

# Quick Fixes, Getting High, and the Pharmaceutical Student

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Dedicated to the friends I've lost and the ones still looking  
I hope you find your way...

To:  
Mom and Dad, thanks for everything. I love you.  
Charlotte, for always making time to talk  
and  
Abigail, I couldn't have done it without you

Thank you:  
Donna Goldstein, for your wisdom and advice  
Carla Jones, for always listening and your faith  
Jay Ellis, for your literary guidance and candor  
and  
Douglas Bamforth for encouraging me that this story was one worth telling

A special thanks to everyone I talked to throughout the course of my research; none of this  
would have been possible without each and every one of you.

## Abstract

In the past two decades, prescription drug use has grown exponentially. Increased awareness surrounding conditions such as clinical depression and attention deficit disorder have led to a biomedical response to what was once considered a psychological problem and was therefore treated with talk therapy. Drug prescriptions are now quite common. A more recent occurrence among my generation is the trend of self-medicating. The Millennial generation have started taking “study drugs” in order to work faster and more efficiently, and self medicate by taking other forms of medication for recreational or “self help” purposes. This habit has received national attention with articles appearing in prominent news outlets such as *The New York Times* and *Time*, questioning the efficacy of taking psychiatric medications and the rise of a self medicated generation. In this thesis I analyze why this is occurring in the specific context of the University of Colorado Boulder. I conducted interviews with medical professionals, doctors, a clinical psychologist, and a homeopathic specialist, to understand how their professions have engaged with prescription drugs in this generation. Furthermore, I anonymously surveyed University of Colorado Boulder students to ask about their experiences and uses of prescription pharmaceuticals. The side effects of drugs used to treat psychiatric conditions are numerous, and their benefits are touted through inconclusive science. We are entering a new era of what anthropologist Emily Martin calls the “pharmaceutical person”<sup>1</sup> is becoming the new norm, and no one seems to be asking why and what this could mean for our future. In this thesis I argue that students at the University of Colorado Boulder are apart of a privileged demographic that situates and justifies their pharmaceutical usage through building a collective subjectivity as consumers raised in a neoliberal economic environment.

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<sup>1</sup> Martin, Emily. “The Pharmaceutical Person.” *BioSocieties* 1, no. 3 (September 2006), 273–87.

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## Chapter 1: Needle and the Damage Done

### Introduction

Boulder might be the closest a college town is to heaven - and not just because it is located at 5430 feet of Rocky Mountain high altitude. It is 27 square miles of relief from reality  
- *Sports Illustrated*<sup>2</sup>

Unfortunately, this story begins at the end. The end of my senior year, the end of my time in Boulder, the end of four lives in my four years of college at the University of Colorado. When it comes to drugs, abuse and dependency are often discovered when it is too late. As I write this, I reflect on my friends whose lives were tragically cut short. My friend Jess<sup>3</sup> ejected from a vehicle a week before Christmas Break senior year on her way back from Steamboat Springs. The driver took a Xanax, fell asleep at the wheel, and sent the car over an embankment. Jess died almost a year to the day after her grandmother passed away. As I sat in the Glen Miller Ballroom for her memorial service, I could only listen as her friends, our friends, stood up to talk about a life lived and lost. I shook with anger as my peers told stories of her life. Stories of drunken escapades and Jess's love of pizza and Sailor Jerry's rum. I felt like screaming. These things seemed vapid and superficial. For many of us in that room, this was not our first funeral. Death was now a constant feature in most of our lives, made all the more uncomfortable by the fact that our friends kept dying from things that we all enjoyed doing together: substances and partying.

My freshman year, en route to a fraternity formal in Beaver Creek, I sat in abject terror in the backseat of a car belonging to a bunch of sophomore fraternity boys. The driver of the vehicle started doing Xanax bars in Frisco, about 40 minutes outside of Beaver Creek. On the

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<sup>2</sup> Cmall. "No Apologies, I Don't Think Before I Speak: Sweet Home Colorado." *No Apologies, I Don't Think Before I Speak*, April 14, 2010.

<sup>3</sup> All names of students have been changed in order to respect their family's privacy.

final mountain pass to our hotel, the fraternity brother driving the vehicle got into a road rage battle with the car next to us, tailgating him, flipping him off, and swerving around the road. My heart beat uncontrollably in my chest as I silently prayed that I would make it to the hotel unscathed. As Jess' parents, brother, and grandfather sat up in the front of the Glen Miller Ballroom stricken in grief, I remembered this moment; one boy's decision had altered the fabric of their family forever. When it comes to death, people often talk about "being in a better place." Jess died from a preventable tragedy just weeks shy of her 22<sup>nd</sup> birthday. We tell ourselves that only the good die young, but why are the young dying?

Dan was from Nashville, Tennessee. In high school, driving home drunk from a party in his white Escalade (a \$75,000 car), he stopped to pick up a hitchhiker. Deciding in his stupor it was probably safer if the hitchhiker drove, Dan surrendered his car to a stranger, and promptly fell asleep on the passenger side. He woke up in Louisiana the next day, asleep in his Escalade on the side of the road. I met Dan through boys living on my hall freshman year. Quick with a laugh and a knack for storytelling, he loved classic rock and Tennessee. Our freshman year Dan got in trouble with the police for starting a fight on the hill; because he was intoxicated and underage, the school put him on probation. His affluent parents made a deal with the school as this was not his first offense; he could continue to be enrolled at the university the following year if he submitted to drug tests and went to rehab. His parents pumped money into the problem and sent him to an expensive drug rehab facility somewhere overlooking the scenic southern California coast. It cost as much for a month of rehab as tuition does at an expensive private high school. Then they sent him back to Colorado.

When class started up again sophomore year, Dan came back a changed man. No alcohol and no substances. He had stayed clean for about four months over the summer. Toward the end

of our fall semester, my roommate Eva heard Dan was using and selling Xanax. I recall feeling alarmed when I heard this news, but Xanax was considered to be mundane, mainstream, and safe. Eva began buying Xanax from Dan for her own anxiety. In late April of sophomore year, while walking home from class, I saw Dan on the corner by The Hill's one-stop shopping 7-Eleven. I walked within ten feet of him and, to my confusion, his eyes glazed over without recognition. His eyes will haunt me until my dying day: veiny, bloodshot, and unfocused. It was the last time I ever saw him. A week later he was found dead from a heroin overdose in his apartment above Five Guys Burgers and Fries restaurant. The day he died I was logged onto my Spotify account. Spotify has a setting that alerts you to the songs your friends are listening to. For Dan, "Gold Dust Woman" by Fleetwood Mac was the last song he ever listened to. I looked up the lyrics the night he died. Stevie Nicks wrote, "take your silver spoon / And dig your grave." That he did.

Returning to Boulder the fall of my junior year, I hoped for an uneventful semester. My roommate Eva joined me in signing a lease for a big house on The Hill. Four guys and four girls, it seemed to have the makings of a reality television show. Sure enough, as soon as we moved in, things started going awry. One of the boys, Nick, rarely left his room, constantly smoked a hookah, took Xanax, and avoided direct eye contact. When I pressed one of my other roommates about Nick's strange demeanor, he said that he was depressed and experiencing severe anxiety. Apparently, Nick took acid over the summer at a concert, experienced a bad trip, and never quite recovered. Within two weeks his aunt came and moved him out of the house.

Trouble continued. My roommate from sophomore year, Eva, did not act the way she used to. She continuously sought refuge in her room, and I rarely saw her leave the house. She skipped class and never ate. Her only pleasure seemed to come from consumption. A \$1000

shopping spree and \$350 pair of sunglasses from a last-minute trip to the Cherry Creek Mall finally brought a smile to her face for an afternoon in September. Her nightstand resembled a pharmacy. The only thing besides pill bottles on it was a small cactus. I knew she struggled from anxiety, but I was bewildered at the plethora of drugs her doctor prescribed her: Ritalin (a stimulant and ADHD medication), Klonopin (a sedative to treat anxiety), Xanax (another drug for panic disorders), an antidepressant, and a sleep aid. When I asked her about it, she said she “needed them,” and the only person who “understood” her was her doctor. She slowly wasted into a skeleton of her former self. My once-bubbly roommate morphed into a nervous waif. A jar of olives and a handful of almonds were the only things I saw her eat all semester. I called her mother to express my concern, but she told me that my worry was unfounded. She became upset and short with me. I later discovered she told Eva about my concern and they brushed it off as me expressing my own jealousy over her slim frame. Eva’s mother reiterated that her daughter was on the “right medications” and she did not have an eating disorder. She was only becoming more “weight conscious.” Eva once told me that her mom used to bribe her with new clothes if she promised to lose five pounds. Unfortunately for Eva, her mother’s compulsions seemed to be directly linked to her own.

In October of junior year, I got a phone call from a friend who lived on my hall freshman year telling me that a close friend, a boy I had also known from freshman year, committed suicide. Oliver lived four houses down from me, and rumors had been circulating within the Greek community in Boulder about his sexual orientation. At the beginning of sophomore year, he told me that he suffered from depression and took medication for it. The night he killed himself, he was drunk and on his medication. Due to feuds occurring amongst his roommates, it took a few days for them to realize no one had heard from him. They lived in a house with a



corpse for three days. Oliver had been the type of guy who you noticed when you walked into a room. He grew up comfortably on Long Island and had the quick wit of a New Yorker. With his bright eyes and messy hair, he exuded charisma and boyish charm, had a wicked sense of humor, and died at the age of twenty-one, alone with his pills.

His death sent my friend Eva over the edge. I walked into her room one afternoon to check up on her. Her eyes were glazed over, and she grew increasingly agitated with me when I asked her what medications she had taken. After a few weeks, it got to the point where she would not talk to me, and I would find myself with my ear pressed up against her door when I got home from class listening to any signs of movement just to make sure she was alive. An hour before my flight home for Christmas break, she told me she would not return to school the following semester. A wave of relief rushed over me. I thought her condition had deteriorated to a point that required her parents' intervention and investment in her health. She and her pills are gone, but the cactus plant she kept on her nightstand next to her pills remains on the front stoop of the house we all lived in on University Avenue. I find it difficult to look at. It is funny how a pink pot containing a dead cactus can bring an unwelcome flood of memories.

I moved back into the house after Christmas break, the only girl now left in an otherwise testosterone-dominated domain. Every extra room got subleased to fraternity boys except for Eva's, which remained empty with the door closed for the semester. Now that I was living with boys, and predominantly boys belonging in the Greek system, Adderall and Xanax became a staple of my everyday experience. Test to study for? Take Adderall. Bored on a Wednesday night? Xanax. The environment became toxic, and I found myself looking for any excuse to get out of the house. They deflected my questions regarding why they took these pills and disregarded my thoughts about why I thought they shouldn't take them. The blank gazes, the

hyperactivity off Adderall, the fact that the pills made the user lose interest in just about everything but themselves, frightened me.

Unfortunately, if I avoided all my friends in Boulder who dabbled with pharmaceutical drugs, then I would cease to have any friends at all. I still hang out with the boys I lived with (though less frequently), and I will be eternally grateful for the kindness they showed me that semester, taking me in as one of “the boys” as I dealt with depression of my own. I no longer speak to Eva, since I later discovered that she blamed me for her dependency with pharmaceuticals. However, I worked on this thesis to seek answers, to understand why my friends were dying, why my best friends dropped out of school, the magic properties that pharmaceuticals promise, and how society could possibly be to blame. I do not consider myself a judgmental person. I enjoy drinking, going out with my friends, and having the occasional wild night. However, pharmaceutical drugs seem to exist in a realm of what are considered to be “safe” drugs because of their legalization in the medical community. Their pseudo-legality allows them to be normalized and used without stigma, though not without consequence. In this thesis I argue that students at the University of Colorado Boulder are a part of a privileged demographic that situates and justifies their use of pharmaceuticals through building a collective subjectivity as consumers raised in a neoliberal economic environment.

## **My Study**

My study took place during the academic school year of fall 2015 through spring 2016. The purpose of my research was to collect usage patterns and justifications behind licit and illicit use of pharmaceutical drugs on the University of Colorado Boulder campus. Due to my firsthand accounts of observing prescription drug usage on campus, I sought to discover if drug usage was

as widespread as I believed or existed only within a certain social group. In order to construct justifications and drug abuse rates behind self medicating and recreational use, I set up an anonymous student survey to protect students' privacy and encourage transparency.

Furthermore, I interviewed medical professionals such as emergency room doctors, chronic pain specialists, neuroscientists, and a homeopathic specialist. These individuals were essential to my understanding of systems of care and how the proliferation of pharmaceuticals has shaped our culture in terms of how we understand pain, mental disorders, and our cognitive abilities. We take pharmaceutical drugs, for the most part, in order to achieve normality or to mask what society has deemed as unsavory personal attributes. Our society constructs these concepts and justifies them through inconclusive science.

