It’s no wonder, then, some are tempted to enhance their academic performance with psychostimulant medications like Ritalin and Adderall, with or without a doctor’s diagnosis of Attention-Deficit/Hyperactivity Disorder (ADHD), the condition the drugs are most often prescribed to treat.

And it’s also no wonder that, among some of their peers, this is generally acceptable behavior—even when obtained illegally from friends, family, or Internet pharmacies. Nearly one in four college students nationwide have reported doing so.

Psychostimulant use in conjunction with ADHD raises important questions about health, fairness, and the development of a person’s identity, as well as safety, artificiality, and dependency.

When we analyzed students’ experiences with prescription stimulants like Ritalin at a university in the northeastern United States, we gained a clearer picture of how and why students incorporate prescription medicine into their lives and identities, as well as the costs and benefits of the prescription of this generation.

medication everywhere

In Running on Ritalin, Lawrence Diller chronicled “a white middle class suburban phenomenon” as psychostimulant medication became one answer to behavior problems in the classroom. In 1998, more than 5 million children had prescriptions for Ritalin, a five-fold increase from eight years before, according to Diller. Its use continues as students age: National surveys report an increased prevalence of psychotropic medication—with and without a prescription—among contemporary high school and college students.

ADHD, previously known as Attention Deficit Disorder (ADD), is the most commonly diagnosed and treated childhood psychiatric problem in the United States, according to Diller. Nearly 8 million children have been diagnosed with ADHD, according to the Centers for Disease Control and Prevention (CDC). As of 2003, 2.5 million children between ages 4 and 17 were being medicated for it, the centers have reported.

White, insured children between ages 9 and 12 make up the highest prevalence group currently using psychostimulant medication in the United States, according to CDC. The picture is clearly gendered, as nearly 10 percent of 10-year-old boys in the United States use medication to treat ADHD while only roughly 5 percent of 10-year-old girls do, the centers have reported. In general, children are the largest market for these drugs, although this may change as the adult ADHD market expands.

While the phenomenon is increasingly global, the United States consumes between 80 percent and 90 percent of the
Ritalin prescribed today, according to Richard Degrandpre, author of *Ritalin Nation: Rapid-Fire Culture and the Transformation of Human Consciousness*.

A psychostimulant “gray market” exists at secondary schools and colleges, where students can buy these drugs from peers. Up to 25 percent of college students on any given campus have used psychostimulants without a prescription, according to national research conducted by public health researchers at the University of Michigan. They found rates were highest at colleges in the northeastern United States and colleges with more competitive admission standards.

Social scientists have identified a variety of social circumstances that paved the way for medicine to solve a wide range of troubles. Managed health care, pharmaceutical consolidation and de-regulation, scientific and technological innovation, and a quick-fix pill culture that normalizes prescription drugs for lifestyle and identity choices are just some of them.

Sociologists have explored how the “Prozac era” and the “Viagra phenomenon,” for example, have emerged out of these circumstances. These and other case studies address the double-edged sword of medicalization—a social process in which a problem becomes defined and treated as a medical issue. While prescription drugs may offer the promise of enhanced quality of life and shift blame away from the individual to the body, a focus on bodies obscures social context. In other words, the emphasis becomes individual students’ bodies rather than the student body at large and the culture that surrounds it. What follows, then, is a Ritalin generation that associates medicine with academic success.

In separate studies, medical sociologists Peter Conrad and Adam Rafalovich have shown that what we now call ADHD has had a host of labels throughout the 20th century, many of which were coined when research on this and related behavioral disorders increased in the 1960s. As the scope of the disorder has expanded, a growing number of children, adolescents, and more recently adults in the United States have been diagnosed with ADHD and prescribed psychostimulants.

In this way, ADHD is a case study of expanding medicalization in American society today. While behavior modification through medication isn’t new, sociologists have shown how, largely through the efforts of advocacy groups and pharmaceutical companies and with the assistance of popular media, diagnoses such as ADHD now address a wider range of troubles. Hyperactivity, general inattentiveness, and underperformance across a wider age range and in a variety of social arenas are now treated under the ADHD umbrella.

Medical professionals may see these numbers as representative of a growing clinical problem in our society. But sociologists see a social crisis and an opportunity to raise important questions about how medicine, the pharmaceutical industry, schools, and families define “normal” childhood behavior and academic achievement.

Parents, doctors, educators, and students play a major role in creating and maintaining—but also resisting—social expectations. In general, social scientists have expressed concern that medicalization, with its focus on the individual and the organic body, obscures the complex social forces that contribute to health and well-being. For example, a lack of hands-on learning opportunities and narrow definitions of academic success, part of an increasingly competitive academic ethic, in American classrooms may be just as central as physiological factors in contributing to behavioral issues.

