

JUST POP AN ADDY

SOPHIA B.

THE OXBOW SCHOOL



In the hypercompetitive world of business, academia, and sports, young adults are expected to create higher quality work in a shorter amount of time. The workload is only increasing, and scrambling students and young professionals are struggling to keep up with their naturally short attention spans, forcing them to find another way to maximize productivity. Unfortunately, most of these young adults are resorting to the use of ADHD medications, such as Ritalin and Adderall to increase their attention spans, but the consequences are more harmful than assumed. Depression, anxiety, and other mental health disorders accompany the misuse of these medications, and awareness needs to be spread about the dangers of ADHD medication.

I made a film about this topic because the message I want to convey is best depicted through video form. The giant pills were part of my initial creative process; they are giant replicas of Adderall in two different forms—Strattera and Ritalin. After making them, I expanded my artistic ideas into using film to depict the story of a young student who has grown dependent on ADHD medication to get through the day. In the film, she has been addicted to focus drugs for quite a long time and has to take a large amount in order for her to feel its effects. Tucked in between the story of the young student is actual news footage of ADHD medication problems and a real story about young man who took his own life as a result of his addiction to ADHD medication. I chose the footage of the young man's father because his emotion portrays the gravity of ADHD medication abuse; his genuine first-hand experience with watching a loved one, let alone his own child, struggle with addiction to focus drugs and take his own life is impactful. His grief and anguish emanates from his interview, and it exhibits the vital need to spread awareness about the consequences of misusing ADHD medication.

Sophia B.
Austin, Texas

This paper addresses how ADHD is diagnosed, treated, its cultural impact, and what I think about all of the previously mentioned as an outsider looking in. I do not have ADHD, but I have multiple family members and friends who do. I want to gain a greater understanding of all the issues surrounding ADHD and come to a conclusion about the best path to solve these issues.

As long as I can remember, my 15 year old brother, London, has had to go to different doctor appointments and treatments for his learning differences which include ADHD, dyslexia, dysgraphia, auditory processing, and working memory just to name a few. A lot of the time, my mother had me receive the treatments, too, so that my brother would not feel “different” or “less than”. I too had my share of dyslexia and a speech impediment but not to the extent of London’s difficulties. I have had to sit back and watch my little brother take medication after medication, altering his personality, appetite, and volatility only to fit the mold the schools shoved him in. As you might be able to tell, “focus” medications such as Adderall, Ritalin, and Concerta do not have a very positive image in my mind, and once I watched the Netflix Original documentary, Take Your Pills, I was blown away by the amount of people who do not have ADHD who take these medications. It was even more shocking that some people even felt that they depended on it to succeed in their fields. How has the past and current United States culture surrounding ADHD contributed to its diagnosis and treatment?

ADHD is a chronic condition including attention difficulty, hyperactivity, and impulsivity. ADHD can manifest in three different forms: hyperactivity, inattentiveness, and a mixture of both hyperactivity and inattentiveness. Within the hyperactivity subtype, people tend to move and squirm around a lot as well as talk even when considered inappropriate. The inattentiveness subtype includes symptoms of being easily distracted, losing track of time, and forgetfulness; those under this subtype are thought of as daydreamers. Lastly, there can be a display of a combination of symptoms found in both of the subtypes listed above. ADHD rarely manifests the same way twice making each case unique.

Some of the factors linked with the occurrence of ADHD are genetics, toxin exposure, and the neurotransmitter dopamine. Genetics is also a large factor that plays into the origin of ADHD; children with ADHD are four times more likely to have a relative diagnosed with the disorder as well. Early exposure to toxins such as different chemicals in food, cleaning/lawn products, carpeting and flooring, and personal-care products (like toothpastes), can disrupt brain development facilitating ADHD. According to ADHD research, there is a link between ADHD and the neurotransmitter dopamine, which is directly correlated to attention span length. People with ADHD have trouble prioritizing tasks especially into most and least time sensitive, and contrary to what most believe, they have more attention than needed. Those with ADHD just have trouble focusing their attention on the right task as the right moment.

Now that we have a basic understanding of ADHD and its sources, how is this disorder diagnosed? To begin, the patient being tested for ADHD is first brought in for a two to four hour long speaking evaluation testing the delays in responses and communication, then patients go through extensive neuropsychological evaluations which analyse how an individual’s brain functions. These evaluations consist of an interview, input from outside sources (such as parents, family members, teachers, etc.), rating scales, questionnaires, and pencil and paper tests.