## **Methodology**

And try to find a life where we could be content /Cause for us, we're just trying to minimize the fear of being alive/ and now my little brother is in the sky/ from a pill that a doctor prescribed/ That a drug dealing billion-dollar industry supplied/ and the cops never go and profile at night/ Yeah, the, the, the orange plastic with the white top they sell to you/ Has us looking for the answers and that instead of you/ Quick Fix, whatever'll do – Macklemore and Ryan Lewis (ft. Leon Bridges) on "Kevin"<sup>4</sup>

One hundred and eighty-one students from the University of Colorado Boulder voluntarily took part in my online student survey. All participants were between the ages of eighteen to twenty-three and enrolled at the University of Colorado Boulder. Using Survey Monkey, I set up controls in order to hide IP addresses and create parameters that prevented students from taking the remainder of the survey if they failed to fall within the desired target age or did not identify as currently enrolled at the university. The survey used a combination of

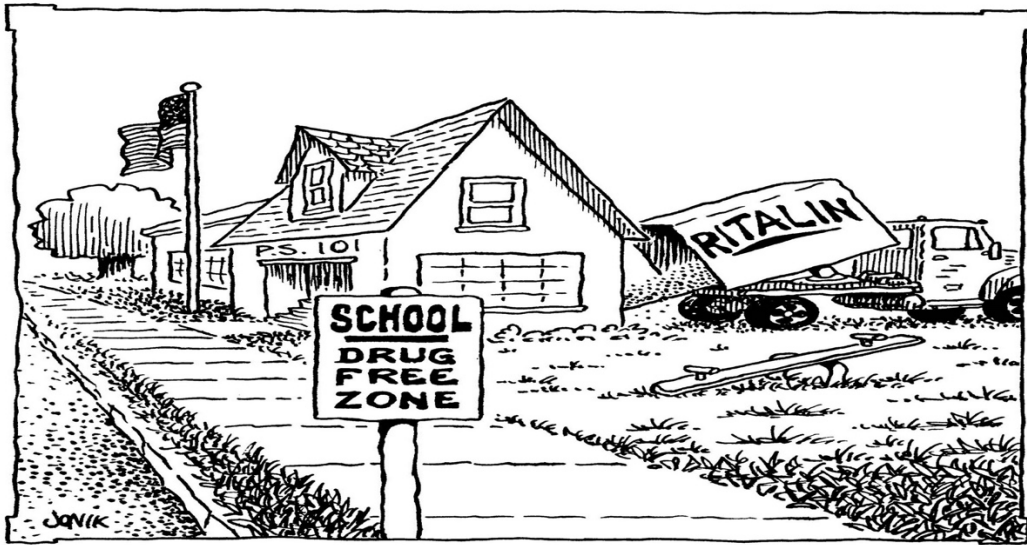
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<sup>4</sup> Macklemore and Ryan Lewis (Ft. Leon Bridges) – Kevin. Accessed March 1, 2016.

22 short response and multiple choice questions and I advertised the survey through Facebook. Each class at the University of Colorado has a student-run page, and I posted a link to my survey along with a description of what my thesis entailed. By taking the survey and clicking, “I consent to be a part of this study: end of survey,” each participant electronically and anonymously gave consent for their answers to be used in accordance with my thesis.

In addition to participants’ responses, I conducted interviews with experts in medicine, pharmaceuticals, neuroscience, and homeopathic remedies, to understand what current professionals in these fields think in regard to illicit usage of pharmaceutical drugs. I tailored my questions to the experts’ individual fields of expertise. Lastly, my thesis and analysis depended heavily on the immense body of literature that exists on this topic. Important supplementary information such as popular news sources, academic journals, and ethnography related to pharmaceuticals issues helped frame my argument. These sources furthered analysis related to pharmaceutical usage, the biomedical model, and Big Pharma. The University of Colorado Boulder Internal Review Board (IRB) reviewed my protocol 15- 0574 and deemed it exempt category 2, and approved my study as of November 3<sup>rd</sup>, 2015.

## University of Colorado Boulder Student Survey Results



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Question 1: How do you gender identify?

Male	35.91% or 65 men
<b>Female</b>	<b>62.43% or 113 women</b>
Other	1.66% or 3 students
Total	181 students

Question 2: Are you a University of Colorado Boulder Student?

<b>Yes</b>	<b>100.00% or 181 students</b>
No	0%
Total	181 students

Question 3: How old are you?

Younger than 18	0%
<b>18-23 years of age</b>	<b>100.00% or 181 students</b>
24-27	0%
Older than 27	0%
Total	181 students

Question 4: How would you describe your socioeconomic status?

Lower socioeconomic status	3.31% or 6 students
Middle class	33.15% or 60 students
<b>Upper middle class</b>	<b>49.17% or 89 students</b>
High socioeconomic status	14.36% or 26 students
Total	181 students

<sup>5</sup> “Big Pharmaceutical Companies | Cognitive Liberty UK.” Accessed February 22, 2016.

Question 5: What region of the United States are you from?

Northeast	12.71% or 23 students
Midwest	13.36% or 24 students
Southeast	4.97% or 9 students
<b>Rocky Mountain West</b>	<b>44.75% or 81 students</b>
Southwest	1.10% or 2 students
Pacific Northwest	4.97% or 9 students
West Coast	11.60% or 21 students
South	2.76% or 5 students
I'm not from the United States	3.87% or 7 students
Total	181 students

Question 6: Do you smoke marijuana?

Once or twice a week	7.18% or 13 students
<b>More than twice a week</b>	<b>31.49% or 57 students</b>
A few times a month	20.99% or 38 students
I've tried it	22.10% or 40 students
I do not smoke	18.23% or 33 students
Total	181 students

Question 7: Have you ever experimented with recreational drugs?

Yes, once	7.73% or 14 students
<b>Yes, a few times</b>	<b>35.36% or 64 students</b>
Yes, frequently	29.28% or 53 students
No	27.62% or 50 students
Total	181 students

Question 8: Have you ever been diagnosed with ADHD (attention deficit hyperactivity disorder)? If so, please explain (age, grade, etc.)

Yes	28 students
	147 responses; 34 skipped
	<b>19.04% of students are diagnosed with ADHD or ADD.</b>

Question 9: Have you ever been prescribed a prescription medication for a lifestyle drug (Adderall, Xanax, Ritalin, etc.)? If so, please explain the context

Yes	50 students
	153 responses; 28 skipped
	<b>32.67% students are prescribed lifestyle drug medication.</b>

Question 10: Have you ever taken a prescription medication you were not prescribed? If so, what was the context?

Yes	118 students
	165 responses; 16 skipped
	<b>71.51% of students have taken medications not prescribed to them.</b>

Question 11: Do you believe that you have ADD or ADHD that has been left undiagnosed?

Yes	13.26% or 24 students
I have considered this before	23.76% or 43 students
I have NOT considered this before	5.52% or 10 students
<b>No</b>	<b>57.46% or 104 students</b>
Total	181 students

Question 12: At what age did you become aware of prescriptions such as Adderall?

0-10	8.47% or 15 students
10-15	25.99% or 46 students
<b>15-17</b>	<b>34.46% or 61 students</b>
17-19	27.68% or 49 students
19-21+	3.39% or 6 students
Total	177 responses; 4 skipped

Question 13: Have you ever taken Adderall to study for an exam?

Yes	110 students
	164 responses; 17 skipped
	<b>67.07% of students have taken Adderall to study for an exam.</b>

Question 14: Have you ever felt overwhelmed by stress?

<b>Yes</b>	<b>80.11% or 145 students</b>
No	4.97% or 9 students
Occasionally	14.92% or 27 students
Total	181 students

Question 15: Have you ever experienced any weird side effects after taking a prescription medication? Please explain

Yes	88 students
	152 responses; 29 skipped
	<b>57.89% of students have experienced weird side effects including depression, weight loss, memory loss, loss of motivation, anxiety, and lack of self confidence.</b>

Question 16: How would you describe the climate of prescription drug medication culture at the University of Colorado Boulder? Please give examples

Prevalent/ High	146 students
	164 responses, 17 skipped
	<b>89.02% of students believed the prescription drug culture at the University of Colorado Boulder was high/ very prevalent. A student noted, “CU Boulder students love pills.”</b>

Question 17: Do you consider prescription drugs to be detrimental to your long term health?

No	43 students
	165 responses; 16 skipped
	<b>26.06% of students did not believe prescription drugs to be detrimental to their long term health. However, most students agreed that health risk depended on abuse.</b>

Question 18: Have you ever offered to pay someone for their prescription drugs/ has anyone ever offered to pay you for access to prescription pills? (Reminder: all responses are anonymous)

Yes	112 students
	167 responses; 14 skipped
	<b>67.06% of students have offered to pay someone for their prescription medications/ have been offered payment for theirs.</b>

Question 19: If you have taken these drugs to study, do you think you will continue to take them once you enter the workforce?

Yes	10.00% or 16 students
<b>No</b>	<b>63.75% or 102 students</b>
Maybe	26.25% or 42 students
Total	160 responses; 21 skipped

Question 20: Are your parents aware of your experience with prescription medications? (Reminder: all responses are anonymous)

Yes/ to an extent	95 students
	161 responses; 20 skipped
	<b>59.00% students reported that their parents were aware of their prescription medication usage to an extent. However, most stated they only knew about the ones they were prescribed or used to study.</b>



Question 21: Have you ever taken prescription painkillers for recreational purposes? Please explain the context and frequency

Yes	49 students
	163 responses; 18 skipped
	<b>30.06% of students have tried them recreationally.</b>

Question 22: Do you feel that using prescription pain medications can segue into experimentation with "hard drugs?" Please explain

Yes/has the potential to	136 students
	166 responses; 15 skipped
	<b>81.92% believes prescription pain medications could segue into "harder drugs," however, most people described prescription pain killers as 'hard enough.'</b>

Question 23: Have you ever taken Adderall or Xanax for recreational purposes? Please explain the context and frequency

Yes	80 students
	160 responses; 21 skipped
	<b>50.00% of people have taken Adderall or Xanax for recreational purposes.</b>

## Chapter 2: Let's Get Medicated

### The Millennial

"I can mingle with the stars and throw a party on Mars/I am a prisoner, locked up behind Xanax bars" --Lil Wayne on "I Feel Like Dying"<sup>6</sup>

What is it about pharmaceutical drugs such as amphetamines, benzodiazepines, and antidepressants that my generation finds so enticing? The Millennial Generation (sometimes called Generation Me) is hallmarked through various attributes and loosely defines the generation of people born in the 1980s through 2000s. I was born in 1993, and my student data collected at the University of Colorado Boulder specifically targets the birth years of 1992-1997.

For the purpose of this thesis, my main concentration will lie with lifestyle drugs and the rising trend of self medication. The definition of “lifestyle” drugs is subject to debate, but they are generally defined as, “drugs taken to satisfy a non-medical or non-health-related goal.”<sup>7</sup> Rod Flower, a researcher from the Department of Biochemical Pharmacology at the William Harvey Research Institute in London, explores the term ‘lifestyle’ and its cultural implications. He argues that traditionally we did not make harsh distinctions between therapeutic and non-therapeutic objectives in medicine and that “lifestyle” drugs have been used for centuries. For example, *Atropa Belladonna*, more commonly known as deadly nightshade, was historically used to dilate pupils in order to make women appear more attractive. The Inca had coca, a plant they hailed as “the divine plant.”<sup>8</sup> It satisfied hunger, gave strength to the tired, and made the unhappy forget their sorrows. In more recent history, Sigmund Freud and ophthalmologist Karl

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<sup>6</sup> Aku, Timmhotep. “5 Hip-Hop Drug References: Rapping about MDMA, Xanax, OxyContin.” *The Root*, August 12, 2012.

<sup>7</sup> Flower, Rod. “Lifestyle Drugs: Pharmacology and the Social Agenda.” *Trends in Pharmacological Sciences* 25, no. 4 (April 2004), 182.

<sup>8</sup> Flower, “Lifestyle Drugs,” 184.

Koller used cocaine as a local anesthetic and as an alternative treatment for morphine addiction, after chemist Alfred Niemann “purified” cocaine in the mid 19<sup>th</sup> century.<sup>9</sup>

Today, one of the main issues surrounding pharmaceutical lifestyle drugs are potential risks and secondary effects or “side effects” associated with taking them. Within the context of neuroethics, debates are considerable when it comes to cognition-enhancing pharmaceuticals being taken by otherwise healthy individuals. Prescriptions are fairly easy to come by, and students resort to feigning symptoms of attention deficit hyperactivity disorder, or ADHD, to obtain a methylphenidate (stimulant) from their doctor.<sup>10</sup> University of Colorado student respondent #144 stated in an anonymous survey response, “(I have) been prescribed Adderall to help with school. But I lied about it to actually lose some weight. I know... sounds bad [sic].”

A methylphenidate is a stimulant most commonly marketed under the trade name of Ritalin. Other stimulants used for the treatment of ADHD include dextroamphetamine (Adderall) and pemoline (removed from the U.S. market in 2005). Methylphenidate is a short-acting stimulant, with a half life of four hours, making it a popular choice for students seeking help with staying focused for daily tasks.<sup>11</sup> The complication of treating ADHD is that it often appears alongside other mental disorders such as learning disabilities, depression, and anxiety.<sup>12</sup> According to my University of Colorado Boulder survey of 181 self-selected students, 32.67% are prescribed a lifestyle drug. (Examples given included but were not limited to Adderall, Xanax, and Ritalin.) However, only 19.04% of respondents were diagnosed with ADD or ADHD. Remarkably, most of the students prescribed lifestyle drugs also took multiple

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<sup>9</sup> Flower, “Lifestyle Drugs,” 184.

<sup>10</sup> Racine, Eric, and Cynthia Forlini. “Cognitive Enhancement, Lifestyle Choice or Misuse of Prescription Drugs?” *Neuroethics* 3, no. 1 (September 4, 2008)., 1–4.

