THESIS

RISK SOCIETY

AND THE FIGHT FOR KRATOM

Submitted by

Drew Yarnell

Department of Sociology

In partial fulfillment of the requirements

For the Degree of Master of Arts

Colorado State University

Fort Collins, Colorado

Spring 2021

Master's Committee:

Advisor: Patrick Mahoney

Pete Taylor Meara Faw Copyright by Drew Yarnell 2021

All Rights Reserved

ABSTRACT

RISK SOCIETY AND THE FIGHT FOR KRATOM

This research argues that the rise of alternative medicine and health supplements is best understood within the context of the 'risk society'. The dual pressures of deregulation in the health sector of the economy and the dominance of Big Pharma, has the consequences of proliferating the use of non-sanctioned forms of health care. The Southeast Asian plant Kratom is one such illustration of this phenomenon. Drawing from over 200 Reddit posts on r/Kratom, this research analyzes the reaction of the kratom community to attempts by the Food and Drug Administration and Drug Enforcement Administration to restrict access to the botanical. Ulrich Beck's work on 'risk society' is combined with the recent literature on neoliberalism to analyze the narratives emerging from the community of kratom users. Using theme-based coding, the findings revealed tent-pole sentiments of 1) A desire for treatment agency and personal liberty, 2) Fear of regression or return to risk, and 3) Disdain and distrust of regulatory agencies and the pharmaceutical industry. Parallels to Beck's risk society were extant in the thematically related passages, including 1) the commonality of anxiety, 2) crises of trust and the loss of monopoly on knowledge from authoritative institutions, 3) the transition from patient ignorance versus being their own auxiliary doctor in the modern era, and 4) the power of corporatocracy overshadowing the traditional preeminence of the state. These arguments indicate a more nuanced understanding of neoliberalism is required. While typically seen as a way of freeing up capitalist markets for the benefit of large corporations such as Big Pharma, neoliberalism's emphasis on self-reliance and entrepreneurialism also provides a frame of resistance for those non-corporate actors

threatened by State regulation. These findings enhance our understanding of the role of States and sub-community resistance in Ulrich Beck's theory of 'risk society'. In the context of risk society, the kratom community's experience with mainstream medicine and subsequently the pharmaceutical industry has made them distrusting of the state due to its failings to properly police such institutions and would rather be left to their own devices to decide what is and isn't appropriate for their respective conditions.

TABLE OF CONTENTS

ABSTRACT	3
I. Introduction	1
II. Literature Review	4
Kratom's Origins and Pharmacology	4
Neoliberalism and the Sociopolitical Precedent for the Dietary Supplement Market	8
The Kratom-FDA Controversy	14
Kratom, the FDA and the "Risk Society"	17
Origins of the American Pharmaceutical Industry	25
III. Method	28
Reddit and the Coding and categorization of Reddit data	29
IV. Data Analysis, Findings and Interpretation	34
THEME 1: Desire for Treatment Agency and Personal Liberty	35
THEME 2: Fear of Regression/Return to Risk	43
THEME 3: Disdain and Distrust of Regulatory Agencies and Pharmaceutical Industry	47
V. Discussion	56
VI. Conclusion	60
Limitations	61
Future Direction	62
Bibliography	63
Appendix A: Coded Words, Kratom Age Demographics Poll	69
Appendix B: Desire for Treatment Agency and Personal Liberty	71
Appendix C: Fear of Regression/Return to Risk	76
Appendix D: Disdain and Distrust of Regulatory Agencies and Pharmaceutical Industry	81
Appendix E: Positionality Statement	85

I. INTRODUCTION

The origins of the risk society are explored and discussed as it pertains to the FDA, pharmaceutical industry, and the neoliberal political ideology that has steered the United States in its modern history. I analyzed the top 200 most replied-to posts made to the Reddit page r/Kratom from a nearly two-month period, 08/30/16 to 10/29/16. The start date marks the day on which the DEA first announced its intent to schedule kratom and end date is 17 days after it was announced that they would no longer go forward with the ban. Primary themes that arose are illustrated.

The statements made by kratom subreddit members are connected to risk society through themes related to individual liberty, antipathy for government intervention, and assumptions of government corruption. This analysis and discussion showed a strong relation to the impact that neoliberalism has had on shaping modern medicine in the United States. Particular attention was paid to the relationship between government, the powerful pharmaceutical industry, and dietary supplements such as kratom. Interestingly, central tenets of neoliberalism such as free markets, deregulation, personal liberty and responsibility have allowed alternative medicines such as kratom to flourish alongside "Big Pharma". What happens however, when pressure is placed on the government to step in and regulate substances like kratom on behalf of pharmaceuticals? This research attempts to capture some of the social dynamics that arise in just such a situation.

Since its inception with the 1994 Dietary Supplement and Health Education Act the dietary supplement market has grown to be a booming industry, with its global market projected to be worth \$230 billion by 2027 (Grand View Research, 2020). Its largest market is currently North America (Grand View Research, 2020), which comes as little surprise given that an

estimated 86% of American adults take some form of vitamin or supplement (American Osteopathic Association, 2019). Amongst the massive pharmacopeia of products available is one that is exceptionally contentious amongst its proponents and regulatory agencies—kratom.

Prized for its pain-killing and mood-elevating properties, kratom has been hailed by many as being an ideal safer and natural alternative to prescription painkillers. In 2016 the DEA announced it would ban kratom as a Schedule I substance, a category reserved for drugs of high addiction potential and no medicinal value. This sparked outrage in the kratom user community that transformed into a grassroots political movement determined to thwart the Drug Enforcement Administration's efforts.

I am actively involved with following the supplement market and am always interested in what the hot new product is. Kratom inevitably fell into my purview and I eventually came across the Reddit forum dedicated to discussions surrounding the botanical. During this time I witnessed a growing fervor as news of the DEA's intentions broke out onto the site. What ensued was a powder keg of sociopolitical discourse and grassroots organizing that was enthralling to witness, especially given the outcome.