Over the past few years, there has been an increase in the diagnosis of ADHD amongst both children and adults. Within adults, ADHD diagnosis increased between 2008-09 to 2012-13

functions. These evaluations consist of an interview, input from outside sources (such as parents, family members, teachers, etc.), rating scales, questionnaires, and pencil and paper tests.

Over the past few years, there has been an increase in the diagnosis of ADHD amongst both children and adults. Within adults, ADHD diagnosis increased between 2008-09 to 2012-13 by 36%, which is equivalent to 18.5 to 25.3 per 1000 visits.¹ Amongst children, ADHD diagnosis increased from 93.1 to 110.3 visits per 1000 visits by 18.5% between 2008-09 to 2012-13. The rate of adults being diagnosed increased the most, but diagnosis in children remains much higher. There are many reasons for why there has been an increase in diagnosis, including an increase of accessibility to doctors and medication, increased knowledge of ADHD as a disorder, and finally, misdiagnosis/overdiagnosis.

Misdiagnosis and overdiagnosis are a recurring problem in the world of ADHD. In 2010, about one million children were wrongly diagnosed with ADHD. Misdiagnosis is discovered mostly by ADHD medication ²not helping their symptoms or even medication making their symptoms worse, then when they go in for further testing, they find out they usually have been misdiagnosed. There are many doctors who diagnose ADHD without following the proper protocol, leading to misdiagnosis especially in young children. Some physicians, will only observe a child or adult's behavior and diagnose them with ADHD without further investigation. Naturally, younger children have shorter attention spans, which may be perceived as an attention deficit, but in actuality, they are just regular children. Just by simply evaluating one's personality traits and attention span is not sufficient information to diagnose ADHD because there are often disorder mistaken for ADHD. Some of the most common mental disorders mistaken to be ADHD are anxiety, depression, sleep apnea, and other learning disabilities; visual and hearing impairments, abuse and neglect, undernutrition, and even giftedness (even though a child can be gifted and have ADHD) are also mistaken for ADHD from time to time.

For those diagnosed with ADHD, the easiest, most popular option is medication including Adderall, Ritalin, Concerta, Focalin, Daytrana, Metadate, Methylin, and Dexedrine. These medications do help focus and productivity amongst those with ADHD, but there are some negative side effects, both short term and long term, that accompany ADHD medications. The short term effects include loss of personality, sleep problems, loss of appetite, weight loss, increased blood pressure, dizziness, headaches and stomachaches, rebound (irritability when the medication wears off), moodiness and irritability, nervousness, and tics (sudden, repetitive movements or sounds), and the long term effects consist of heart disease, abdominal pain, insomnia, dry mouth, heart palpitations, tremors, trouble breathing, constipation, and on the documentary, Take Your Pills, there were also reports of liver damage after years of use.

Besides medication, there are other treatment options that do not involve medication. In particular, occupational therapy gives ADHDers the coping skills to utilize in school, at home, and in other social environments where they may encounter difficulty focusing. Exercise, yoga and tai chi classes, and avoiding certain foods and food dyes such as red dye number 5, sugar, wheat, dairy, eggs, and food additives can help decrease the symptoms of ADHD.

Maybe the best way to help those with ADHD is to embrace their differences. Those with ADHD have the ability to hyperfocus on subjects that they are interested in and learn almost everything there is to know about that specific topic. People with ADHD are 300 percent more

¹ <https://sharpbrains.com/blog/2017/03/22/study-rates-of-adhd-diagnosis-and-medication-treatment-continue-to-increase-substantially/>

² <https://www.additudemag.com/misdiagnosis-of-adhd-our-doctor-got-it-wrong/>

likely to start their own business.³ This is because they become very passionate about what their visions, and they are willing to take initiative in making those visions come to fruition.

In today's world, having ADHD is looked at as an inconvenience, and people with the disorder even think of themselves as incapable, lagging, or stupid. It is very unlikely for ADHD to be the only disorder someone has; 50-90 percent of children and 85 percent of adults have accompanying disorders or comorbid conditions. Roughly half of children with ADHD have depression, anxiety, learning disabilities, OCD, or other related conditions. A lot of these disorders make focusing more difficult and stressful.