<sup>11</sup> Searight, H. Russell, and A. Lesley McLaren. “Attention-Deficit Hyperactivity Disorder: The Medicalization of Misbehavior.” *Journal of Clinical Psychology in Medical Settings* 5, no. 4 (December 1998)., 478.

<sup>12</sup> Searight and McLaren. “Attention-Deficit Hyperactivity Disorder,” 476.

medications, with some combination of Adderall, Vyvanse (a central nervous system stimulant), and Xanax being amongst the most common.

Question #9 from my survey asked, “Have you ever been prescribed a prescription medication for a lifestyle drug (Adderall, Xanax, Ritalin, etc.)? If so, please explain the context.”

Some of the more descriptive responses were as follows:

Xanax, for anxiety. I was prescribed my sophomore year after I was diagnosed with depression. I had stopped eating. [sic] was smoking weed everyday. I turned into a zombie just taking my extremely high prescription of 6mg a day. I lost all of my good friends, failed out of school, but was able to barely maintain my job. This made me more depressed and I started taking more to cope with my problems [sic]. – Student #61

Another student responded:

Yes. I have severe anxiety and depression. I currently am [sic] prescribed Effexor for my anxiety and depression. However due to the medication's reaction with my body, I have developed "chemically-induced narcolepsy" so to counteract blackouts and such I am on Ritalin despite not having ADD or ADHD. It is purely to keep me awake – Student #60

Likewise, student respondent #66 stated, “I get prescribed Adderall (10mg), Xanax (.5 mg for panic attacks/planes/public speaking), and Xanax XR (1mg). Although I do have ADHD and really bad anxiety, I definitely abuse my pills because they are addicting.” All three of these students admitted to experiencing adverse reactions to their prescriptions, as well as occurrences of self- medicated abuse. The Millennial generation is the first generation to be prolifically treated with pharmaceutical drugs beginning in early childhood. Every year on medication results in the body adjusting and adapting to the chemicals being prescribed. Therefore, doctors constantly need to alter the dosage or change the medication itself, as the body’s physiology adjusts to the dosage. Dr. Dan Henning, an emergency medicine doctor, noted that they do not only affect overall ecologic wellbeing but they also normalize an individual’s brain chemistry to

become accustomed to a certain chemical; once taken away it lessens the ability to cope (Interview with Henning, January 6<sup>th</sup> 2016).

My generation is a generation medicated to produce normalcy; everyone is expected to live a typical and productive life while falling within a certain narrow band of the spectrum. However, messages propagated by doctors, parents, and mass media are, at best, contradictory. Cultural anthropologist Sherry Ortner defines the anthropological theory of subjectivity as “modes of perception, affect, thought, desire, fear, and so forth that animate acting subjects.”<sup>13</sup> She uses this definition in accordance with the cultural and social formations that shape, organize, and promote modes of affect and thought.<sup>14</sup> Framing her definition within the subject of pharmaceuticals, users of psychotropic drugs adopt a self image that aligns with their drug usage. Users interpret and manage their pharmaceutical drug usage in relation to sociocultural, institutional, and political-economic contexts.<sup>15</sup> A person’s subjectivity is framed from their own personal experiences overlaid in a broader cultural context. For college students today, pharmaceutical drugs occupy an acceptable means to an end. Students assume that their peers and their future workforce competition are using psychotropic drugs to enhance not only their grades but their personalities as well. These drugs promise they can transform you into a faster, smarter, more enhanced version of self. Similarly, these collective pressures can be equated to stresses experienced by professional athletes and their use of performance-enhancing drugs. Logic dictates that if your competitors are doing steroids in order to stay competitive, you will need to use them as well. Psychotropic drugs are a college student’s equivalent of steroids. They

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<sup>13</sup> Ortner, Sherry B. “Subjectivity and Cultural Critique.” *Anthropological Theory* 5, no. 1 (March 1, 2005), 31

<sup>14</sup> Ortner, “Subjectivity and Cultural Critique,” 31.

<sup>15</sup> Schlosser, Allison V., and Lee D. Hoffer. “The Psychotropic Self/imaginary: Subjectivity and Psychopharmaceutical Use among Heroin Users with Co-Occurring Mental Illness.” *Culture, Medicine and Psychiatry* 36, no. 1 (March 2012), 26.

offer a promise of better cognition, better rest, even enhanced fun. If everyone takes them, it negates the risk and masks the danger.

In this thesis, I argue that the Millennial generation is lost. Similar to the original “Lost Generation” of the 1920s, the values of the world are changing. The inherited values received from parents clash with the stresses of a generation fighting to maintain an intensified, neoliberal, middle-class identity, while the failings of the system are becoming more and more apparent. For my generation, performance is based on grades, and it is reinforced that success is judged by income. Meanwhile, popular culture such as song lyrics talk about getting high off of pharmaceuticals; while television commercials reiterate that pharmaceutical drugs are needed in order to achieve normalcy, meet social expectations, and live rewarding lives.

Compounding the issue is the fact that the gatekeepers to obtaining prescriptions are concerned parents. They are fearful that their children will fall behind in school as academic pressures mount. In an interview with Dr. Eric Schenfeld, an emergency medicine doctor, he noted that:

Every parent wants to think their kids are perfect and special. They have this idea that well... if they aren't performing, then there must be something medically that we can fix. (If) it's not something that we can work through, we can, you know, take the pill and fix it. It seems like people just want the very quick, quick fix to those kinds of things I guess [sic] (Interview with Schenfeld, February 3<sup>rd</sup> 2016).

As a society, individuals have become hardwired to expect and receive immediate gratification. Today it is possible to talk with people on the other side of the globe instantaneously, and Google answers the most obscure questions one can propose. As technology and rates of productivity increase, it makes sense that individuals are beginning to expect the same results when it comes to the management and improvement of their physiology.

During my interview with emergency medicine physician, Dr. Tom Doyle, we discussed the not-too-distant future of cognitive-enhancing pharmaceutical drugs in society. He suggested society could be entering a future resembling Huxley's *Brave New World* in the next thirty years. Currently, the side effects of drugs in the marketplace are too great and the efficacy of promoting specialized chemistry for people is problematic (Interview with Doyle, January 6<sup>th</sup> 2016). However, through self medication, the beginnings of how people use pharmaceuticals in order to achieve advantageous results and counteract side effects of other drugs is already evident. The combination of drugs in order to achieve more desirable outcomes are called pill "cocktails."<sup>16</sup>

In Los Angeles, a drug combination became so popular it was called the Hollywood cocktail. It consisted of Serzone (an antidepressant, with mild sedative properties, but without side effects of sexual dysfunction and weight gain) and Effexor (another antidepressant, with stimulating properties). The hyper-management of symptoms to achieve a "better normal" is already becoming commonplace to those who can afford it.<sup>17</sup> As my generation enters the workforce and adulthood, I anticipate that these cocktails will not only become more common but also influential in how one defines oneself. Drugs are marketed through their characteristics; in the future, the combination of pills one takes could be understood not only as a means to enhance one's mood and productivity but also to characterize one's underlying personality.

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<sup>16</sup> Martin, "The Pharmaceutical Person," 278.

<sup>17</sup> Ibid., 278

## What is Mental Illness?

Men go abroad to admire the heights of mountains, the mighty waves of the sea, the broad tides of rivers, the compass of the ocean, and the circuits of the stars, yet pass over the mystery of themselves without a thought. – Augustine of Hippo; *Confessions*<sup>18</sup>

The biomedical model of mental illness suggests that mental disorders of the brain are caused by abnormalities in the brain structure, either in function or genetically. Mental illnesses began to be described as chemical imbalances in the brain during the 1960s. At this time, researchers were beginning to understand how antipsychotics and antidepressants acted chemically in the cerebrum. Chemical imbalance theory told us that antipsychotics blocked dopamine receptors; therefore, a condition like schizophrenia could be caused by too much dopamine, and similarly depression could be caused due to a monoamine deficiency (monoamines are neurotransmitters such as serotonin and norepinephrine).<sup>19</sup> The drugs that “fixed” these chemical imbalances were described with monikers such as “insulin for diabetes,” and society accepted the metaphor.<sup>20</sup>

Embedding curative properties in the names implies that they are antidotes to medical disorders. *Antidepressants*, *antianxiety*, *antipsychotic* all imply a reversal of a mental condition. However, instead of a decrease in mental illness, there has been an increase in rates of diagnosis. In 1955 there were 355,000 people in state and mental hospitals with a psychiatric diagnosis; in 2013 there were 4.5 million Americans receiving disability pay due to mental illness.<sup>21</sup> Disability

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<sup>18</sup> “15 Augustine Quotes That Helped Shape Modern Christian Thought.” *RELEVANT Magazine*, August 28, 2014.

<sup>19</sup> Whitaker, Robert. “Anatomy of an Epidemic: The History and Science of a Failed Paradigm of Care.” *The Behavior Therapist* 38, no. 7 (October 2015), 192

<sup>20</sup> Whitaker, “Anatomy of an Epidemic,” 192.

<sup>21</sup> *Ibid.*, 192



rates jumped from 1 in 468 Americans to 1 in 70, all of this occurring as the United States shifted its paradigm of care to a biomedical model.<sup>22</sup>

Treatments therefore addressed these biomedical mechanisms. However, as Robert Whitaker, an award-winning journalist and author who covers medicine and science writing in the prestigious psychiatric journal *The Behavioral Therapist* points out, there is no credible scientific evidence for the assumption that these disorders are caused purely by chemical imbalance. Sona Dimijian, a professor in the Psychology and Neuroscience department at the University of Colorado Boulder described depression as a “heterogeneous category” with many different severity levels. She points out studies showing that pharmacological therapy benefits for patients taking antidepressants were only evident if the patient was on the severe end of the depressive scale. Otherwise, most patients respond well on a placebo. Conversely, those prescribed medication ran a higher risk of relapse.

Yet, the discourse used by governmental health agencies and even clinicians reinforces the rhetoric that mental illness is caused by “underlying brain or neurotransmitter abnormalities.”<sup>23</sup> Neuroscientists themselves take issue with what is called “biological reductionism,” or the idea that psychological concepts and experiences can be reduced to biology.<sup>24</sup> One of the medications I am most interested in due to its prevalence at the University of Colorado Boulder campus is Xanax, a benzodiazepine. Xanax is a common treatment for anxiety disorders. But, how do you define anxiety? Currently, neuroscientists cannot directly observe anxiety in the brain—in order to diagnose it, it must be inferred from verbal and overt behavioral signals such as avoidance and cognitive biases. The amygdala is the part of the brain

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<sup>22</sup> Whitaker, “Anatomy of an Epidemic,” 192.

<sup>23</sup> Abramowitz, Jonathan S. “The Biomedical Model: Caveat Emptor.” *The Behavior Therapist* 38, no. 7 (October 2015): 171.

<sup>24</sup> Abramowitz, “The Biomedical Model,” 171.

that is involved with anxiety and fear. However, firings in the brain itself do not shed light on the actual experience of anxiety. Human emotions cannot be reduced to a purely biological mechanism and should not be treated with a singular biomedical response. Jonathon Abramowitz of the University of North Carolina Chapel Hill argues that leaning on a purely biomedical model does not effectively treat mental illness and by championing it as a “real disease,” stigma surrounding sufferers of mental illness has not dissipated but has become more stigmatizing.<sup>25</sup>

Mainstream psychology is increasingly becoming neurocentric in explaining human behavior. The National Institute on Drug Abuse (NIDA), in its Strategic Plan released in 2014, informs readers that its major objective is “defining the biological basis of complex behaviors,” and “describing the molecules, cells, and neural circuits associated with complex behaviors.”<sup>26</sup> However, if connectivity mapping linking neuroscience and mental illness has not yet been proven, then why are physicians treating mental illness so prolifically with biomedicine?

Robert Whitaker shared his perceptions on the current biomedical model in his article “Anatomy of an Epidemic: History and Science of a Failed Paradigm of Care.” He focuses on episodic illnesses that are now treated as chronic conditions. Prior to the introduction of antidepressants, depression was understood as an episodic disorder. People hospitalized after their first depressive episode could be expected to recover over time; 50% would not experience a second episode, 30% would suffer two to three episodes over a fifteen-year period, and 20% could become chronically ill.<sup>27</sup> In the 1960s a physician studying depression concluded, “long term antidepressant medication... exerts a paradoxical effect on the recurrent nature of the vital

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<sup>25</sup> Abramowitz, “The Biomedical Model,” 171.

<sup>26</sup> Lilienfeld, Scott O, Seth J Schwartz, Katheryn C Sauvigné, and Sally Satel. “Neurocentrism: Implications for Psychotherapy Practice and Research.” *The Behavior Therapist* 38, no. 7 (October 2015), 174

<sup>27</sup> Whitaker, “Anatomy of an Epidemic,” 195.

depression.”<sup>28</sup> Naturalistic studies over the last 25 years have regularly found that off-medication patients have better outcomes than those on medications and are less likely to be symptomatic years later. In a six-year study by the National Institute of Mental Health (NIMH), patients treated with medication were three times more likely than the untreated group to suffer a “cessation” of their “principal social role,” and seven times more likely to become incapacitated.<sup>29</sup> As the body becomes more and more accustomed to medication, the default becomes a depressive state.