This area of study should be of interest to sociologists because it speaks to a prominent shift in how Americans view health, wellness, and their developing responses to the current mainstream methods of healthcare and facets of the healthcare system. The nature of these responses and the circumstances preceding them fit into Ulrich Beck's Risk Society concept. Exploration of neoliberalism and risk society is a natural pairing, as it was the advent of neoliberalism to Western democracies in the 80s that catalyzed the development of risk society by the way in which it facilitated a shift from an industry-driven economy to that of a technology, information, and finance-driven economy, and served to diminish the State's role in

day-to-day life. State authority was then subverted to accommodate the demands of these new realms of the economy. Reddit's relation to this pairing stems from the statements and actions made by the users who posted to r/Kratom tracking neatly with them. They showed an awareness of the government's acquiescence to the pharmaceutical industry's demands, held great antipathy towards government oversight into their personal lives, and expressed anxieties about the impending ban that spurned them into action that facilitated change, all while acting and organizing outside of the political sphere; these features interplay between the predominance of neoliberalism and the traits of risk society. Thus my research question became: in a risk society, what narratives of resistance emerge pertaining to healthcare?

II. LITERATURE REVIEW

Virtually no research exists regarding kratom's legal battles and the conflict between its proponents and regulatory bodies. Aside from Nichter and Thompson's research on dietary supplement users, most relevant literature is centered around adjacent topics such as the history and pharmacology of kratom, the origins and structure of the dietary supplement market, the developmental history of the pharmaceutical industry, and the history of the FDA and how its relationship with the pharmaceutical industry has changed over the past several decades.

Overhanging these subjects is the historical backdrop for and inception of neoliberalism in America.

KRATOM'S ORIGINS AND PHARMACOLOGY

Kratom (*mitragynine speciosa*) is a tree native to Southeast Asia, including Thailand, Malaysia, Borneo, and Indonesia. It belongs to the Rubiaceae family, sharing relation to both the gardenia and coffee plant (Cinosi et al. 2015). Use of the tree's leaves has been documented in the region for hundreds of years, utilized medicinally as a cough suppressant, painkiller, antidiarrheal, and for treating opium dependency (Grinspoon, 2019). It is also commonly used by day laborers in the region for its energy-producing effects and is traditionally consumed by chewing the whole leaf or by steeping it into a tea, though in the west the leaves are usually ground into powder and then mixed into a drink or put into capsules to avoid its rather bitter, earthy taste.

In recent years it has grown in popularity in the United States, where it has been sold as a dietary supplement. Here it is touted by its adherents as being beneficial for chronic pain, mood disorders such as anxiety, depression and PTSD as well as a means of curbing addictions and

dependencies to other substances such as alcohol, marijuana, prescription opioids and their illicit counterparts.

As the plant's popularity has grown, so has its legal troubles. A rise in reported hospitalizations and deaths attributed to kratom use has drawn the attention of the Drug Enforcement Agency, Food and Drug Administration and numerous state legislatures, all of whom have made attempts to ban the sale of kratom in some capacity at their respective levels of government. From the perspective of the State, kratom is a recreational drug with no medical value and has deadly risks associated with its use. In contrast, the community of kratom users claim that kratom has brought real positive change to their lives. Additionally, kratom is seen to be a treatment that is devoid of the myriad side effects associated with standard pharmaceuticals. Many of its proponents accuse government agencies of doing the bidding of Big Pharma by misconstruing the data about kratom to justify their interest in outlawing the plant and substituting its use with a patented, synthetic alternative (Roberts, 2019).

The implications of kratom's use in the United States has only recently fallen under the purview of the scientific community. This preliminary analysis has revealed that the claims made on each side of the "kratom debate" cannot be so easily written off as unequivocally true or patently false. In fact, the fervent debate surrounding kratom occurs over even most elemental traits of the botanical. Specifically, the issue pivots on whether it should be classified as an opioid or not. While kratom's predominant alkaloids, *mitragynine* and *7-hydroxymitragynine* do appear to interact with mu-opioid receptors much like conventional opiates and opioids do, they (or possibly one of the other 37 alkaloids identified in kratom) also appear to have activity in the brain's adrenergic (related to adrenal function and the production of epinephrine and norepinephrine) and serotonergic (serotonin-related) systems (Singh et al. 2019). Though not

fully understood, it is theorized that kratom's activity in these systems could account for the mood-elevating and stimulating effects reported by users (Prozialeck et al. 2019).

It has also been demonstrated that kratom does not produce respiratory depression to the degree seen with other opioids, ostensibly making it less risky in this regard compared to conventional opioids (Váradi et al. 2016). The reasoning offered for this novel mechanism stems from the theory that activation of the mu-opioid receptors prompts the release of a protein called *beta arrestin*, which after a certain level of concentration begins a cascade of effects that ultimately interfere with the functioning of the diaphragm, thus causing respiratory depression (Arnst, 2017). While a substance like morphine fully activates the mu-opioid receptors, kratom is only a partial-agonist, meaning that it does not elicit a full-spectrum response from the receptor site. The unique and diverse range of kratom's pharmacological profile has led it to provisionally be described as an 'atypical opioid' and may represent a unique class of drugs (Prozialeck et al. 2019).

The overall alkaloid profile of any given plant seems to determine the degree of balance between the plant's effects, with some batches of kratom exhibiting more sedating and painkilling effects and others more stimulating and mood-elevating. These in turn are thought in part to be dictated by the age of the tree: the older the tree, the more potent the leaves will be. The differences in alkaloid content have been categorized into 'vein' types, referring to the coloration of the leaves' veins as an indicator of its primary effects. The main categories are green, red, and white-veined kratom (Kratom Science, 2019). Red-veined kratom is associated with more anti-anxiety, painkilling and sedating effects while white is more stimulating and euphoric, with green veins sharing characteristics of both (Kratom Science, 2019). Additional classifications of yellow and gold exist and are achieved through allowing the leaves to dry and

age for a longer period of time, thereby altering the alkaloid profile. The effects of yellow and gold strains are described as a combination of reds and greens.