The abuse of ADHD medication, such as Adderall, has been running rampant within high schools, colleges, and demanding jobs. The use of focus drugs is the second most common use of illicit drug use directly behind marijuana, and 30 percent of students reported abusing Adderall or other focus medications at some point in time. People without ADHD are taking "smart pills" to help them focus, work faster, get more done in a short amount of time, and make them, well, "smarter".

27 percent⁴ of teens say that prescription drugs are safer than using other illicit drugs, but in actuality it is a lot more dangerous. The abuse of Adderall is encouraged by the normalization of it in social environments and the music industry as well. A lot of artists are writing about using Adderall, and it has aided in the normalization of its abuse. It has become so normalized for students to, "pop an addy," before studying a large amount of information or taking an exam. With the illusion that prescription drugs are safer for you, more people feel as if they can take prescribed medications without worrying about the repercussions. Prescription medication is specifically prescribed for the person meant to take it; just in 2014, 1,700 young adults (18-25 years old) died from overdoses on prescription medication.

Although people believe that taking "smart pills" will actually increase their intelligence, studies show no correlation between add med use and test performance. In testing, there were hardly any differences between people on a placebo pill and those on ADHD medications; the only difference seen was in the working memory of those whose working memory is naturally the smallest. ADHD medication seems to give those without ADHD the illusion that the quantity and quality of their work is better.

As mentioned, my brother has ADHD along with comorbid conditions that accompany it. I have seen him on a number of ADHD medications, each one having a significant side effect that affected his physical and mental health. My brother is not the only one I have seen affected by focus drugs; a lot of kids at my school take Adderall to perform better on their exams even though they did not study. After seeing first hand the problems caused by focus medications, it is hard for me to believe that there is not a better solution to treating ADHD. There has to be something that helps without all the side effects, and without medication at all depending on the severity of the ADHD.

The diagnosis of ADHD needs to be carefully monitored because proper diagnosis is extremely important. Every person who is suspected of having ADHD should go through proper testing. There are many disorders such as anxiety, depression, conduct disorder, oppositional

³ "Failing at Normal: An ADHD Success Story." Performance by Jessica McCabe, *Failing at Normal: An ADHD Success Story*, TEDxBratoslava, 9 Oct. 2017, www.youtube.com/watch?v=JiwZQNYIGQI.

⁴ <http://www.theedgerehab.com/adderall-addiction-among-millennials/>

defiant disorder, and other disorders that display symptoms also found in ADHD, and this is why extensive testing is so important in coming to an accurate conclusion. I have gone through extensive testing as well as witnessing my brother go through tedious testing as well, and I know that it is not a pleasant process. With proper diagnosis though, the appropriate treatment can be received. Although accurate diagnosis takes time, the benefits of a proper diagnosis are worth the lengthy process.

Although these accommodations help those with ADHD and even other people with learning differences like dyslexia, it does not feel good to be separated into a “special” class for those who have trouble learning the old fashioned way, which in my opinion is even hard to do if one is typically developing. My brother, has thought of himself as “stupid” just because it is more difficult for him to get work done than his classmates, and he is not alone in this feeling. Many children with ADHD and other learning differences feel this way. I felt very nervous (and still feel a little nervous) about reading in class because of my dyslexia even though the remedial therapies helped me control it.

My mother, too, has struggled with putting my brother on heavy medication because she did not want to alter his personality just to make sure he would stay still in class. Some of the side effects that my brother has experienced and that my family and I have witnessed first hand are irritability, loss of appetite, loss of personality, dizziness, and headaches. Recently, my brother took Adderall, and just after a month and a half he refused to take it because it made him feel so awful. My mother, wishing to not put my brother through another round of terrible side effects, started researching safer ways to treat ADHD, but then a fellow parent told her about a supplement called On Task. Within this chewable supplement, there is magnesium, zinc, Vitamin 8-6, and Vitamin C; These natural supplements help increase attention span. My brother and his friends who are taking On Task love it. They feel like themselves and do not have any of the accompanying side effects that other ADHD medications have.

Even though there is a natural supplement that helps with ADHD, why are doctors still prescribing Adderall, Ritalin, Concerta, etc.? It makes you think whether some doctors are actually thinking about the well being of their patients when they prescribe the drugs that have been in use for so long. Ritalin has been in production since 1955, and ADHD has been treated with amphetamines since 1937. The composition of these drugs has not been altered at all. It does not make sense that so much time has passed with such harmful side effects, and there has not been any attempt to alter these medications into a less damaging substance.