Similar drug histories can be formulated for other classes of psychiatric disorders and their treatment with medications. Benzodiazepines, the type of medication that typically treats anxiety disorders, may cause patients to become chronically anxious and functionally impaired. Likewise, long-term studies involving stimulants used to treat ADHD have also failed to prove that they provide any long-term benefit to the user.<sup>30</sup> The issue with the long-term use of these medications is that they induce compensatory adaptations that are the opposite of what the medication is intended to produce. Pathways in the brain that the drugs affect may make these areas less functional, and this can occur even if the medication is withdrawn relatively early. For many cases, the compensatory adaptations are not reversible.<sup>31</sup> Therefore, the user’s condition worsens as their drug regime continues. Even more alarming, the dramatic increase in the number of people ultimately disabled by bipolar disorder has risen in tandem with the use of antidepressants.<sup>32</sup> Suggesting that use of these medications have the potential to exacerbate other underlying conditions. The word disease implies a chronic condition that requires constant

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<sup>28</sup> Whitaker, “Anatomy of an Epidemic,” 195.

<sup>29</sup> Ibid., 195

<sup>30</sup> Ibid

<sup>31</sup> Ibid

<sup>32</sup> Ibid

management. The way healthcare professionals currently treat mental illness highlights the possibility that the most prevalent paradigm of care is has failed. By prescribing someone medication, society confirms the notion that something is wrong. If someone is told from a young age that they have a learning disability and need medication and the message is reiterated into adulthood, it is likely this pattern will continue. The human brain is a powerful organ and has the ability not only to reason but also to shape perceptions of reality.

Emily Martin, an anthropologist at New York University, offers valuable insight in her essay “The Pharmaceutical Person” (2006). In this paper Martin explores a question posed on American public television in 1967 in the film *Drugs in our Culture*.<sup>33</sup> The film asks, “What kind of person would we be when... the only way we can cope with situations is through a chemical?” The answer, the film suggests, is “then we’re not really much of a person...”.<sup>19</sup> By relying purely on chemicals, one mitigates their free will and self control. Martin places the film’s question and answer into a contemporary context, exploring the proliferation of pharmaceutical chemicals in the mainstream consciousness. Her analysis of the pharmaceutical person is relevant to the ethical landscape that I am calling attention to at the University of Colorado.

For example, Martin argues that psychotropic “pills” can be regarded as both a living person and an inanimate object simultaneously. I thought about this in the context of Eva who told me that she “needed” her prescriptions. I wondered, “what does that mean?” A necessity is something that you cannot live without. Her pills were not keeping her alive, but instead enhancing attributes about herself that she thought needed to be fixed. She wanted to feel normal, but what does normal look like? A respondent to my survey picked up on the association between pharmaceuticals and constructing a sense of self and wrote,

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<sup>33</sup> Martin, “The Pharmaceutical Person,” 273.

I'd say there's a lot of abuse, especially amongst [sic] Greek system. A lot of frat brothers I know use drugs such as pills as ways to feel emotions almost. For example, they'll take Vyvanse or Ritalin if they need to study, take Xanax or an opiate if they want to relax, etc. They let the substance feel for them. I'd also say a lot of CU students have rich parents which gives them [sic] disposable income they didn't earn, which seems to fund a lot of drug habits. – Student #150

This quote not only touches upon students' using medication to self identify, cope, and define meaning; it also sheds light on constructions of class and privilege. Pharmaceutical companies recognize the importance of investing drugs with particular personality traits.<sup>34</sup> The pill's ultimate goal is to make the consumer a better person, a more enhanced person, the person you would be without a mental disorder.

When the book *Listening to Prozac*, by psychiatrist Peter D. Kramer, came out in 1993, it was the first popular publication to emerge about Prozac. In chapter one, titled "Makeover," Dr. Kramer tells the story of a patient named Tess who has a troubled upbringing and suffers from clinical depression. Tess became clinically depressed in her 30s, even though she had an accomplished professional life. Dr. Kramer recounts Tess's failed and destructive love, and tells of his confusion over the discrepancy between her failed personal life and her charmed and successful professional life. Psychotherapy was not a treatment he used with Tess. Instead, he treated her depression entirely through medication. Imipramine, once the gold standard for anti-depressant medication, seemed to work well for Tess, but Dr. Kramer reported he did not feel satisfied. Tess's mother suffered from mental illness, and he felt that in order to be successful with Tess he had to be more thorough. Depression is a recurring illness, and even though Tess seemed to be in remission, he explains that doctors are trained to look for what neurologists call "soft signs."<sup>35</sup> These are signs that are seemingly normal, but if a patient is particularly stoic, any

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<sup>34</sup> Martin, "The Pharmaceutical Person," 273–87.

<sup>35</sup> Kramer, Peter D. "Listening to Prozac," 5. New York, NY: Viking, 1993.

abnormalities can make “the clinical nose twitch.”<sup>36</sup> When Prozac was released by the FDA, he decided to try it out on Tess. The results were astounding; she had more energy, more dates, her social circle changed, and it seemed as if all of her deep-seated insecurities faded away.

However, once off the medication for eight months she reported to Dr. Kramer that she was “slipping,” and this is where the ethical issues became complicated. She was not “slipping” back into her depression or even faltering professionally, but she simply felt less peppy, less energetic, and less fun. Tess was no longer depressed, but still wanted Prozac. Prozac had the power to alter one’s personality and perceptions of self.<sup>37</sup> He calls this “cosmetic pharmacology” and wondered about the implications and efficacy of medicating someone like Tess for the betterment of personality rather than for mental illness.<sup>38</sup> Prozac did not seem to affect her differently than a substance such as cocaine or alcohol would. People use chemicals all the time in order to “feel normal” and lower inhibitions, so what makes pharmaceuticals any different?

Access and privilege can allow prescription pharmaceuticals to sneak in through a middle-class back door. Instead of buying drugs on the street, people with money can access drugs that are socially sanctioned and whose effects are targeted and controlled. However, their effects and reasons for use can be morally indistinguishable.<sup>39</sup> Kramer, the Prozac doctor discussed above, worried that the threat of pharmacology would seep its way into American business. Writing this as a college student in 2016, it seems that Kramer’s worry has already fully materialized. *Listening to Prozac* came out in 1993, the same year I was born. Twenty-two years later, I would argue that society has entered into an era of “cosmetic pharmacology.”

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<sup>36</sup> Kramer, “Listening to Prozac,” 5.

<sup>37</sup> Kramer, “Listening to Prozac,” 13.

<sup>38</sup> Ibid., 15

<sup>39</sup> Ibid., 16

Thoroughness in health care has been replaced by economy. Psychoanalysis is supplemented, if not replaced, by the immediate magic that pharmaceuticals promise. Yet, as life often teaches us, if things are too good to be true, then they probably are. When did life become so busy that one no longer has the time to talk about their issues? My friend killed himself on anti-depressants, as rumors circulated over his sexual orientation. Were his magic tablets enough for him, then? No.

Medication allows human beings to enter into a gray space. In this space we have notions of responsibility, free will, self-determination, and unique and individual development. If one tablet has the ability to change everything about us that defines a sense of self, as it did for Tess, how does it change our entire notion of biology? If pharmaceuticals can change a person's personality through a biological reaction, then what does that imply for the human condition? Medication allows for the individual to redefine themselves, and realign their values in order to create a "better" version of self. I saw this clearly in the case of my roommate Eva. Her medication not only altered her personality, but also the way she constructed her self worth. She was not "herself" if she had not taken her medication. Yet, it also calls into question another issue. At what point do unsavory personality characteristics become something that need to be medically treated? Some of the greatest thinkers of our times have been socially inept. Mozart, Albert Einstein, even Mark Zuckerberg are not known for their charisma but for the brilliance of their minds.

The ancient Greek word *Pharmakon* means both remedy and poison.<sup>40</sup> The duality of meaning lends itself nicely to the complex setting of pharmaceutical drugs within the United States' marketplace. Martin argues that certain forms of displacement are needed in order to understand the market surrounding pharmaceuticals. She defines displacement as "a social

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<sup>40</sup> Martin, "The Pharmaceutical Person," 274.

process by which dangerous parts of an object are removed from direct view.”<sup>41</sup> By using displacement as a framework, she argues that Big Pharma can displace the negative side effects associated with the drugs and diminish the ability of the public to become aware of these effects.

## **The Rise of ADHD**

"Gnarly, radical, on the block I'm magical/See me at your college campus baggie full of Adderalls/Call me if you need a fix, call me if you need a boost" --Kreayshawn on "Gucci Gucci"<sup>42</sup>

In the 1980s doctors began diagnosing something called Attention Deficit Hyperactivity Disorder and Attention Deficit Disorder, also known as ADHD and ADD. Both were originally believed to be pediatric disorders; however, it is estimated that 30% to 70% of children diagnosed with ADHD and ADD continue to have symptoms into adulthood.<sup>43</sup> As children diagnosed with ADHD and ADD transitioned into adulthood and rates of diagnoses increased, prescription stimulants became a popular treatment option. Attention Deficit Hyperactivity Disorder is characterized by inattention, hyperactivity, and impulsiveness. In statistics released from the Center for Disease Control 13.5% of boys aged 3 to 17 are diagnosed with the disorder; while conversely, only 5.4% of girls aged 3 to 17 are diagnosed.<sup>44</sup> Additionally, it is estimated that over two-thirds of children diagnosed with the disorder take medication for it.<sup>45</sup>

In an interview with emergency medicine physician Dr. Tom Doyle, he attributed the increased rates of diagnosis over the last 20 years to our performance-driven society. In the past

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<sup>41</sup> Martin, "The Pharmaceutical Person," 274.

<sup>42</sup> Aku, Timmhotep. "5 Hip-Hop Drug References: Rapping about MDMA, Xanax, OxyContin." *The Root*, August 12, 2012.

<sup>43</sup> DeSantis, Alan D., and Audrey Curtis Hane. "'Adderall Is Definitely Not a Drug': Justifications for the Illegal Use of ADHD Stimulants." *Substance Use & Misuse* 45, no. 1–2 (2010): 31

<sup>44</sup> "FastStats." Accessed February 24, 2016. <http://www.cdc.gov/nchs/fastats/adhd.htm>.

<sup>45</sup> "Is It Really ADHD?" *Http://www.apa.org*. Accessed March 2, 2016.



when kids were falling behind in school, it got brushed off as students being forgetful and spacey. These situations were accepted as academic pressures on students were not as rigorous. However, as academic expectations became more and more stringent, increased numbers of parents took their kids in to be tested (Interview with Doyle, January 6<sup>th</sup> 2016). During the late 1980s and early 1990s, several states passed consequential accountability laws. Funding for schools then became based on standardized test scores rather than the number of students served. Schools (and teachers, actually) whose students performed well on standardized tests were rewarded accordingly.<sup>46</sup> Moreover, if students were diagnosed with ADHD then the school could acquire more funding for tutors or were allowed to take students with the disorder out of the academic pool that was used to judge the school's standardized test performance.<sup>47</sup>

Pressure from the schools, coupled with parents wanting their kids to “meet their potential” has led to increased sensitivity in the diagnoses of ADD and ADHD and an increase in pharmacology in order to combat the diagnosis. Dr. Doyle reiterates that while some students may truly benefit from these drugs, the rates of diagnosis have exploded due to more and more kids being tested and increased acceptance of pharmaceutical drug treatments for learning disabilities (Interview with Doyle, January 6<sup>th</sup> 2016). On average an assessment to diagnose ADHD by a doctor and gain a prescription takes 10 minutes,<sup>48</sup> regardless of the fact that the usefulness of stimulants is still subject to debate.

*Time* magazine reported on a University of Pennsylvania study in 2010 comprised of 47 students without an ADHD diagnosis. The students were each given both a cognitive enhancer (Adderall) and a placebo and then tested on how much information they could retain and

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<sup>46</sup> “Is It Really ADHD?”

<sup>47</sup> Ibid

<sup>48</sup> Ibid

reiterate (i.e. raw intelligence and memory recall). The University of Pennsylvania study determined that Adderall did not not actually improve students' performances but gave them an inflated sense of productivity.<sup>49</sup> As one student noted, "Of course, I could have studied in college without Adderall, just like I did in high school — I just couldn't have studied with such ecstasy."<sup>50</sup> Ecstasy is an interesting word choice to use in regards to studying, implying that studying should be a euphoric experience as opposed to one that requires patience and concentrated effort.

A study at an unspecified public research university in the southwestern United States looked into justifications behind medicinal stimulant use. Researchers interviewed 175 students in 2007 in order to seek insight on their usage patterns. The overarching results of the study concluded that students viewed prescription stimulant use as physically harmless and morally acceptable.<sup>51</sup> They also reported that stimulant use is discussed stigma free on college campuses, allowing for the discourse surrounding them to be collectively crafted,<sup>52</sup> even though Adderall and other cognitive enhancers are classified as Schedule II substances according to the U.S. Drug Enforcement Administration (DEA). Other Schedule II drugs include cocaine, morphine, PCP, injectable methamphetamine, and pure opioids.<sup>53</sup>

After conducting face-to-face interviews with the student body, they identified the collectively crafted justifications that occurred in the highest frequency. Administrators of the interviews called the first justification used by students the "comparison and contrast" justification. Students would compare and contrast ADHD stimulant use with traditional "party

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<sup>49</sup> Melnick, Meredith. "Adderall May Not Make You Smarter, But It Makes You Think You Are." *Time*. Accessed November 2, 2015.

<sup>50</sup> Melnick, "Adderall May Not Make You Smarter."