On top of these distinctions, kratom is assigned different names to further signify the orientation of the plant's effects, such as Thai, Malay, Indo, and Bali. For example, Bali strains are thought to be more on the relaxing side, so Red Bali kratom is highly touted for powerful painkilling and sedating effects (Kratom Science, 2019). There are no rules in place regarding what the kratom is named versus what its appearance and alkaloid profile are, nor standards set for alkaloid content, so branding is not an inherently reliable indicator of how it will affect a person. The names used also seem to imply that they are representative of that plant's country of origin but this is unlikely, as it is estimated that 95% of the world's kratom imports are harvested and shipped from Indonesia (Hess, 2019).

People also report differences in effects as being dose-dependent, with smaller dosages leaning more towards stimulation and euphoria and larger ones more painkilling and sedating. A study by Sing et al. measured the reported stimulant and sedative effects of kratom with both new and long-term daily users and did not find any significant differences in reported effects between smaller and larger doses other than larger amounts proportionally increasing the intensity of both (2019), so this guideline appears contentious.

While kratom is not as potent as synthetic opioids and does not seem to carry the same severity of risks, this is not to say that kratom is harmless. Side effects such as nausea, reduced sex drive, dehydration, constipation, and dizziness have been reported, and dependence is possible with habitual use. The possible withdrawal symptoms are like those seen from conventional opioids: diarrhea, sweating, cold or flu-like symptoms, trouble sleeping, restless legs, depression, anxiety, irritability, and fatigue. The severity of such symptoms is described to

be on the milder side when compared to conventional opioids but is also dependent upon duration of use and level of consumption, as well as individual body chemistry. The overall effects of long-term habitual kratom use are largely unknown. One study of Malaysian users mentions, "Long-term addicts are described to become thin and have skin pigmentation on their cheeks, due to the capacity of mitragynine to increase the production of melanocytes-stimulating substance" (Cinosi et al. 2015). Aside from this small piece of information, long-term effects are still largely unknown and understudied.

NEOLIBERALISM AND THE SOCIOPOLITICAL PRECEDENT FOR THE DIETARY SUPPLEMENT MARKET

Kratom provides an ideal window into the sociopolitical machinations that surround access to alternative health products, especially given that this market has arisen in the dominating shadow of Big Pharma. One major element that led to such a situation is neoliberalism. This ideology of political thought and policy was first birthed in mid-20th century Europe and matured into the more radical form it is recognized as today when it reached the USA several years later (Stedman Jones, 2013). Before it became actively employed in policy decisions and subsequently became a cultural ethos, it was merely a concept that was planted in the sociopolitical climate of post-World War II in the hopes that it would take root and flourish under the right conditions. In the 1950s, economists such as Milton Friedman and Aaron Director from the Chicago School argued that monopolies were the result of the government favoring certain companies over others, and that corporate structures and incentive systems naturally encouraged competition. Adherents of what was to become known as neoliberalism also argued that labor unions had undue influence over the economy and were directly responsible for hampering the proper functioning of markets in a capitalist society (Jones 2013). Neoliberalism

was incubated in academia and appealed to corporations. Corporations then funded think-tanks to propagate its proposed merits, at which point parts of the media were swayed to cheerlead the concept further, which would lead to fostering a supportive climate for the movement to develop further. From there it was a matter of capturing political parties which would then beget state influence. As has been alluded to, this was made possible through the fertile ground of geopolitical, idealistic and economic circumstances. In his book *A Brief History of Neoliberalism*, David Harvey describes the postwar economic directives of democratic states prior to the introduction of neoliberalism:

"...an acceptance that the state should focus on full employment, economic growth, and the welfare of its citizens, and that state power should be freely deployed, alongside of or, if necessary, intervening in or even substituting for market processes to achieve these ends. Fiscal and monetary policies usually dubbed 'Keynesian' were widely deployed to dampen business cycles and to ensure reasonably full employment. A 'class compromise' between capital and labour was generally advocated as the key guarantor of domestic peace and tranquility. States actively intervened in industrial policy and moved to set standards for the social wage by constructing a variety of welfare systems (health care, education, and the like)" (2007:10).

The security of this economic directive would be imperiled by the fears of the economic elite in the face of growing socialist and communist movements in the 1960s. Neoliberalism began to be espoused as the silver bullet for vanquishing the threats to capitalism and the freedoms it granted. No other group carried this torch with greater fervor than the Mont Pelerin Society, a group consisting of academics and philosophers—including Milton Friedman. It was started by Austrian philosopher Friedrich von Hayek, who believed that neoliberalism must prevail in the war of ideas if the threat of communism was to be abated (Harvey, 2007).

Neoliberalism stayed a mere idea until the 1970s. In the wake of deindustrialization, the oil crisis of 1973, and "stagflation", support for the implementation of neoliberal policies grew.

Chairman of the Federal Reserve Paul Volcker was the first to set the change in motion by abandoning New Deal and Keynesian economic directives and implementing policy to drive down inflation—no matter the cost to the job market—which ultimately led to an economic recession (Harvey, 2007). Democratic president Jimmy Carter soon followed up with his own neoliberal implementations by deregulating the airline, transport and finance industries (Jones, 2013).

Though its grafting into American policy is historically marked in the late 1970s, neoliberalism became the lodestar for United States economic and social policies under President Ronald Reagan and has been so ever since. Neoliberalism's guiding principles are that of laissez faire economics and deregulated markets with little government oversight or regulation interfering with the "natural processes" of the economy, save for certain circumstances.