It is illegal for doctors to get kickbacks from the sales of medications, but it is perfectly legal for them to promote the sales of drugs. Some doctors get paid tens to hundreds of thousands of dollars by pharmaceutical companies⁵ just to promote certain drugs. Obviously, this is a sneaky loophole because who is going to get a drug that their doctor does not recommend? Although not all doctors are corrupt and most of them begin their careers with good intentions, a large paycheck is extremely persuasive. When someone offers you a massive amount of money to “promote” a product, resisting that easy money is difficult. I believe there is some suspicious activities happening behind the pharmacy curtain at places like Pharmaceutical Research and Manufacturers of America (PhRMA); after all, they do control the supply of all the drugs that go into circulation. Now that we are in this new age of technology where people have access to an

⁵ Cochran, Amanda. “Does Your Doctor Have Ties to Big Pharma? How You'll Be Able to Find Out.” *CBS News*, CBS Interactive, 4 Mar. 2014, www.cbsnews.com/news/does-your-doc-have-ties-to-big-pharma-how-youll-be-able-to-find-out/.

endless database of knowledge on the internet, there is an opportunity to educate the public about the harm of ADHD medication and the possible alternative treatments.

It seems that people tend to try and alter people with ADHD and other learning disabilities to their environment instead of altering their surrounding to accommodate them. In actuality, those with ADHD have advantages in other ways that are unique to them. They are able to think about many different ideas even if they are not completely thought through, they are good starting points, and once they find something they enjoy doing, they can hyperfocus on that subject. For London, cars, football, and fishing are his favorite things to do, but cars seem to be his specialty. He knows more about cars than most people have thought about knowing. He can hold conversations with professionals and car connoisseurs without waver, and he has even had his own column in our neighborhood paper about the fast and furious cars that people had in the neighborhood. London could study cars for hours on end, but when it comes to school work, the story is a little different.

Knowing that London is completely capable of retaining information if he is interested in the subject made me realize that he is able to focus and study things that he is interested in, and as most of us know, school work is not necessarily the most exciting learning material. Even for people without ADHD, it is difficult to focus in class when the teacher has been talking about the definition of a vertex for thirty minutes straight. This is why I believe that if the curriculum at schools were applied to more interesting topics or have standing as an optional position in class, it would make it easier for everyone to focus. For children with and without ADHD, it is not easy to sit still for a whole class period.

Overall, there needs to be a significant amount of improvement in the diagnosis and treatment of ADHD. Medication should not be handed out so frivolously because its use is not limited to those who are prescribed it. For those with ADHD, the stigma behind not thinking like everyone else needs to be erased because there are millions of people with ADHD who are just as smart, if not more intelligent, than those without it. The side effects of these medications are terrifying, and there needs to be something done about the care free attitude in which people are taking these medications. I have seen the damage ADHD medication has done to both ADHDers and typically developing people, and there needs to be action taken.