<sup>51</sup> DeSantis and Hane. "'Adderall Is Definitely Not a Drug,'" 31.

<sup>52</sup> *Ibid.*, 31

<sup>53</sup> *Ibid.*, 31-32

drugs,” creating a good versus bad dichotomy.<sup>54</sup> Within this justification, the researchers identified four subcategories with which students justified their use. The *I’m-doing-it-for-the-right-reasons-argument* argued that if stimulants were used for a positive outcome, such as acquiring good grades, then it is morally justifiable. Students claimed that because they do not use these drugs to get high (even though they can be used to get high), then they are safe and morally justifiable. Although taking someone else’s prescriptions is technically illegal, if they are used to promote yourself professionally or academically then the illegality of the act is suppressed due to the promise of positive results.<sup>55</sup> Students at the University of Colorado employed similar ideologies, though they did not seem to hold illusions regarding the potential for these drugs to get them high. For example, student #155 noted, “people love it. They brag about how they were high on Adderall to study,” and student respondent #69 simply said, “it fucks you up, bro!” Adderall is viewed as a drug that satisfies a means to an end and is excusable if used to advance oneself academically. Respondent #24 from my student survey critiqued this notion:

Students do not take prescription drugs seriously. Students take drugs for unnecessary reasons. For example, I was meeting with a group for a class project, [sic] it was an informal meeting just to get our ideas flowing, and one student complained about how her body was “totally rejecting the Adderall” she just took. Meaning that she had taken the drug for the group meeting in order to focus, but it had some how back fired and she didn’t feel well [sic].

DeSantis and Hane also found that students frequently employed *it-comes-from-the-medical-establishment argument*. The oversight by pharmacists in laboratories in the production of these substances and their control by the FDA make them feel safe. Students involved in the study repeatedly expressed and believed that the FDA, medical doctors, pharmaceutical companies,

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<sup>54</sup> DeSantis and Hane. ““Adderall Is Definitely Not a Drug,”” 35.

<sup>55</sup> Ibid., 35-36

and health experts would not lie or deceive them about the safety of ADHD stimulants.<sup>56</sup> Yet these same students believed that the potential dangers that these same institutions warned of were exaggerations.<sup>57</sup> The fact that students from this southwestern public university did not perceive ADHD stimulants as substances that could create a high, compounded with the view that these drugs do not have internal or external side effects, negated their perceived personal risk.

While most of the students who participated in the DeSantis and Hane study claimed they did not experience any negative side effects or instances of abuse, they did acknowledge that their peers could use these drugs irresponsibly. At the undisclosed university, girls reported that their friends and sorority sisters used Adderall in order to suppress their appetite and condemned their friends who used it on a daily basis in order to get through mundane tasks.<sup>58</sup> Interestingly, in my anonymous survey the results conflicted with the findings from DeSantis and Hane. Out of 181 students who took the survey, 157 responded to my question, “Have you ever experienced any weird side effects after taking prescription medication? Please explain.” A majority, 59.24% of respondents, admitted to experiencing adverse effects. (Though the question did not specifically target ADHD medications, most adverse effects were attributed to them.) I believe that because DeSantis and Hane conducted interviews face to face, the lack of anonymity produced less honest answers from students. The most common complaints from University of Colorado students were depression, anxiety, feeling irritated, and blacking out. Student #44 remarked:

Depression, anxiety, lack of self confidence, spaciness [sic]. Honestly, after years of taking the Ritalin and Adderall, I feel as if my ADD (attention deficit disorder) is worse off than it was before. My body is completely dependent on it for the

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<sup>56</sup> DeSantis and Hane. ““Adderall Is Definitely Not a Drug,”” 36.

<sup>57</sup> Ibid

<sup>58</sup> Ibid., 39

most part, even though I take a very, very small dose every day. Sometimes, I wish I never began taking the medication in the first place...

Respondent #16 noted, “overuse of Adderall negatively impacted my skin health, as my body was constantly overstimulated. This resulted in undiagnosed psoriasis for quite a while. Overuse of Xanax has resulted in memory loss, overall distraction, loss of motivation, as well as muscle pains.”

Although University of Colorado students admitted that these prescription medications had the potential to produce long-term detrimental effects, the risk seemed to vary with the individual user and their usage patterns. Surprisingly, 26.06% of student respondents thought that prescription medications held no potential for long-term effects even though the FDA’s warnings associated with Adderall include sudden death, serious cardiovascular adverse events, worsening mental illness, decreased growth, increased tics, headaches, and mood changes. If the user has heart defects, high blood pressure, heart or blood vessel disease, or an overactive thyroid, the risks associated with Adderall grow exponentially.<sup>59</sup> Respondent #76 expressed concern over their own experiences with use of stimulant drugs:

Sometimes I felt that I needed more Adderall or Vyvanse. At one point I was taking Vyvanse for a couple weeks - but taking the pills apart and taking only part of the powder. Definite self medication. When I didn't have any I felt down and depressed. I was lucky enough to overcome that. After that I told myself I'd never take any again. I haven't. My vice is now coffee but it's much better for my mental and physical health than the prescription drugs were [sic].

The statement above highlights student ingenuity to bypass safeguards imposed by drug manufacturers, but also the side effect of feeling down and depressed after the drug withdrawal.

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<sup>59</sup> DeSantis and Hane. ““Adderall Is Definitely Not a Drug,”” 42.

Similarly, one parallel between students in the DeSantis and Hane study at the undisclosed university and my study at the University of Colorado Boulder was their admission that they did not know very much about dosages. Some students thought that taking 10 mg was plenty, whereas others admitted to just taking whatever everyone else was taking (or more). Unless they were taking prescribed medications, students in my survey did not discuss or specify dosages to a great extent. Most took their friends' Adderall, Ritalin, or Vyvanse and were not particular or deliberate on the dosages they sought. Like student #76 expressed, self medication becomes a desirable option as one's body starts adjusting to the dosage. The alteration of the capsules becomes necessary in order to fulfill self-perceived needs.

The justification of self-medication prevailed in both student body populations. Students justified their drug usage because they felt they needed it. Undiagnosed symptoms of ADHD such as difficulty focusing, daydreaming, poor reading comprehension, and boredom were all believed to be fixed medically by use of ADHD stimulants.<sup>60</sup> By reducing the risk profile of ADHD stimulants to harmless, acceptable, capsulated caffeine, the risks associated with stimulants became superseded. At the University of Colorado, 13.36% of students believed that they have ADD or ADHD left undiagnosed, whereas 23.76% of students have at least considered this notion before. The justification of self-medication works well in the collectively crafted discourse surrounding prescription cognitive enhancers. Students who are prescribed these medications give them to their friends, thus dissolving the lines between clinical diagnoses and *WebMD* self-diagnoses. This allows students to form a collective subjectivity in their peer community in which performance is valued, academic integrity is undermined, and achieving one's goal by any means necessary is accepted.

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<sup>60</sup> DeSantis and Hane. "'Adderall Is Definitely Not a Drug,'" 40.

## The Eradication of Pain

Doctor, please, give me a dose of the American Dream / Put down the pen and look in my eyes / We're in the waiting room and something ain't right / All this is on you, we're overprescribed – Macklemore and Ryan Lewis ft. Leon Bridges on “Kevin”<sup>61</sup>

Opium was first introduced to China by Turkish and Arab traders in the late 6<sup>th</sup> or early 7<sup>th</sup> century C.E. Taken orally to relieve pain, it was used sparingly until the 17<sup>th</sup> century. By 1729, during the Qing Dynasty, the smoking of opium became such a problem for the Chinese economy that it was outlawed.<sup>62</sup> The decree of the Chinese government did not deter the addicts that demanded the product, and an overwhelming demand spurred the Opium Wars between the European Anglicans and the Chinese over opium trade. This historical case highlights not only the addictive properties of opium but also its potential to disrupt societal norms. Today opium is used medicinally in prescription painkillers and as a result our own societal fabric is changing. The efficacy of treating people with such a powerful and addictive narcotic is – at best - questionable.

When one steps into a doctor's office, medical practitioners routinely monitor four vital signs: respiration rate, pulse rate, body temperature, and blood pressure (Interview with Doyle, January 6<sup>th</sup> 2016). However, 20 years ago a push within the medical community determined that pain should be considered the 5<sup>th</sup> vital sign, and patients should have their pain scored on a scale. The doctor's goal, therefore, became to eradicate pain by any means necessary (Interview with Doyle, January 6<sup>th</sup> 2016). Tom Doyle, an emergency medicine doctor, explains that doctors were getting sued and disciplined for not adequately mitigating a patient's pain or leaving them in pain when a pain narcotic could have been administered.

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<sup>61</sup> Macklemore and Ryan Lewis (Ft. Leon Bridges) – Kevin. Accessed March 1, 2016. <http://genius.com/Macklemore-and-ryan-lewis-kevin-lyrics>.

<sup>62</sup> “Opium Trade | British and Chinese History.” *Encyclopedia Britannica*. Accessed February 24, 2016.

More recently, in the past five years, there has been increasing backlash against registering pain as the 5<sup>th</sup> vital sign, as most people would agree that pain is a subjective category. Dr. Doyle explains the over management of pain has resulted in a population overly sensitive to pain. To put this into context, the United States is home to 4.6% of the world's population but consumes 80% of the world's opioids.<sup>63</sup> Complaining about pain has led to a trend of a gross overprescribing of narcotics for things like broken ankles, toothaches, etc. There is a social demand for narcotics because of the perception that pain always needs to be treated and pushed away rather than temporarily endured until the patient is healed (Interview with Doyle, January 6<sup>th</sup> 2016). Pain and our threshold to endure it have become socially constructed; no patient wants to be told to "suck it up." They would rather have an OxyContin.

Dr. Ed Heres is the medical director of chronic pain services at the University of Pittsburgh. On a daily basis he deals with the efficacy of opioid pain management. Although he acknowledged the risk of abuse and the potential for prescription opioid narcotics to segue into heroin use, he argued that, unfortunately, it is currently the best and most effective tool available for chronic conditions (Interview with Heres, January 11<sup>th</sup> 2016). Chronic conditions requiring pain medications include nerve injuries and cancer pain. For instances such as these, prescriptions are typically given out in a monthly supply, and patients see a primary provider (Interview with Heres, January 11<sup>th</sup> 2016). His concerns are quite different from those of emergency medicine doctors, who experience a mass turnover of patients on a daily basis. The worry for physicians who treat chronic pain is that in efforts to curtail the narcotic abuse, those

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<sup>63</sup> AM, Mike Mariani On 12/23/15 at 4:41. "Why So Many White American Men Are Dying." *Newsweek*, December 23, 2015.



suffering from chronic conditions (e.g., cancer patients) may be undermanaged for pain in the future as perceptions of pain management must change in the wake of excessive opioid abuse.

Emergency medicine doctors have had to adapt to the changing landscape of prescription narcotics and abuse. More often than not, the emergency departments are the first line of interface between patients and prescription pain narcotics. Dr. Dan Henning noted that the efficacy of treating people with pain narcotics comes into question when emergency medicine physicians treat people with an injury, as they require more narcotic for pain, yet their condition is not chronic (Interview with Henning, January 6<sup>th</sup> 2016). However, after the original dosage, patients must seek out a primary care physician in order to receive more drugs (Interview with Henning, January 6<sup>th</sup> 2016). In order to combat the risk for abuse, some states have implemented statewide prescription drug monitoring systems that keep track of users and frequencies of medication renewal (Interview with Henning, January 6<sup>th</sup> 2016). These systems allow doctors to look up any patient's record to look for inconsistencies and make sure that these patients are not "shopping doctors;" that is, going around from hospital to hospital with acute complaints seeking medication.

The success of these programs is questionable. Alarming, rising concurrently with the proliferation and over-prescribing of prescription narcotics is abuse of heroin. Heroin use in the United States has increased 63% in the last 11 years, and heroin-related deaths have quadrupled in the same period of time.<sup>64</sup> In 2013 an estimated 517,000 people reported that they had used heroin in the last year or had heroin dependencies, a 150% increase from 2007.<sup>65</sup> The most common group abusing heroin is comprised of males between 18-25 years of age who make less than \$20,000 a year. Yet, more recently, heroin usage has doubled among women and non-

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<sup>64</sup> Sifferlin, Alexandra. "Heroin Use in U.S. Reaches Epidemic Levels." *Time*, July 7, 2015.

<sup>65</sup> Sifferlin, "Heroin Use in the U.S."

Hispanic white people.<sup>66</sup> Prescription painkillers could be to blame due to the over- prescribing of pain narcotics in the last 20 years.

Pills or tablets are easily consumed, and their outward appearance is not threatening. They are sometimes even made to look like sweets and, as such, their risk becomes negated as they are viewed as innocent confections.<sup>67</sup> Aversion to needles and injection make prescription opioids an attractive gateway and alternative to heroin. However, people who are addicted to painkillers may switch to heroin as it is cheaper, offers a similar high, and does not require a prescription. More recently the CDC has been calling for a comprehensive intervention and are urging health care providers to be more diligent in prescribing painkillers responsibly, as heroin use is approaching epidemic levels.<sup>68</sup>

Most of the doctors with whom I spoke agreed that as heroin use rises, doctors will have to become more selective about giving out prescription opioids. As a reversal in the medical community regarding pain as the 5<sup>th</sup> vital sign becomes more widely accepted, a reversal in the way in which doctors treat acute injuries or illness will change. Society may enter an era in which people are undertreated for pain management, and the population must undergo a cultural shift in perceptions of pain. Dr. Eric Schenfeld, an emergency medicine doctor in Utah, noted that prescription opioids are the number one killer of people aged 18 to 55 in the state (interview with Schenfeld, February 3<sup>rd</sup> 2016). Nationwide, prescription medications are the 4<sup>th</sup> leading cause of death.<sup>69</sup> The United States is reaching pandemic levels of narcotic abuse and, most disturbingly, healthcare providers are the dealers supplying the public with the drugs.