"The role of the state is to create and preserve an institutional framework appropriate to such practices. The state has to guarantee, for example, the quality and integrity of money. It must also set up those military, defense, police, and legal structures and functions required to secure private property rights and to guarantee, by force if need be, the proper functioning of markets. Furthermore, if markets do not exist (in areas such as land, water, education, health care, social security, or environmental pollution) then they must be created, by state action if necessary" (Harvey, 2007:2).

Included in this belief is the conviction that any social welfare programs the government offers could be better run and more effective by means of privatization, lending the reins of management to the free market. This last tenet is what drives the gutting of social welfare programs in public policy under the auspices of neoliberalism.

The question of how such a socioeconomic ethos could gain popularity in the population outside of the economic elite is a matter of how it was packaged. An emphasis on personal freedom and liberty was the ticket, especially in the cultural climate of the 1980s.

"Neoliberalization required both politically and economically the construction of a neoliberal market-based populist culture of differentiated consumerism and individual libertarianism. As such it proved more than a little compatible with that cultural impulse called 'postmodernism' which had long been lurking in the wings but could now emerge full-blown as both a cultural and an intellectual dominant" (Harvey, 2007:42). Hitching the neoliberal wagon to these ways of thinking gave the impression that its existence was to the extreme benefit of any given individual, when the real goal was "... capturing ideals of individual freedom and turning them against the interventionist and regulatory practices of the state..." (Harvey, 2007:42).

Fortune 500 companies began funding think-tanks to fabricate data that would extol the virtues of neoliberalism, which subsequently influenced universities and their economics departments. New campaign finance laws in 1971 opened the door for such companies to begin injecting inordinate amounts of money into the political system through political action committees to influence legislation to their benefit. The historically pro-business Republican Party was the first to be seized, with the Democratic Party following suit on account of having no single large constituency amongst its varied demographics of supporters with which they could count on bankrolling their operations. In his book *A Brief History of Neoliberalism*, David Harvey lays out in greater detail the circumstances that compromised the Democratic Party and allowed the Republican Party greater electoral strength:

"The dependency of Democrats. . .on 'big money' contributions rendered many of them highly vulnerable to direct influence from business interests. While the Democratic Party had a popular base, it could not easily pursue an anticapitalist or anti-corporate political line without totally severing its connections with powerful financial interests. The Republican Party needed, however, a solid electoral base if it was to colonize power effectively. It was around this time that Republicans sought an alliance with the Christian right. . .It also appealed to the cultural nationalism of the white working classes and their besieged sense of moral righteousness (besieged because this class lived under conditions of chronic economic insecurity and felt excluded from many of the benefits that were being

distributed through affirmative action and other state programmes). . .The problem was not capitalism and the neoliberalization of culture, but the 'liberals' who had used excessive state power to provide for special groups (blacks, women, environmentalists, etc.) . . ." (2007:49-50).

The most thinly veiled component of neoliberalism is that its economic policies serve the interests of both businesses and consumer alike. In reality, only one participant in this economic layout gains benefits, and it is not the consumer. Consumer protections get stripped away, allowing for more dubious methods of conducting business to go unhindered. Robert Kuttner (2019) argues that neoliberal policies are a way for the economic elites to cement their place in the upper echelons of power and to ensure that no one else may ascend to upend their position. Monopolized markets continue to emerge, as companies with enough power and influence develop a stranglehold on their respective markets that chokes out or diminishes any potential competition, with no meaningful regulatory laws left to keep such behavior in check. Kuttner also argues that the metastasizing of neoliberalism in American policy has become a threat not only to the health and stability of the markets, but democratic processes as well. Corporations are permitted to participate in the political process through lobbying and PACs with budgets the average citizen (or even hundreds or thousands of average citizens) could not hope to match. Such a free reign of influence ultimately rots the foundations of democracy and makes for a political and economic environment that does the opposite of what neoliberalism claims to encourage. "As the great political historian Karl Polanyi warned, when markets overwhelm society, ordinary people often turn to tyrants. In regimes that border on neofascist, kleptocapitalists get along just fine with dictators, undermining the neoliberal premise of capitalism and democracy as complements. . ." (Kuttner, 2019).

In other words, unfettered capitalism under neoliberal principles ultimately strives for greater profits and fewer restraints and will undermine the interests of the majority of the country to do so. Costs of services such as healthcare skyrocket and little is done for those who then struggle to access such services, leaving them to enter financial ruin or to seek out alternatives. Principles of neoliberalism are meant to accommodate for such developments, with markets opening up to meet needs when old avenues no longer become viable. One such instance in which this has occurred is the inception of the modern dietary supplement market. The Dietary Supplement and Health Education Act (DSHEA) of 1994 permitted dietary supplements to be classified as a subcategory of food that was exempt from the regulatory oversight the Food and Drug Administration has over food additives (Noah and Powell 2005). Additionally, "Congress also opted against treating dietary supplements as drugs under the Food, Drug, & Cosmetic Act (FDCA). In contrast to the regulatory scheme for drugs, which [theoretically] requires substantial pre-market evaluation of safety and efficacy before the granting of a license, DSHEA allows dietary supplement manufacturers to market their products without requiring any pre-market clearance from the FDA" (Noah and Powell 2005:860).

This act can be viewed as the neoliberal policy that begot today's burgeoning dietary supplement industry and a boon for kratom. With kratom's classification covered by DSHEA, the plant was allowed to freely enter this new market to be bought and sold. However, this laissez faire approach has been a double-edged sword. The lack of regulatory oversite of the supplement market has compromised quality control. There have been several instances where kratom products have been found to be contaminated with salmonella (FDA, 2018) and heavy metals (Mammoser, 2019). It should be noted that heavy metal contamination is an issue with

many herbal supplements on the market, as they are often grown in countries with soil contamination problems (Abdulla et al. 2019).