**the spectrum of use**

Over the past several years I’ve worked with undergraduates to collect and understand data on the medicalization of student life. Drawn to the research because we were troubled and intrigued by patterns of pharmaceutical use—particularly psychostimulant use and abuse—we wanted to know more about scope, social meanings, and identity.

As we conducted our surveys and interviews, national surveys conducted by the University of Michigan exposed the scope of prescription drug use and abuse on college campuses. Our and the Michigan data revealed that for a generation coming of age in the pharmaceutical era, prescription drug use can be acceptable and even strategic in a competitive academic environment. But we also found that fears of dependency, loss of “authentic” identity, and implications for post-college career planning may motivate students to renegotiate their relationship with medication at some point in their college years.

Nearly 8 million children have been diagnosed with ADHD. As of 2003, 2.5 million children between ages 4 and 17 were being medicated for it.

In general, four types of experiences represent a spectrum of college-student stimulant users. They have in common that they use prescription drugs to enhance, fix, and/or normalize. One way they differ is in how they got to that point.

One group of students have been on a daily regimen of medication for the majority of their lives, having been diagnosed with ADHD by a professional. For them, stimulants are for treating their learning disorders. On the other end of the spectrum are students who have self-administered psychostimulant medication (many times without a prescription) intermittently during their college years. They may turn to ADHD meds to smooth the transition from high school to college or manage stress during their college years. These students represent the new and growing “adult ADHD” market.
In the middle of the spectrum are students who approached doctors for prescriptions as they transitioned into high school or boarding school. Some of these students, who in essence self-administered medication, soon faced problems with drug addiction or worse; others were closely monitored by a doctor and the drugs became a regular part of their identities or sense of personal potential.

For all these students, “pharming to get by” as some characterized it to us, is generally accepted and approached strategically. They diagnosed their failings and administered their own medications, and many believe that with the help of prescription stimulants they can block out distractions to concentrate on academic performance and become smart and studious on demand. However, they also admit that medically managed bodies can have social, psychological, and physiological costs. For those college students asking themselves, “who am I?” medications can complicate the answer. Students said they prefer the “natural” over the “artificial,” or the “real” person over the medicated self, and that Ritalin is central to their ability to focus and perform in school, but it blunts their personalities. Some complain that stimulants make them anxious or overly thin, or transform them and their peers into out-of-control busybodies.

For example, while most students report using psychostimulants for enhanced academic performance, some women, including one profiled on the 2005 MTV documentary program True Life, also use these drugs as an appetite suppressant. One female athlete we spoke with described using Adderall as a way to feel confident and in control in the classroom, on the sports field, and in managing her weight. It wasn’t until this weight loss affected her athletic performance that she realized the drug might have unhealthy consequences.

Men also develop eating disorders as a result of psychostimulant use and over-dosing. On the verge of a nervous breakdown in response to poor academic performance, a male student described turning to Adderall to help him concentrate and perform. However, on the drugs he found himself increasingly anxious and obsessive. The drugs made him feel like he could “do eight things at once, like on speed.” As a result, he spent hours writing the perfect sentence, folding his roommates’ laundry, even masturbating. He skipped meals and soon found himself emaciated, shaky, and addicted to Adderall. After taking time off school to regain his health, this student told us he has sworn off all drugs.

Such student accounts reveal the high social price of a medically managed body; besides concentrated weight loss, stimulant users report difficulty relaxing and sleeping, drug dependency, perfectionism gone too far, heightened social anxiety, and negative health effects. Some students decide to stop using prescription stimulants once they perceive their medicated bodies as out of control or unnatural. Others moderate their drug use, rationalizing stimulant use only in situations they perceive as urgent.

managing medical ambivalence

New college students who were diagnosed with ADHD as children or teens have had years to construct a personal identity that incorporates their medication use. However, by their junior and senior years many wonder whether their daily prescriptions are truly necessary, and some experiment with stopping the medication.

Looking back on 14 years of medication use, one student said: “I think it’s messed up and twisted that I’ve been on study medications since first grade…but there’s no way I’d be at [this college] without it.” She said the pills made her more efficient with work, but she still spent long hours writing papers and wondered whether the pills were slowing her down or creating an obsessive degree of focus on detail. This type of internal debate is not uncommon, we found.

The majority of students we interviewed who had stimulant prescriptions chose not to take their medication over the summer, for example, preferring to be “themselves,” instead of feeling “fake” when on medication. Besides disliking the transformative effect on their personalities, students expressed fear of dependency or reliance. Some expressed discomfort with the fact that their daily sense of who they are is achieved through “unnatural” chemicals and medication. Because of this discomfort, many students diagnosed with ADHD choose to take their prescription drugs only in cases of academic necessity; they don’t feel like they’re “better people” on the drugs.