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<sup>66</sup> Sifferlin, "Heroin Use in the U.S."

<sup>67</sup> Martin, "The Pharmaceutical Person," 273–87.

<sup>68</sup> Sifferlin, "Heroin Use in U.S."

<sup>69</sup> Research, Center for Drug Evaluation and. "Drug Interactions & Labeling - Preventable Adverse Drug Reactions: A Focus on Drug Interactions." WebContent. Accessed February 17, 2016.

## Chapter 3: Mo' Money, Mo' Problems

### White Collar Criminal

First dealer was his mom's medicine cabinet / Got anxiety, better go and give him a Xanax/  
Focus, give him Adderall, sleep, give him Ambien/ 'Til he's walking 'round the city looking like  
a mannequin/ Ups and downs, shooting up prescriptions you're handing him/ So America, is it  
really worth it? I'm asking you – Macklemore and Ryan Lewis ft. Leon Bridges on “Kevin”<sup>70</sup>

In 2012 federal and state police raided seven medical clinics in Florida under investigation for trafficking millions of doses of pharmaceutical drugs, including painkillers, to “patients.” In a clinic surrounded by leafy palm trees off an interstate in Miami, board-certified physicians prescribed hundreds of thousands of oxycodone pills (an opioid) to patients after conducting hasty medical examinations. Inside the clinic, the Drug Enforcement Agency (DEA) found a bare-bones operation with little or no medical equipment. One of the physicians indicted, Roger Gordon, a board-certified plastic surgeon, prescribed over 270,000 oxycodone in one year, and at least two patients died of drug overdoses in the days following a visit to this Miami area clinic. The clinic's owners ran 10 pain-management clinics in Florida and Georgia and employed registered doctors and nurses. Another physician, Doctor Bruce Kammerman, prescribed an average of 1,700 oxycodone tablets a day. (His medical license has since been revoked.) The Florida attorney general called the pharmaceutical drug ring a “modern day cartel.”<sup>71</sup>

The cartels of old catered to “traditional drugs,” like cocaine, heroin, marijuana, and methamphetamine. For me cartels evoke clandestine meetings, jungle hideaways, and stir up visions of Pablo Escobar. Today, the landscape is changing. As Tom Doyle, an emergency medicine, doctor points out:

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<sup>70</sup> Macklemore and Ryan Lewis (Ft. Leon Bridges) – *Kevin*. Accessed March 1, 2016.

<sup>71</sup> “Doctors Accused of Drug Trafficking in Fla.” *USATODAY.COM*. Accessed February 16, 2016.

If you think about it economically, if you are going to go into the business of dealing drugs let's say, you can either choose to sell heroin which is illegal to make, it's illegal to possess, it's illegal to use and it's illegal to sell. But if you look at prescribed narcotics, it's legal to make, it's legal to possess, it's legal to use and it's just illegal to sell, so instead of having ten people along a chain of potential criminal activity that might get busted and narc on you. You only have the one act that's illegal - the selling of it, so you reduce your risk profile as a money making business [sic] (Interview with Doyle, January 6th 2016).

This transition has allowed for the middle class and social elite (e.g., doctors, as in the Florida case, and patients) to cross into a deviant sphere. The drug manufacturers are the powerful pharmaceutical companies, the distributors are physicians and psychiatrists, and the dealers are more often than not, patients. My roommate in Farrand Hall freshman year was prescribed Adderall. Whether or not she actually had ADD or ADHD, I cannot recall. I do remember little pieces of aluminum foil gathered in pieces on the floor beneath her desk and an endless stream of students visiting our dorm room looking to buy her medication. For five dollars she wrapped up a pill in foil and sent them on their way. I never saw her take one herself. She was a nice girl with a sweet mother, and she lived in relative comfort in Colorado Springs, so why sell drugs? My friend Dan, who died sophomore year, was from one of the wealthiest neighborhoods in Nashville, lived next to the governor of Tennessee, and still sold Xanax.

A critique of neoliberalism is that it works toward a restoration of class power, although not for the same individuals. This critique assumes that within neoliberal formations there are fluctuations within the system, and that some will lose class power as others gain.<sup>72</sup> These presumed fluctuations would begin to explain why young people are resorting to deviant subculture in order to make extra cash, especially if they are trying to maintain a lifestyle introduced to them by their parents. According to my student survey 33.15% of respondents

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<sup>72</sup> Goldstein, Donna M. "How Corruption Kills: Pharmaceutical Crime, Mediated Representations, and Middle Class Anxiety in Neoliberal Argentina (2012)." *City & Society* 24, no. 2 (2012).

identified as middle class, 49.17% of respondents identified as being upper middle class, and 14.36% of students identified as high socioeconomic status. Out of 181 students, only 6 students or 3.31% self-identified as lower socioeconomic status. Therefore, of the self-selected student respondents, most identified as being part of the middle class, upper middle class, or high socioeconomic status.

In my survey question #18 asked, “Have you ever offered to pay someone for their prescription drugs/ has anyone ever offered to pay you for access to prescription pills?” Respondent #61, who self-identified as middle class wrote, “Yes, almost daily. I was broke [sic] and needed money. I never bought anything but would always sell in a pinch to make rent or for food.” Respondent #66 noted, “My friend sells Xanax bars. He picked up 300 (2 mg bars) of Xanax and sold them all in less than two hours in Boulder.” Respondent #108 said, “Obviously. You ask kids in class your close with, friends, [sic] usually a week or so in advance of the exam or what it's gonna [sic] be used for.”

To my best understanding, the going rate for Adderall/ Xanax is about \$5 dollars per capsule. While this does not seem like a lot, a typical prescription contains at least a one-month supply of the drug. For Adderall this could mean 30 tablets and for Xanax up to 90 tablets. If one were to sell an entire month’s prescription this could mean up to \$450 dollars for Xanax and \$150 for Adderall. For prescription opioids the supply can be much higher; a monthly prescription for a prescription opioid such as Percocet could be as many as 120 tablets, whereas a normal dosage given out in the ER is anywhere from 15 to 20 (Text message with Doyle, March 2<sup>nd</sup> 2016). For students self-identifying as middle class, an extra couple hundred bucks a month from their prescriptions would be enough to supply valuable “supplemental” income as college students and allow them to interact with their higher class peers. Conversely, for students who

self-identify as part of a high socioeconomic status, \$5 for a tablet would not be enough to break the bank *per se*. Bought sporadically and with cash, transactions are nearly impossible to track. When asked about the prescription drug climate at the University of Colorado, student respondent #72 communicated, “It’s a massive part of the culture. The first guy I dated in college came from a very wealthy family and would pop a Xanax multiple times a day, but he wasn’t prescribed [sic].” Student #72’s remarks about her boyfriend being from a wealthy family is directly linked to constructions of wealth and access. Moreover, the lack of a doctor’s diagnosis did not hinder his efforts to obtain a prescription.

The University of Colorado’s student body is overrepresented by a privileged, white student demographic (myself among them). While reviewing demographic data for the University of Colorado Boulder, I learned that my class, the class admitted for fall 2012, is 73.20% white.<sup>73</sup> In addition, average rent prices on the Hill, where a majority of University of Colorado students reside range from \$800 to up to \$1800 per person.<sup>74</sup> These prices rival rent rates in major metropolitan centers across the United States and require serious capital in order to maintain a residence. Wealth is opulently expressed through Aspen ski homes, designer clothes, expensive automobiles, Instagrams from private planes, and a seemingly endless supply of pharmaceuticals.

Many of the student respondents reinforced my concerns based on what I have witnessed over the last four years. Access and wealth provide students with purchasing power.

Pharmaceutical drug consumption taps into students’ social and academic insecurities in our

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<sup>73</sup> “CU-Boulder Enrollment by Gender and Ethnic/racial Group over Time.” Accessed March 14, 2016. <http://www.colorado.edu/pba/div/enrl/>.

<sup>74</sup> “Average Rental Rates in Boulder County.” *Boulder Student Rentals Off Campus Rental Housing in Boulder Colorado* | *CU Boulder Rentals*, June 6, 2013.

high-stress, competitive academic settings. Purchasing pharmaceuticals plays off of neoliberal middle class anxiety, the need to meet expectations, and the stresses associated with maintaining class status. Student respondent #43, who identified as upper middle class, described the university as, “a culture where stressed students want to do well in their classes, but don’t have time to dedicate to all of their classes. Or as students who don’t care to dedicate the required time to their classes, opting to spend their time other ways, and look to drugs in a crunch [sic].” That is why we are seeing historically defined “white collar” individuals crossing into a deviant subculture of illicit drug dealing and consumption in order to maintain status quo.

The illicit trade of legal pharmaceuticals has not only changed the face of the drug trade, but it has also altered the composition of illicit drugs themselves. As pharmaceutical drugs have become overprescribed and readily accessible, street narcotics, to stay competitive, have had to become cheaper and cheaper, more potent, and therefore more dangerous (Interview with Doyle, January 6<sup>th</sup> 2016). Today, heroin is even being cut with pharmaceuticals in order to make them more potent (Interview with Henning, January 6<sup>th</sup> 2016). For example, my friend Dan died from a concoction of Heroin and Fentanyl, a powerful prescription synthetic opiate.

While the Florida case spotlights a gross example of negligence and medical malpractice, physicians are not solely to blame for the mass proliferation and sale of pharmaceuticals. Our consumer-driven society and neoliberal Americans are the users and abusers of these drugs. Pharmaceutical companies now define our health. Our bodies, along with our brains, have become commoditized. Our health and cognition can be “improved” through biomedicine, and a diagnosis of a chronic condition (ADHD, anxiety, depression, etc.) makes one an unwilling lifetime investor in a fraudulent investment.

## Neoliberalism in America

Too many bottles of this wine we can't pronounce / Too many Bowls of that green, no lucky charms / The maids come around too much / Parents ain't around enough / Too many joy rides in daddy's Jaguar / Too many white lines and white lines / Super rich kids with nothing but loose ends / Super rich kids with nothing but fake friends – Frank Ocean ft. Earl Sweatshirt on “Super Rich Kids”<sup>75</sup>

Neoliberalism at its basic level is a theory of political and economic practices that argues that human wellbeing can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade.<sup>76</sup> Since the 1980s, there has been a drastic turn toward neoliberal political and economic practices in the United States. Deregulation, privatization, and withdrawal of the state from many social sectors has caused an adjustment to the guiding principles of economic thought and brought human action into the domain of the market.<sup>77</sup> David Harvey, author of *A Brief History of Neoliberalism*, argues that we can interpret neoliberalism as either a utopian project to realize a theoretical design for the reorganization of international capitalism or as a political project for capital accumulation and a restoration of power for the economic elite.<sup>78</sup>

The end of the twentieth century concluded with unrestrained power of large corporations and increased stress on the individual as the agent responsible for his or her actions and wellbeing in the market place. Harvey critiques neoliberal financialization, arguing that it redistributes wealth to the social elite rather than generating wealth and income for the masses (as it was intended to do). He calls this phenomenon “accumulation by dispossession,” and four main features serve as its hallmarks: privatization and commodification, financialization, the

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<sup>75</sup> Frank Ocean (Ft. Earl Sweatshirt) – *Super Rich Kids*. Accessed March 9, 2016. <http://genius.com/Frank-ocean-super-rich-kids-lyrics>.

<sup>76</sup> Harvey, *A Brief History of Neoliberalism*, 2.

<sup>77</sup> Ibid., 3

<sup>78</sup> Ibid., 19



management and manipulation of crisis, and state redistributions.<sup>79</sup> The privatization of public assets is a cornerstone of neoliberal policy, and its main goal is to open new industries for capital accumulation. Public utilities such as transportation, social welfare, and public institutions have all been privatized to some extent under capitalism; the pharmaceutical industry is no exception.

Big Pharma's influence in America is directly correlated to the power and anxieties that neoliberal society produces--anxieties about performance and maintaining class status and the influence that pharmaceutical companies exert over public health through drug promotions and marketing in the private sector is excessive. The Federal Drug Administration (FDA) is supposed to act as the state's watchdog in an otherwise privatized industry, tasked with protecting public health by ensuring the safety and efficacy of drugs in the marketplace. In spite of that, the FDA does not operate as an unbiased and objective entity when it comes to drug approvals.

In the 1980s the United States experienced a "drug lag;" a lack of resources within the FDA slowed the approval of new pharmaceutical drugs trying to reach the general public.<sup>80</sup> More than half of all drugs approved in the United States had been approved in Europe a year prior. The lag presented a concern for patients, doctors, advocacy groups, and pharmaceutical companies, who were unsettled that Americans were being denied new emerging medications. Consequently, Congress enacted the Prescription Drug User Fee of 1992, which provided a mechanism whereby monetary charges were levied on pharmaceutical companies for every new drug application (NDA) filed.<sup>81</sup> The revenues from the user fees funded the hiring of more staff and expedited the FDA review process.<sup>82</sup> Since the original legislation in 1992, Congress has

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<sup>79</sup> Harvey, *A Brief History of Neoliberalism*, 160-162.