THE KRATOM-FDA CONTROVERSY

The FDA has attributed at least 44 deaths to mitragynine (FDA, 2019). The validity of this last point and its cases have been subject to sharp scrutiny, the most thorough of which has come unsurprisingly from the American Kratom Association (AKA), a non-profit group that seeks to meet with and inform legislators and officials about kratom to stymy ban attempts and to protect people's access to it (AKA, "Our Mission"). Their response to the FDA's report pointed out a litany of questionable entries to their recorded deaths list. Over half were identified as attributing the cause of death to mitragynine simply because it was present in the toxicology screen, not because it was actually ruled the cause of death (Haddow, 2018). The veracity of these entries ranges from dubious (multiple substances found in the system of the deceased such as heroin, cocaine, oxycodone and alcohol; 9 instances reported from Sweden in which the kratom was found to be adulterated with the prescription painkiller Tramadol) to inexcusably deceptive, such as suicides by hanging and gunshot victims (Haddow 2018) (FDA Adverse Event Reporting System, 2017).

Overdose deaths become additionally suspect when considering that in Thailand (one of kratom's countries of origin), after 100+ years of recorded use there have been no recorded deaths resulting from kratom intoxication (Prozialeck et al. 2019). This seems to indicate that kratom in its unadulterated form is not a likely source for overdose. One key difference between kratom consumption in the US and the countries of Southeast Asia is the utilization of 'enhanced' forms of kratom available for purchase. These can range from kratom that has undergone an extraction process that produces higher concentrations of alkaloids to the more

recent development of mitragynine isolate, which is a very high concentration of *mitragynine* separated from and devoid of kratom's other constituents. It is possible that kratom holds a greater mortality risk when its active ingredients are consumed in concentrations substantially greater than are found naturally in the plant.

The safety of certain products related to enhancements or concentrations is not unprecedented in the dietary supplement market. One such product is green tea, which contains the catechin epigallocatechin gallate (ECGC), an antioxidant claimed to be beneficial to the body across many dimensions including weight loss, cardiovascular health, inflammation, and cancer prevention (Semeco, 2017). Following the oft-fallacious reasoning of 'more is better', supplement manufacturers sell products containing green tea extract that have concentrations of ECGC far higher than is naturally present in green tea. For reference, one would have to consume around a liter of green tea to obtain the amount of ECGC found in a 250-500mg capsule of green tea extract (Semeco 2017). In 2016, the Norwegian food safety agency announced mounting cases liver damage following green tea extract supplementation in doses of 800mg and higher per day (Gray, 2018). Similar cases of liver damage have also been identified by the National Institute of Health in those taking bodybuilding and weight loss supplements, both of which commonly contain green tea extract in their compounds (Cooper, 2017). Several countries have subsequently limited or banned the sale of green tea extract, the United States not being one of them. To date it is still possible to find green tea extracts being sold by prominent retailers such as Amazon and Vitamin Shoppe in dosages close to and above the 800mg threshold.

Furthermore, kratom is not alone in being a product on the supplement market that has been attributed to deaths. An infamous case is that of ephedrine: in 2004, the FDA mandated that

products containing ephedrine be pulled from the shelves. Ephedrine is the active ingredient of the Ephedra plant and acts as a stimulant that affects the cardiovascular system. It was frequently included in products advertised for promoting weight loss and improving physical performance. The decision to ban it came after years of reports regarding adverse side effects to such supplements (over 800 in all dating back to 1994) and was implicated as the contributing cause to at least 155 deaths (Noah and Powell 2005). The FDA's original intention was to merely limit the amount of ephedrine permitted in a serving size but ultimately decided an outright ban was the only surefire way of ensuring public safety (Noah and Powell 2005). This complete ban was short lived, as ". . . a year later, a federal district court in Utah struck down the FDA rule as applied to ephedrine products containing 10 milligrams or fewer of active ingredient. The court opined that the FDA's interpretation of DSHEA's "unreasonable risk" standard, which involved a risk-benefit analysis, was inconsistent with Congressional intent because it 'places a burden on [manufacturers] to demonstrate a benefit as a precondition of sale, and that is contrary to Congress' intent" (Noah and Powell 2005:860). This decision further demonstrates the DSHEA's innate inclination to err on the side of industry when it comes to the tug-of-war between product manufacturers and regulatory bodies and goes a long way in demonstrating how little reach the FDA typically has in the field of dietary supplements.

The most problematic issue related the oversight and safety of supplements is the lack of mandated quality control. The quality and quantity of a supplement can vary greatly from brand to brand. One investigation from the FDA even found that some store brands of herbal supplements from major retailers such as GNC, Target, Walmart and Walgreens did not contain the product it claimed to have at all, instead consisting of nothing more than inert fillers such as rice powder, asparagus and ground houseplant (Cameron, 2015).

The FDA mandates that supplement manufacturers must be in compliance with its Good Manufacturing Practices guidelines, which means they are "... required to establish their own quality standards for manufacturing processes, packaging, storage, and ingredient testing, and must properly document that these standards are being met." However, "... the FDA does not test the products or provide the specific definitions of what is considered appropriate for a given product or process" (Pharmacy Times, 2014). This means that while manufacturers must set standards and guidelines, they are not routinely being checked for whether they are following through with them. In effect, the guidelines are just that: guidelines.

All of this is to say that when it comes to dietary supplements, the onus of research and risk assessment largely falls on the consumer. Oversight bodies, in effect, can only react when confronted with potentially harmful products and questionable manufacturing procedures. Even then, regulatory agencies have little legal recourse to take meaningful action. Knowledge of this lack of robust consumer protection strategy in the dietary supplement market might lead consumers to believe that they are assuming less risk in seeking out prescription pharmaceutical drugs rather than holistic products on the loosely regulated supplement market, where quality and efficacy are not guaranteed. But here too the standards of risk assessment are not what they seem.