Works Cited

- “Adderall Addiction Among Millennials.” *The Edge*, 31 Oct. 2017, www.theedgerehab.com/adderall-addiction-among-millennials/.
- “ADHD: Other Conditions With Similar Symptoms - Topic Overview.” *WebMD*, WebMD, 14 Nov. 2014, www.webmd.com/add-adhd/childhood-adhd/tc/adhd-other-conditions-with-similar-symptoms-topic-overview.
- “ADHD Sucks, but Not Really.” Performance by Salif Mahamane, *ADHD Sucks, but Not Really*, TEDxUSU, 18 Dec. 2015, www.youtube.com/watch?v=fWCocjh5aK0.
- Chadd. “General Prevalence of ADHD | CHADD.” *CHADD – The National Resource on ADHD*, www.chadd.org/understanding-adhd/about-adhd/data-and-statistics/general-prevalence.aspx.
- Cochran, Amanda. “Does Your Doctor Have Ties to Big Pharma? How You'll Be Able to Find Out.” *CBS News*, CBS Interactive, 4 Mar. 2014, www.cbsnews.com/news/does-your-doc-have-ties-to-big-pharma-how-youll-be-able-to-find-out/.
- Editors, ADDitude. “Common Comorbid Conditions.” *ADDitude*, ADDitude, 15 Sept. 2017, www.additudemag.com/common-comorbid-conditions/?src=embed_ss.
- “Everything You Need to Know About ADHD.” *ADDitude*, ADDitude, 23 Mar. 2018, www.additudemag.com/what-is-adhd-symptoms-causes-treatments/.
- “Failing at Normal: An ADHD Success Story.” Performance by Jessica McCabe, *Failing at Normal: An ADHD Success Story*, TEDxBratislava, 9 Oct. 2017, www.youtube.com/watch?v=JiwZQNYIGQI.
- Frye, Devon. “Children Left Behind.” *ADDitude*, ADDitude, 23 Mar. 2018, www.additudemag.com/race-and-adhd-how-people-of-color-get-left-behind/.
- Holland, Kimberly, and Valencia Higuera. “The History of ADHD: A Timeline.” *Healthline*, Healthline Media, 12 Oct. 2017, www.healthline.com/health/adhd/history#1955.
- Klayman, Alison, director. *Take Your Pills*. Netflix Original, 2018.
- Lakhan, Shaheen E, and Annette Kirchgessner. “Prescription Stimulants in Individuals with and without Attention Deficit Hyperactivity Disorder: Misuse, Cognitive Impact, and Adverse Effects.” *Brain and Behavior*, Blackwell Publishing Inc, Sept. 2012, www.ncbi.nlm.nih.gov/pmc/articles/PMC3489818/.

Markman, Art. "Are ADHD Drugs Smart Pills?" *Psychology Today*, Sussex Publishers, 6 Sept. 2011, www.psychologytoday.com/us/blog/ulterior-motives/201109/are-adhd-drugs-smart-pills.

Marks, Lynn. "ADHD Treatment." *EverydayHealth.com*, 14 Jan. 2016, www.everydayhealth.com/adhd/guide/treatment/.

Michigan State University. "Nearly 1 Million Children Potentially Misdiagnosed with ADHD." *MSUToday*, Michigan State University, 17 Aug. 2010, msutoday.msu.edu/news/2010/nearly-1-million-children-potentially-misdiagnosed-with-adhd/.

National Institute on Drug Abuse. "Abuse of Prescription (Rx) Drugs Affects Young Adults Most." *NIDA*, 8 Feb. 2016, www.drugabuse.gov/related-topics/trends-statistics/infographics/abuse-prescription-rx-drugs-affects-young-adults-most.

Rabiner, Dr. David. "Study: Rates of ADHD Diagnosis and Medication Treatment Continue to Increase Substantially." *SharpBrains*, 22 Mar. 2017, sharpbrains.com/blog/2017/03/22/study-rates-of-adhd-diagnosis-and-medication-treatment-continue-to-increase-substantially/. [study-rates-of-adhd-diagnosis-and-medication-treatment-continue-to-increase-substantially](http://sharpbrains.com/blog/2017/03/22/study-rates-of-adhd-diagnosis-and-medication-treatment-continue-to-increase-substantially/)

"Racial, Ethnic Differences Found in Psychiatric Diagnoses, Treatment, According to Researchers." *ScienceDaily*, ScienceDaily, 18 May 2016, www.sciencedaily.com/releases/2016/05/160518094721.htm.

"Ritalin." *Chemical & Engineering News: Top Pharmaceuticals: Ritalin*, pubs.acs.org/cen/coverstory/83/8325/8325ritalin.html.

Scheck, Anne. "All-Natural Ways to Focus Better with ADHD." *ADDitude*, ADDitude, 5 Apr. 2018, www.additudemag.com/adhd-natural-remedies-for-focus/.

Spiro, Linda. "Disruptive Behavior - Misdiagnoses in Children." *Child Mind Institute*, childmind.org/article/the-most-common-misdiagnoses-in-children/.

Team, Understood. "ADHD Medication Side Effects." *Understood.org*, www.understood.org/en/learning-attention-issues/treatments-approaches/medications/adhd-medication-side-effects.

"What Are The Long-Term Effects of Heavy Adderall Use?" *American Addiction Centers*, americanaddictioncenters.org/adderall/long-term-effects/.

"6 Natural Remedies for ADHD." *Healthline*, Healthline Media, 31 Aug. 2016, www.healthline.com/health/adhd/natural-remedies#bonus-tip.