use it when they don’t actually need it.”

“You may begin to think that you need it and that you are more and more productive on Adderall when that may not really be true. The more that you use of it, the more you want to use it,” said Kyra.

It is difficult to pinpoint exactly what is it about this generation that includes an entire population of people who feel they can’t find the motivation to their homework without the use of drugs. Kyra thinks that one of the main issues is procrastination. “We have so many distractions. It’s hard to juggle school, a social life, and other elements so we tend to save studying to the last minute,” she added.

The Wellness Center and the Health Promotion Office both provide students with basic facts and warnings about using these kinds of drugs. At NYU, where academics are emphasized, the majority of students who have already used study drugs say the benefits outweigh any of the adverse effects. “I think grades are more important and I don’t think it’s used enough,” said Kevin Estok, 19, a sophomore in Stern.