KRATOM, THE FDA AND THE "RISK SOCIETY"

The concept of "risk society" has been put forth both by Anthony Giddens and Ulrich Beck, but for the purposes of this discussion Beck's conception will be the primary focus. It argues that as societies have modernized and changed, so too has the nature of the risks its members face both in how they are navigated and dealt with. Both sociologists observed that modernity has brought a preoccupation with the potential of the future rather than any focus on

immediate issues, particularly in the case of managing the consequences of environmental destruction in the pursuit of science and business. Beck states that it is the very methods used to reach modernity—attempting to bend nature to our will in order to overcome problems of scarcity—that has promoted the existence of the new kinds of risks now faced in the modern age (1992). The simplest example of this phenomenon is that of food scarcity: In many developing parts of the world hunger and famine are still very real threats to survival, whereas in 'modernized' societies it is the overconsumption of food (i.e. obesity and diet-related diseases) that has largely taken its place. The pesticides used on crops, the immense amount of land and resources required for raising livestock and the greenhouse gases they produce, as well as the chemical additives put in food are additional examples of the sort of consequences being analyzed in his work.

As it pertains to medicine, Beck posits that innovations are often allowed to develop freely with little oversight or regulation:

"Despite all the criticism and skepticism regarding progress, what continues to be possible, even taken for granted, in the area of medicine would, if transferred to official politics, be equivalent to the scandal of simply implementing epoch-making fundamental decisions on the social future, while bypassing the parliament and public sphere, and making debate on the consequences unreal by virtue of their realization in practice. This need not even express a failure of the moral quality of science. According to medicine's social structure, there is no parliament in the sub-politics of medicine, and no executive branch where the consequences of the decision could be investigated in advance" (1992:208).

Applied to pharmaceutical industry, the point being made here is that there are no longer any adequate checks and balances on the production of prescription drugs. The pharmaceutical industry by their own efforts and the lack of true understanding of current drug testing and development processes by members of Congress has effectively allowed them to push drugs of

dubious efficacy and unknown (or concealed) risk to market. The mechanisms to keep them in check are technically in place but have been thoroughly compromised due to the far-reaching influence the pharmaceutical industry has both on Congress and the FDA. In 2019, the pharmaceutical industry spent \$295 million dollars on lobbying efforts—almost double the amount of the second biggest spender (\$156 million), the electronics manufacturing and equipment industry (Duffin, 2020). Additionally, Caroline Chen's exposé on the seemingly quid pro quo relationship that has formed between the FDA and the pharmaceutical industry revealed damning statements made by former FDA employees about the degree in which the agency is led around by Big Pharma as the result of its lobbying efforts in Congress:

"'You don't survive as a senior official at the FDA unless you're proindustry,' said Dr. Thomas Marciniak. A former FDA medical team leader, and a longtime outspoken critic of how drug companies handle clinical trials, Marciniak retired in 2014. 'The FDA has to pay attention to what Congress tells them to do, and the industry will lobby to get somebody else in there if they don't like you.' Staffers know 'you don't get promoted unless you're pro-industry,'..." (Chen, 2018).

Some members of the upper echelon of the FDA were not afraid to openly admit this uneven power balance while still employed there. During a 2015 agency forum, one slide in a presentation explicitly stated "User fees pay for services that directly benefit fee payers," with FDA representative from the agency's negotiating team Theresa Mullin adding, "And because it's a fee, it's really intended to benefit directly . . . the fee payers and benefit them in a way that exceeds the benefit to the general public [emphasis added]. . ." (Hilzenrath, 2016). It is not just their current occupation employees are considering when they bow to the pressure to abide by the pharmaceutical industry's will—they also have to consider their future employment once they decide to move on from the FDA, which for many means working in the pharmaceutical industry. The migration of employees from the FDA to the pharmaceutical

industry has been described as a 'revolving door'. One study done looked at 55 medical reviewers for the FDA who worked with haematology-oncology related drugs and the approval of such drugs from 2006-2010, cross-referenced it with a collection of medical reviews from the agency's database from 2001-2010 and then looked at what job the reviewers had in that nine-year span. "The researchers found that among 55 people who worked as haematology-oncology medical reviewers from 2001 to 2010, 27 continued in their roles at the FDA, two people worked at the FDA but held other appointments, and 15 left the FDA to work with or consult for the biopharmaceutical industry. The jobs of the rest of the people could not be determined" (Sifferlin, 2016).

The rate at which this occurs at the very top of the FDA's hierarchy is even more alarming. Nine out of the last ten heads of the FDA went on to work at pharmaceutical companies (Foley, 2019). The pharmaceutical industry also participates in de facto (though not legally applicable) bribery to gain favorable outcomes in the drug approval process. The FDA has statutes in place that forbid employees from accepting gifts in any form and are (alongside physicians who are invited on) expected to reveal any potential conflicts of interests they may have before joining a review board for any given drug or therapy. These safeguards have two fatal flaws: the first is that bringing to light conflicts of interest relies almost entirely on the honesty of the members of the panel. The second is that pharmaceutical companies work around these rules by instigating something described as "pay-later conflicts of interest", which the current conflict of interest rules were not structured to include (Piller et al. 2018).

The FDA's culpability in the Opioid Epidemic by way of ineffective policing of the pharmaceutical industry has grown more apparent over time. Former member of the FDA advisory committee overseeing the approval of new opioid drugs, Dr. Raeford Brown described

the agency as having "a willful blindness that borders on criminal" in regard to its continued approval of narcotic painkillers in spite of the growing number of dead and addicted opioid users (McGreal, 2019). The FDA's general response to opioids over the years can be described as 'too little, too late' and with great inefficiency. One such example being their commissioning of a program in 2010 to better educate doctors on prescribing narcotic painkillers that they designed so poorly they could not properly determine whether or not the programs had any efficacy (Goodnough and Sanger-Katz, 2019). A later investigation by the agency's parent organization, The Department of Health and Human Services determined that just 14% of these programs met their targeted goals (Levinson, 2013). This has been attributed to the fact that pharmaceutical companies were put in charge of their own oversight regarding data collection to support their programs' efficacy but often included an insufficient amount of data for outside parties to make accurate assessments. A later DHHS report would note that the problem was further complicated by the FDA's lack of authority to take enforcement actions against manufacturers who did not provide an adequate amount of data (Sullivan, 2019).