<sup>80</sup> "Is The FDA Being Compromised By Pharma Payments?" *Forbes*. Accessed February 10, 2016.

<sup>81</sup> Office of the Commissioner, Center for Biologics Evaluation and Research. "Prescription Drug User Fee Act (PDUFA)." WebContent. Accessed March 8, 2016.

<sup>82</sup> "Is The FDA Being Compromised By Pharma Payments?"

reapproved the act over five times (1997, 2002, 2007, and 2012) with the next reauthorization planned for September 2017.<sup>83</sup> The authorization of user fees has turned pharmaceutical companies into the FDA's biggest clients; for an application requiring a clinical trial, a fee is taxed on the pharmaceutical companies in the amount of \$2,374, 200. Conversely, if the entity seeking approval has included full reports of investigations of safety and effectiveness, the fee is reduced to \$1,187,100.<sup>84</sup> According to the federal registrar, they expect fees generated by *drug applications alone* to total \$283,827,000 in 2016. This number is one-third of the total revenue (\$851,481,000) accrued by the FDA in fee amounts from pharmaceutical companies.<sup>85</sup>

While the numbers stated above are massive, they are nothing compared to the revenue generated by the pharmaceutical industry. The Big Pharma sector has the largest industry profit margins in the United States, with profits totaling over \$300 billion and expectations to rise to \$400 billion in the next three years.<sup>86</sup> Strangely, though not surprisingly, promotional spending in the pharmaceutical industry is 50 times larger than spending on public information about health.<sup>18</sup> The private sector dominates research and development of the pharmaceutical industry and appeals heavily to the mass market located in the global North. As a result, drugs that would benefit diseases in the global south are heavily neglected, as people in those regions cannot afford to generate the massive profits that western consumers do.<sup>18</sup> Since the 1980s the neoliberal turn has created a system of exploitation and failure, where the human body becomes a commodity from which to profit.

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<sup>83</sup> "Prescription Drug User Fee Act (PDUFA)."

<sup>84</sup> Ibid

<sup>85</sup> Ibid

<sup>86</sup> "WHO | Pharmaceutical Industry." *WHO*. Accessed November 17, 2015.

## Defining Health

Syrup, Percocet, and an eighth a day will leave you broke, depressed, and emotionally vacant / Despite how Lil Wayne lives / It's not conducive to being creative. – Macklemore on “Otherside”<sup>87</sup>

What is a pill? In reference to modern pharmaceuticals, using the term “pill” to describe a pharmaceutical drug is outdated. Pills, though the term is still used colloquially, are referred to by physicians as tablets or capsules. Pills were traditionally made by hand; however, with the advent of mechanically made drugs, most start out as capsules then morph into tablets, which are made to be impervious to environmental factors.<sup>88</sup> The physicality of the pharmaceuticals we ingest provides an important allegory for their hidden dangers, the technology used to compress tablets was modeled on the technology used to make lead bullets,<sup>20</sup> providing an analogy to the promise of enhanced life and the fear of death. In *Drugs for Life: How Pharmaceutical Companies Define our Health*, by Joseph Dumit, he explores the evolution of illness and why pharmaceutical companies are so successful at promoting their product.

Clinical trials are at the heart of the pharmaceutical industry, yet the pharmaceutical industry is the driving force behind administering clinical trials. In order for pharmaceutical companies to be successful, they need to produce medications and tablets that people seek to continually take. Treatments such as vaccines, which prevent illness, are not actually in the vested interest of pharmaceutical companies. Chronic treatments, long-term risk reduction prescriptions in particular, generate much larger markets than acute treatments.<sup>89</sup> Through defining the evolution of illness, pharmaceutical companies are able to redefine our very notion

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<sup>87</sup> “MACKLEMORE LYRICS - Otherside.” Accessed March 14, 2016.

<sup>88</sup> Martin, “The Pharmaceutical Person,” 275.

<sup>89</sup> Dumit, Joseph. *Drugs For Life: How Pharmaceutical Companies Define Our Health*. Experimental Futures. 5. Durham and London: Duke University Press, 2012

of health. When the risk of a disease becomes as threatening as the disease itself, the market potential is immense. The word health itself is starting to disappear altogether from the lexicon evoked by the pharmaceutical companies.<sup>90</sup> The increased consumption of preventative or chronic drugs paints a problematic picture when trying to analyze health. Taking drugs as a preventative measure confuses the boundaries between healthy and sick. If you take medication for high cholesterol, are you healthier because of risk reduction, or are you sick because you have an elevated risk? Yet this is exactly the paradox existing within the pharmaceutical landscape that makes this industry so successful. A similar paradox exists for cognitive enhancers and anxiety medications used at the collegiate level. By self-medicating, are students redefining what it means to be normal and healthy or are they medicating in order to achieve normality? By defining mental illness and other psychiatric conditions as “diseases,” pharmaceutical companies are effectively shaping the way society views and treats these conditions.

Health is rapidly becoming a relative category. If illness is not felt, not seen, and displays no symptoms, are you sick? In order to determine “risk,” screening tests are generally administered, but the test does not determine ill health but a state of risk.<sup>91</sup> The historian Robert Aronowitz calls this trend the “preventive revolution,” and states that if the health risk can be reduced then it should be.<sup>92</sup> Pharmaceutical companies are effectively trying to reduce the potential for adverse outcomes, yet these outcomes cannot be predicted. Students are experiencing a preventative revolution in pharmacology as well--take Adderall before school and

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<sup>90</sup> Dumit, *Drugs For Life.*, 7

<sup>91</sup> Ibid., 13

<sup>92</sup> Ibid

Xanax to relax, counteract the Adderall, and relieve stress. Instead of using medication when needed, students use it as desired to prevent undesirable possibilities and feelings.

Clinical trials are crucial to the industry's ability to generate market potential. By operating within a gray space between market logic and infinite logic of risk (for which there is no limit), clinical trials can be defined as broadly as possible to identify the largest possible target market.<sup>93</sup> Yet how safe are drugs that get brought to market? An article published by *The New York Times* in September of 2015 reported on the antidepressant Paxil. Fourteen years ago a study came out claiming that Paxil was safe and effective for teenage users, yet a reanalysis of the study claims this is not the case. Warnings in the 2000s about the risk of suicide among children, adolescents, and young adults on antidepressants led to strong warnings on these drugs.<sup>94</sup> GlaxoKlineSmith, the maker of Paxil, stood by the conclusions of the original study until outside parties started poring over the company's files on the study and found discrepancies. Studies regarding antidepressants are problematic as anywhere from a third to half of all participants improve on a placebo.<sup>21</sup>

"Paid Volunteers" for human research studies resemble migrant worker populations who are exposed to agro-toxins. Due to a lack of a centralized human registrar, potential problems are obscured due to a lack of transparency. Furthermore, the pharmaceutical companies have no incentive to invest in long-term effects and risks.<sup>95</sup> Big Pharma shape definitions of wellbeing, pain, and even success as the general public conforms to the pressures of consumer-driven

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<sup>93</sup> Dumit, *Drugs For Life.*, 16

<sup>94</sup> Carey, Benedict. "Antidepressant Paxil Is Unsafe for Teenagers, New Analysis Says." *The New York Times*, September 16, 2015: 16

<sup>95</sup> Abadie, Roberto. *The Professional Guinea Pig: Big Pharma and the Risky World of Human Subjects*. Durham and London: Duke University Press, 2010.

society. Individuals expect pain to be eradicated and success to be achievable overnight, and create and ingest substances that they believe will fulfill these needs.

## The Birth of Big Pharma



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Big Pharma as a colloquial reference to the pharmaceutical industry sector is apropos, as the industry is big with a long legacy. Since the beginning of the United States, the pharmaceutical industry has been a mixture of big business and hidden agendas. Until 1812 America imported most of its medicines from Great Britain, but the outbreak of war disrupted overseas trade routes, thus creating opportunities for local apothecaries. The transition from transforming an apothecary into a laboratory was not much of a stretch, as it required a low capital investment and only a basic knowledge of pharmaceutical practice.<sup>96</sup> Foreign-trained pharmacists founded many of the pharmaceutical companies that arose in the second half of the

<sup>96</sup> Hardin, John. "Big Pharma | Like You've Got Something Better to Do." Accessed February 17, 2016. <https://lygsbtd.wordpress.com/tag/big-pharma/>.

<sup>97</sup> Abadie, *The Professional Guinea Pig*, 130

nineteenth century and continued into the twentieth. In the middle of the 19<sup>th</sup> century, Philadelphia and New York City became the main hubs that supplied the nation with medicine.

The industry continued to grow with the outbreak of civil war in the United States. Overseas trade all but stopped between America and Europe. As a result the number of establishments manufacturing medicines grew from 173 to 292, and capital investment grew from \$1,977,385 to \$12,750,809.<sup>98</sup> Developments in communications and transportation in the 1890s allowed drug companies to successfully supply a national market, and they began hiring scientists emerging from medical schools who had knowledge in bacteriological and biochemical processes. The pharmaceutical industry in the United States did not resemble the more conservative industry in Germany; rather, massive profits provided fuel to an emerging biomedical machine.

Until the 1970s, pharmaceutical companies used prisoners to test the toxicity of experimental drugs, yet the prohibition of using prisoners for this purpose led to an emergence of a new disenfranchised class.<sup>99</sup> People participating in clinical trials typically identify themselves as part of a poor and vulnerable subclass. Roberto Abadie, author of *The Professional Guinea Pig*, compares the mentality of clinical drug trial volunteers to the attitudes of sex workers. He discusses the detachment between the mind and body as a technique used by the participants in order to downplay or mitigate the risks involved with being a professional guinea pig. Money plays an important role in volunteers' experiences with drug trials, and pharmaceutical companies seek healthy males eighteen to forty-five with flexible schedules. These criteria lend themselves to a recruitment of marginalized and disenfranchised individuals. Most hold part-time jobs and are short on cash. Therefore, volunteers place a greater importance on the money

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<sup>98</sup> Abadie, *The Professional Guinea Pig*, 130

<sup>99</sup> Ibid., 7

associated with the trial than the potential risks of being involved in a drug trial. This detachment between body and mind is something I also witness on the collegiate level. Success is valued more heavily than health, and risks are dismissed due to their normalcy on our campus.

Biocapitalism and pharmaceutical politics are two terms associated with the neoliberal framework of Big Pharma. Biocapitalism refers to the condition in which a broad array of biomaterial (e.g. cells, molecules, genomes, and pharmaceuticals) produces value in the market place,<sup>100</sup> whereas pharmaceutical politics is the politics of the production, consumption, marketing, sale and/or laboratory and human testing of pharmaceutical products.<sup>101</sup> Currently, this industry is redefining what is meant by a commodity, traditionally thought of a tangible object that can be bought or sold. Our economy is redefining the concept of human capital, not only through the drugs you take but their ability to transform the brain. It is no longer productive for individuals to fall outside the realm of “normal.”

Through the privatization of the industry, the world’s genetic resources became the intellectual property of a few powerful pharmaceutical companies.<sup>102</sup> In 2013 the five biggest pharmaceutical companies generated profit margins of over 20%, with Pfizer alone making a profit margin of 42%.<sup>103</sup> Big Pharma generates more profits than the biggest firms on Wall Street and the oil industry, even though only a fraction of drugs produced make it to market. Only three in every ten drugs launched are profitable, yet revenue is of paramount concern for the industry, as they spend nearly twice as much money marketing new drugs than they do developing them.<sup>104</sup> According to the World Health Organization (WHO), there is “an inherent conflict of

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<sup>100</sup> Goldstein, Donna M. “Experimentalité: Pharmaceutical Insights into Anthropology’s Epistemologically Fractured Self (2012),” 2012: 121

<sup>101</sup> Goldstein, “Experimentalité,” 121.

<sup>102</sup> Harvey, *A Brief History of Neoliberalism*, 160.

<sup>103</sup> Richard, Anderson. Business reporter, and B. B. C. News. “Pharmaceutical Industry Gets High on Fat Profits.” *BBC News*. Accessed November 17, 2015.

<sup>104</sup> Richard, “Pharmaceutical Industry Gets High on Fat Profits.”



interest between the legitimate business goals of manufacturers and the social, medical and economic needs of providers and the public to select and use drugs in the most rational way.”<sup>105</sup> This is overwhelmingly true as the general public relies on information from the pharmaceutical companies themselves to know what drugs are the most effective.

In an article supported by Harvard’s Edmond J. Safra Center for Ethics, bioethics experts presented evidence that 90% of all new drugs approved by the FDA in the past thirty years are no more effective for patients than existing drugs.<sup>106</sup> Government forces coupled with free-market economic pressures work at the helm in the highest echelons of American society. Through establishing strong corporate and private property rights, free markets, and free trade to ensure the free functioning of markets in the neoliberal era, the United States government is in control yet bear no responsibility for negative market externalities and are not obligated to provide social safety nets to protect citizens.<sup>107</sup> This places responsibility on the individual for their own destiny in a hostile neoliberal environment. The industry of pharmaceuticals thrives in this free market economy by offering a promise of mind-enhancing capabilities along with ability to self-manage. Self-medication becomes an attractive option for those seeking to help themselves and increase their human capital in this ever-changing and highly competitive landscape. College students ingest these substances in the hopes of elevating potential, and use them to get high, to have fun, and negate the stresses that their marketing campaigns remind them they face.