A small but committed group of college students with ADHD take psychostimulants daily, even during school breaks, and have incorporated them into their sense of identity and potential, appreciating the seamless role medicine plays in their everyday lives. However, even these students report experimenting with going off their drugs simply out of curiosity, in
order to assert control over what can be perceived as drug dependency during their school-aged years, or to prepare themselves for their post-school lives without the medication. After years of medicating in the context of academic pressures, taking schooling out of the equation may mean attempting everyday life without the drugs.

For many, these short experimental periods off stimulants end up reinforcing the need for medication and complicating perceptions of self in disturbing ways. One student’s “interesting experiment” without his daily Adderall led him to feel more in control, but less motivated, like he “couldn’t do anything.” Other students reported that, off Adderall, all they wanted to do was sleep.

A similarly small group of students have instead chosen alternative, non-medical strategies for managing performance and avoiding failure. That meant scaling down aspirations or taking on less challenging courses. They have trained themselves to reverse ADHD symptoms by using study skills and concentration techniques like taking breaks, underlining while reading, and keeping reading notes to increase retention.

imagining medication-free, post-college lives

Far more effort in our society is placed on getting patients on drugs than off them. This is particularly salient for members of the Ritalin generation. As they look ahead to their post-college futures and imagine life without the daily medicine they associate with academic performance, they wonder if their sense of self can be extricated from the effects of their medication.

Some are looking for careers and lifestyles that suit their unique attributes. One student said a fast-paced lifestyle in a large city might suit him best. Another described her ADHD not as a “deficit” but an ambitious drive to multitask—this, she feels, is a perfect fit for a career as an emergency room physician. On the other hand, another believes choosing a routinized, structured job will eliminate his need for a stimulant. Yet another said the goal of being an educator will take as much concentration and job will eliminate his need for a stimulant. Yet another said the goal of being an educator will take as much concentration and in control, but less motivated, like he “couldn’t do anything.” Other students reported that, off Adderall, all they wanted to do was sleep.

A similarly small group of students have instead chosen alternative, non-medical strategies for managing performance and avoiding failure. That meant scaling down aspirations or taking on less challenging courses. They have trained themselves to reverse ADHD symptoms by using study skills and concentration techniques like taking breaks, underlining while reading, and keeping reading notes to increase retention.

imagining medication-free, post-college lives

Far more effort in our society is placed on getting patients on drugs than off them. This is particularly salient for members of the Ritalin generation. As they look ahead to their post-college futures and imagine life without the daily medicine they associate with academic performance, they wonder if their sense of self can be extricated from the effects of their medication.

Some are looking for careers and lifestyles that suit their unique attributes. One student said a fast-paced lifestyle in a large

city might suit him best. Another described her ADHD not as a “deficit” but an ambitious drive to multitask—this, she feels, is a perfect fit for a career as an emergency room physician. On the other hand, another believes choosing a routinized, structured job will eliminate his need for a stimulant. Yet another said the goal of being an educator will take as much concentration and focus as being a student, so she thinks she’ll stay on her pills.

A recent New York Times article estimated that a quarter of children attending summer overnight camps in 2006 were medicated for ADHD, psychiatric problems, or mood disorders. Beyond the growing numbers of children diagnosed with ADHD, prescriptions for ADHD drugs tripled between 2000 and 2004 for adults between ages 20 and 30 as drug marketing budgets have quadrupled and physicians remain uncertain about how to adequately diagnose ADHD.

Amidst the expansion of drug marketing budgets, the disorder, and the correspondingly “disordered” populace, debate about over-diagnosis and expanding psychostimulant use is still brewing in the medical field, in our education system, and among students on college campuses.

The college campus is a good place to begin a discussion about it. Students situate their own perceived need for stimulants within a larger social context, where, as some students explain, success is defined by unrealistic performance standards in every arena of life.

For example, one student commented: “I wonder, if so many people have ADD, at what level is this just because of the standards we hold over everyone and the expectations of the school system and the work world?” Another said he doesn’t really “believe in ADHD” because drugs like Adderall “help everyone” and only become necessary in the context of academic performance pressures. Maybe, he concluded, “people are situationally ADD.”

Contemporary students’ life experiences allow them to think critically about the social construction of medicine and the effects of psychostimulant drugs on society. They should be leading this discussion. At the same time, rather than treating social problems solely with prescriptions, individuals and educational institutions must begin to rethink how they “do” education and define success. Now is the time to critically engage in these topics, before more individuals embrace prescription drugs as a “normal” part of their academic life and the net effect ends up disciplining society at large, becoming a self-perpetuating cycle.

recommended resources


Meika Loe is in the sociology and anthropology department at Colgate University. She is the author of The Rise of Viagra: How the Little Blue Pill Changed Sex in America.