Despite more pronounced efforts to understand trends and curb the dispensing of opioids in recent years, the FDA persists in having a contradictory approach to the class of drugs. In one action they promised to fast-track opioid alternative painkillers and to limit access to opioid through the SUPPORT (Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment) Act (Kent, 2019) while in another they approved the drug Dsuvia, an opioid stronger than fentanyl which it had initially rejected in 2017 only to approve it when it was resubmitted the following year (Sullivan, 2019).

Regardless of how well the public is informed about the details of the FDA's policies, practices, and close relationship with the pharmaceutical industry (pertaining to the opioid

epidemic or otherwise), their opinions of both entities have soured to say the least. In a 2020 Axios-Ipsos poll, a majority of Americans (57%) said they have some degree of trust in the FDA but 42% stated that they have little or no trust in the agency at all, while a majority (57%) of those polled said they had little or no trust in the pharmaceutical industry (Talev, 2020). A 2019 Gallup poll found the pharmaceutical industry to be in dead last out of twenty-five other industries in terms of favorability in the eyes of Americans, 58% of which viewed the industry negatively and 27% positively (McCarthy, 2019).

Given the compromised role of the state to help determine and mediate risk involved with pharmaceutical drugs, it is no surprise that many Americans prefer to try and go their own way through the use of dietary supplements rather than subject themselves to the products of the pharmaceutical industry. The 2002 National Health Interview Survey found that 18.9% of US adults had taken non-vitamin/non-mineral supplements in the past year, with an expectation that inclusion of vitamins and minerals would bring the figure considerably higher (Nichter and Thompson, 2006). This claim bears out in another survey revealing that 86% of American adults take some form of vitamin or supplement (American Osteopathic Association, 2019). Women, especially those who are white and middle class, are the most prominent demographic of supplement users. Additionally, higher levels of educational attainment appear to correlate to an increased likelihood of supplement use (Nichter and Thompson. 2006).

Motivations for general dietary supplements use are varied and numerous. The motivation to utilize them due to distrust of mainstream medicine and medical authorities, particularly on their general consensus of supplements was detected in the Nichter and Thompson study, who found that "Several of the supplement users we interviewed seemed somewhat ambivalent about, if not skeptical of, scientific assessments of supplements—with a

few informants suggesting that conventional medicine has its own agenda for negatively evaluating supplements and discrediting other healing systems, namely, because of the close ties between the pharmaceutical industry and conventional medicine and to reinforce biomedical authority over alternatives". Nichter and Thompson go on to say, "They [the supplement users] perceived these practitioners to be engaging in 'boundary work' that entailed defining the 'other' in negative terms. Scientific evidence about supplements was received with some degree of latitude" (2006:208).

Nichter and Thompson attribute this sort of thinking to an overarching phenomenon taking place in society in which science's 'monopoly on knowledge production' is called ever more into question as ". . . people are open to the possibility of multiple and differential sources of knowledge" due to "lay involvement in the coproduction and evaluation of knowledge" (2006:200). One can speculate that this way of thinking is a consequence of the modern risk society and was catalyzed by the ubiquity of the internet and the fertile ground it provides for disseminating dissenting opinions towards various subjects such as mainstream versus alternative medicine.

The Nichter & Thompson interviews also discovered that this apprehension did not simply compel supplement users to shun modern medicine and accept alternative medicine without question. The risk society element to the big picture becomes apparent once again, as those interviewed held suspicions about supplements as well and sought out methods for determining their safety and veracity for themselves.

"Most of the supplement users we interviewed struck us as being cautious, if not skeptical, consumers of public information—not passive consumers accepting information at face value. Informants maintained doubts about both product promotional literature and product quality. They came up with their own litmus tests for measuring safety and quality such as the 'Costco test' or by

equating cost with safety quality. Few informants rejected biomedicine and most thought that 'amazing breakthroughs are occurring in science all the time'. On the other hand, they did not feel that conventional medicine was a panacea, and many suspected that some biomedical practitioners and researchers rejected CAM [complementary and alternative medicine] modalities, including dietary supplements, 'out of principle, not practice.' (2006:208)

The principles of risk society are apparent. People are less inclined to simply believe what they are told, no matter the source of the information, than they may have half a century ago. The subsequent analysis of the discussions on the kratom subreddit tend to be reflective of the data surrounding supplement users in general, with a theme arising from a portion of the interactions where users cautioned against seeing kratom as a decisively safe and risk-free substance, instead advocating for a more balanced perspective that although kratom does have some risks, they have determined for themselves based on the information they have accrued that its safety profile is preferable to that of the prescription alternative they would require for their condition.

There are other areas of consistency between the motivations for general supplement users and using kratom specifically. This is not inherently surprising, but it does speak to the nature of kratom usage and indicates a contradiction towards the scenario conjured up by detractors of the substance as being nothing more than a legal alternative to narcotics for recreational drug users. Other parallels that arose between the Nichter & Thompson study and the analysis of the Reddit posts are as follows:

"Our research suggests that most supplement use is pragmatic. Nevertheless, the popularity of dietary supplements also reflect American values of personal responsibility and individualism. . .Supplement use, for others, is a search for an alternative diagnosis for a health problem. . .supplement use is a means of gaining a sense of control. . .supplements are a means of self-care, reminding people to think of themselves on a regular basis. . .Supplement use is a means of harm reduction for those living in what is perceived to be an unhealthy environment, as well as for those who have adopted unhealthy habits. For those who see their disease treatment by conventional medicine as

simultaneously having negative health effects on the body, dietary supplements may also be utilized as a form of harm reduction. Others are using supplements in order to 'save' potent drugs for when they need them most or to avoid dependence on potentially addictive conventional medicines" (2006:206-207).