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<sup>105</sup> “WHO | Pharmaceutical Industry.” *WHO*. Accessed March 10, 2016.

<sup>106</sup> Light, Donald W., Joel Lexchin, and Jonathan J. Darrow. “Institutional Corruption of Pharmaceuticals and the Myth of Safe and Effective Drugs.” SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, June 1, 2013.

<sup>107</sup> Martin, “The Pharmaceutical Person,” 274.

## Chapter 4: What A Long Strange Trip It's Been

### Final Thoughts

If you can *feel* that staying human is worth while, even when it can't have any result whatever, you've beaten them – George Orwell, 1984<sup>108</sup>

The biomedical model of medicine is justified through inconclusive science and the hidden agendas of pharmaceutical companies. The general public are overprescribed and in 2016, the pharmaceutical college student is the new norm. Antidepressants, antipsychotics, antianxiety drugs, and painkillers all promise a reversal of unfavorable attributes. Feeling depressed, unable to focus, anxious, and in pain are pernicious human conditions; yet, by heavily medicating the population--and I would argue the Millennial generation in particular--society is programming a generation for indifference. At the University of Colorado Boulder, I have witnessed a class of people hardwired for instant gratification. Pharmaceuticals promise to transform students into better individuals with a glass of water and a quick swallow. They vow enhanced cognition, better relaxation, and increased happiness packaged nicely in an easily ingestible capsule.

In this thesis I have argued that students at the University of Colorado Boulder are part of a privileged demographic, one that situates and justifies their pharmaceutical usage through building a collective subjectivity as consumers raised in a neoliberal economic environment. At the University of Colorado Boulder, students' subjectivity is framed through their upbringing in a neoliberal, consumer-driven society. Subjectivity is the coalescence of historical change and moral apparatuses, and it is how the population begins to establish the presumed understandings

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<sup>108</sup> "1984 Quotes by George Orwell (page 2 of 33)." Accessed March 17, 2016.

of life. Each generation's moral compass is different when it comes to assumed standards, and the Millennial generation is no exception. My generation is innovative, promotes tolerance, and have a greater global awareness than generations past. Nevertheless, their collective moral compass is also being defined by how they value themselves as human capital.

America is experiencing a systemic failure on all fronts in healthcare. By first defining the Millennial generation in the context of the University of Colorado and expanding into the broader framework of neoliberalism and the influence the pharmaceutical industry exerts over our health and economy, I hope to have demonstrated how dense and complex this issue is. The dominance of Big Pharma in defining notions of health is excessive, doctors prescribe medications at rates that border on negligence, and the class power of University of Colorado Boulder students enables them to have purchasing power in a highly competitive atmosphere in which performance is valued above all else. Though drug use is an individual experience, the justifications for using are produced collectively. Pharmaceutical drugs' pseudo-legality allows them to occupy a gray space in students' collective consciousness. They are normalized and used without stigma at school, and it is not uncommon for people to openly discuss using Adderall, taking Xanax, and inquire about purchasing a friend's medication.

However, these medications are dangerous and potentially life threatening. I have had four friends die, seen my best friend's personality deteriorate before my eyes over a few months, and heard countless stories of Xanax combined with drinking leading to blackouts and accidental overdoses. Abuse of drugs diminishes one's ability to cope without them. This effect is made even more problematic in that that once one begins to take these substances it is hard to get off them.

Due to the excessive number of prescriptions circulating, it is nearly impossible to hold anyone accountable for the dealing of prescription drugs unless it takes on extreme proportions. This pseudo-legality allows them to be used without threat of legal recourse, while endorsements from medical professionals obscure the risks associated with pharmaceuticals. From a neoliberal capitalistic framework, it provides an ideal business model: get a historically enfranchised and wealthy population hooked on drugs, take away the potential for severe legal penalties and rake in massive profits. Meanwhile, members of historically disenfranchised populations get incarcerated for drug offenses involving substances that are less effective and often less potent than what doctors prescribe. The pharmaceutical companies are propagating and playing off the fears that every American with high class aspirations fear--failure.

As discussed previously, cultural anthropologist Sherry Ortner defines the anthropological theory of subjectivity as “modes of perception, affect, thought, desire, fear, and so forth that animate acting subjects.”<sup>109</sup> She uses this definition in relation to the cultural and social formations that shape, organize, and promote modes of affect and thought.<sup>110</sup> Users of psychotropic drugs adopt a self-image that aligns with their drug usage. Students interpret and manage their pharmaceutical drug use in relation to sociocultural, institutional, and political-economic contexts.<sup>111</sup> Framing personal experiences in a broader cultural context, college students today perceive pharmaceutical drugs as an acceptable means to an end. They are under the assumption that their peers and future workforce competition are using psychotropic drugs to enhance not only their grades but also their personalities. Yet the issue with long-term use of

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<sup>109</sup> Ortner, “Subjectivity and Cultural Critique,” 31.

<sup>110</sup> Ibid., 31

<sup>111</sup> Schlosser, Allison V., and Lee D. Hoffer. “The Psychotropic Self/imaginary: Subjectivity and Psychopharmaceutical Use among Heroin Users with Co-Occurring Mental Illness.” *Culture, Medicine and Psychiatry* 36, no. 1 (March 2012): 26.

these medications is that they induce compensatory adaptations that are the opposite of what the medication is intended to produce.

Dr. Scott Shannon, the founder of a Wholeness Center in Colorado that specializes in a holistic model of health that reduces medication dependency by focusing on a full-body approach, believes he has an answer to the biomedical model of medicine. By using a combination of homeopathy, talk therapy, and restricting his patients' intake of pharmaceuticals to a singular medication, his center seeks to reduce adverse side effects and curb addiction. Homeopathy can be expensive though, for patients whose insurance does not cover treatment, an hour-long session can run \$300 cash, and for those whose insurance does cover some assistance, the fee is reduced to \$75 cash (Interview with Scott Shannon, January 15<sup>th</sup> 2016). While further research must be done in regards to homeopathy's effectiveness in treating mental illness, by focusing on healthy lifestyle and alternative treatments it could offer a promising future in regards to management of mental illness.

As members in a neoliberal society college students act and are acted upon, and their reality is determined through perceptions of self. Try turning on the television without seeing a commercial advertising a new drug for a condition that may or may not necessitate treatment. The current paradigm of care is medicating misbehavior and stifling human emotions in order to achieve a baseline of "normal." Pharmaceutical companies are not only trying to mediate lives but also dictate experiences and the way one's physiology performs.

Society -- and the Millennial generation, in particular -- are over-prescribed; as a result of medicating normalcy and mediating lives through pharmaceuticals, the not-so-distant future could be chilling. Psychotropic drugs can alter the mind and infringe on free will. I do not believe that the driver of the vehicle who killed my friend Jess would make the same decision if

given a second chance, and I know Dan never intended to be remembered forever as the guy who overdosed. Furthermore, the Eva I knew from freshman and sophomore year not once anticipated dropping out of college. However, her mental condition worsened as her prescriptions increased, and her past notions of self were reduced to a distant memory. Drugs alter one's physiology to such an extent that the past self is dismissed and replaced by a pharmaceutical self. I dedicated this thesis to the friends I lost in my four short years at the University of Colorado Boulder. I urge my peers to seek knowledge so they can understand that pharmaceuticals are not the innocent concoctions that they are perceived to be. The Millennial generation are cogs in a global biomedical machine, one laced in neoliberal irony, dictated by an elite class colluding with the FDA, who are exploiting the general public for their own personal gain.

## **Appendices:**

### **Appendix A: University of Colorado Boulder Survey Questionnaire**

1. How do you gender identify?
2. Are you a University of Colorado Boulder student?
3. How old are you?
4. How would you describe your socioeconomic status?
5. What region of the United States are you from?
6. Do you smoke marijuana?
7. Have you ever experimented with recreational drugs?
8. Have you ever been diagnosed with ADHD (attention deficit hyperactivity disorder)? If so, please explain (age, grade, etc.)
9. Have you ever been prescribed a prescription medication for a lifestyle drug (Adderall, Xanax, Ritalin, etc.)? If so, please explain the context
10. Have you ever taken a prescription medication you were not prescribed? If so, what was the context?
11. Do you believe that you have ADD or ADHD that has been left undiagnosed?
12. At what age did you become aware of prescription medications such as Adderall?
13. Have you ever taken Adderall to study for an exam? If yes, please explain the context (time of school year, class, grade level, etc.)
14. Have you ever felt overwhelmed by stress?
15. Have you ever experienced any weird side effects after taking a prescription medication? Please explain
16. How would you describe the climate of prescription drug medication culture at the University of Colorado Boulder? Please give examples
17. Do you consider prescription drugs to be detrimental to your long term health?
18. Have you ever offered to pay someone for their prescription drugs/ has anyone ever offered to pay you for access to prescription pills? (Reminder: all responses are anonymous)
19. If you have taken these drugs to study, do you think that you will continue to take them once you enter the workforce?
20. Are your parents aware of your experience with prescription medications? (Reminder: all responses are anonymous)
21. Have you ever taken prescription pain killers for recreational purposes? Please explain the context and frequency
22. Do you feel that using prescription pain medications can segue into experimentation with “hard drugs?” Please explain

## **Appendix B: Interview Questions for Medical Experts**

### **Interview Sample Questions – Emergency Room Physicians**

1. What prescriptions do people specifically ask for in the highest frequencies in the ER?
2. For psychiatric medications is the ER department typically the first line of interface or do they have to see a primary care physician?
3. Does the hospital you work at engage in any activities with the pharmaceutical companies?
4. Have you ever attended any events sponsored by pharmaceutical companies?
5. What do you see in the emergency room in terms of abuse of pharmaceuticals?
6. How do these drugs react with alcohol?
7. Nowadays, is it difficult to recognize what types of things people are taking?
8. Is it possible for these drugs, if taken frequently, can produce multi generational consequences?
9. Is there any difference between abusing street narcotics versus abusing prescription narcotics?
10. When are people most at risk for an overdose?
11. Due to the high rates of Americans on drugs do you think this is due to a cultural shift in our society or the influence of pharmaceutical companies?
12. How does a cognitive enhancer effect someone with the diagnosis of ADHD differently than someone who does not have the diagnosis?
13. Do you feel as if people treat pharmaceuticals as ‘safe drugs’?
14. How often to people come into the emergency room reporting their medication stolen?
15. Are there any genetic markers that make people more prone to addictive behaviors?
16. What are the minimum ages that lifestyle drugs such as Xanax or Adderall should be prescribed?
17. If misdiagnosed, do prescription medications threaten to exacerbate other undiagnosed conditions?
18. What do withdrawal symptoms look like for these medications?
1. How do you determine what kinds of prescriptions’ people get and are their guidelines for standard dosages?
2. Do you feel as if patients expect to be ‘pain free’? Why do you think that mentality has come about?
3. From a medical standpoint, what defines the baseline of ‘normal’?
4. How do you perceive the long term health effects from psychiatric medication? What can we expect to see 20-30 years down the line?
5. Are doctors in the emergency departments concerned with the proliferation of pharmaceuticals?
6. Are there any other alternatives to managing pain besides opiates?

### **Interview Questions – Director of Chronic Pain Services at the University of Pittsburgh**

1. In the past how did the pharmaceutical company representatives interact with doctors and the hospital/ university administration?
2. What sort of monetary benefits do doctors receive for promoting a new drug?
3. How often would a pharmaceutical company representative come in to promote new drugs?



4. Why has the university system restricted pharmaceutical ‘lunches’ and promotions?
5. After writing a prescription how often are patients required to come back for either more drugs or for a check up?
6. Does your office use a drug database to keep track of prescriptions given out to patients?
7. Do patients frequently report their medications stolen?
8. Dealing with chronic pain and opioids, do you ever see heroin show up in the urine tests you administer to patients?
9. What is your opinion of America’s approach to a biomedical response to manage every aspect of our lives?

### **Interview Questions– Clinical Psychologist**

1. How does someone get clinically diagnosed with depression?
2. Why has the shift occurred over the years from treating depression as an episodic illness to a chronic one?
3. What sort of symptoms would one look for?
4. Do we know what causes depression?
5. What sort of treatments do you view as being the most viable?
6. How do environmental and social factors affect a persons’ depression?
7. How do you advise your patients on what courses of treatment to take?
8. What sort of information do you give your patients on studies coming out about antidepressants?
9. Are psychiatrists allowed to prescribe medication in Colorado?
10. Why do you think rates of prescription use in the United States are higher than elsewhere in the world?
11. Do you advise college students on campus?
12. What are some common things you hear from students?
13. How do antidepressants effect the brain?

### **Interview Questions– Homeopathic specialist**

1. What are the main objectives of the Wholeness Center?
2. How many years have you been open for?
3. How did you decide to open up an alternative treatment center? What concerned you with the biomedical model of medicine?
4. What does a reductionist model entail?
5. What are some of the reasons that people give as to why they are interested in treatment at your center?
6. What kinds of side effects have people reported from prescription medication?
7. What would be an alternative treatment option for an individual suffering from depression, anxiety, etc.?
8. What sort of psychiatric conditions does the Wholeness Center specialize in?
9. Who are the staff that you employ?
10. What is your policy on multiple medications?
11. What sort of criteria must your patients follow?
12. What is the age range of your patients?
13. How representative is the college student demographic at your center?
14. How much does it cost for treatment?

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