Matters of self-reliance, self-care, and an aversion to conventional medications in the interest of harm reduction and addiction avoidance are all prevalent aspects of the discussions that took place on the kratom forums analyzed. Kratom is seen as a medicinal botanical that does not require doctors or insurance to access and has fewer side effects than prescription drugs while not feeling as 'heavy duty'. The healthcare system is largely viewed with great antipathy by those who have opted to use kratom in a therapeutic capacity. This is in part due to many of these people having chronic pain and being put on prescription opioids to manage it. Some claim that their prescribers would not allow them enough medication to successfully manage the pain, while others found their growing dependency on pills to be unsettling. In the end it is a desire to make a clean break from doctors and pharmaceuticals that leads many such people to utilize alternatives such as kratom.

ORIGINS OF THE AMERICAN PHARMACEUTICAL INDUSTRY

Two of the earliest founded pharmaceutical companies in America were Pfizer, Eli Lilly, and Bristol Myers Squibb, which were started in 1849, 1876 and 1858, respectively. The American Civil War was a boon to the budding pharmaceutical industry, as the demand for painkillers was high (Pharmaphorum, 2020). Further opportunities for American pharmaceutical companies arose with World War I, the result of which destabilized the German pharmaceutical powerhouses Merck and Bayer and toppled the country from its position of dominance in the pharmaceutical industry. The years of interlude between the world wars would see the conception of two new groundbreaking medications, insulin and penicillin. Penicillin would lend

itself to propelling the pharmaceutical industry to even greater heights as its necessity reached a fever pitch during World War II, likely saving the lives of countless soldiers (Pharmaphorum, 2020).

It was during the postwar period that pharmaceutical companies grew to be the industrial giants they are known as today. The newly formed National Institute of Public Health began giving millions of dollars in funding to begin filling the vast void of diseases and medical conditions without treatments or cures. In addition to government funding, the industry was also helped along by a high demand for prescription drugs due to circumstances of soaring population growth, rising standards of living, and an organized market thanks to the advent of health insurance (Malerba and Orsenigo, 2015). The United States' unique patenting laws for drugs allowed the product itself to be protected rather than the process of producing it, unlike in many other developed countries (Malerba and Orsenigo, 2015). This allowed pharmaceutical companies to have a stranglehold on new drugs for twenty years (Berger et al. 2017), keeping their cost to consumers high.

The postwar years up until the 1980s are considered the "Golden Age" for pharmaceutical discovery and sales, seeing the inception of birth control, antidepressants, anxiolytics, ACE inhibitors and anti-cancer drugs (Pharmaphorum, 2020). These breakthroughs would culminate in an important milestone for pharmaceutical companies, setting the historical precedent for the majority of their profits being attributable to 'blockbuster drugs' of esteemed value due to efficacy or lack of alternatives. The first major blockbuster drug was the ulcer medication Tagamet, which was solely responsible for netting its manufacturers \$1 billion a year in sales (Pharmaphorum, 2020). Within the golden age came greater regulation, in part due to the public funding received as well as infamous cases such as that of thalidomide. Thalidomide was

a sedative drug sold over the counter that became immensely popular due to being touted as a completely safe substance and later being found to alleviate morning sickness in pregnant women, leading to an increasing number of these women taking it. It was not until later when cases of babies being born deformed mounted that it became widespread knowledge that thalidomide had a high likelihood of causing birth defects, leading to more stringent rules regarding proof of safety and restrictions on the ease of access to some drugs (Fintel, Samaras, and Carias 2009).

Today the pharmaceutical industry is more profitable than ever. Between the year 2000 and 2018, the 35 largest pharmaceutical companies earned a combined revenue of \$11.5 trillion with an estimated \$8.6 trillion being in profit—a figure almost twice as high as that of 357 other non-pharmaceutical S&P 500 companies (McCall, 2020). Though the rate of new pharmaceutical drugs has slowed in recent decades, pharmaceutical companies have evolved to branch into new mediums of medicine. Immunotherapy and gene therapy are the new horizon for the industry to combat rare or difficult to treat illnesses, though the rise of antibiotic-resistant bacteria and viruses such as COVID-19 pose additional challenges—with very steep price tags.

III. METHOD

The method of content analysis was applied for analyzing the forum threads. Content analysis is suited to "...organize and elicit meaning from the data collected and to draw realistic conclusions from it" and "...provides a systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and quantify specific phenomena" (Bengtsson, 2016:8-9). Given that the data being analyzed was derived from an online forum, content analysis was best suited to the purpose of this study.

Content analysis is generally done in four stages: Decontextualization,
Recontextualization, Compilation, and Categorization. Decontextualization is the process of
coding potentially important words and phrases in order to catalogue them. Recontextualization
involves re-reading the material in order to ensure nothing uncoded that could be of relevance to
the research question is left out or confirming if it is in fact unneeded. The categorization stage is
when data begins to get grouped together based on the common elements or themes they share
and may generate sub-categories or sub-themes (Bengtsson, 2016). The final stage of
compilation is when analysis of the data occurs. Analysis may be done in a latent or manifest
manner, with latent analysis allowing "...the researcher to immerse him/herself to some extent
in the data in order to identify hidden meanings in the text. For each category or theme, the
researcher chooses appropriate meaning units presented in the running text as quotations" while
manifest analysis "...often uses the informants' words, and he/she remains aware of the need to
refer back to the original text" in order to stay more faithful to original meanings and context
(Bengtsson, 2016:12).

REDDIT AND THE CODING AND CATEGORIZATION OF REDDIT DATA

Reddit is an aggregation site where users post links, images, gifs, videos and have discussions on every conceivable subject, with 'subreddits' being forums dedicated to specific topics of interest. Comments and posts can be upvoted and downvoted, which determines how prominent the posts and comments will be. Posts with a very high number of upvotes may break out onto the site's front page, which displays the most popular posts on the site from any subreddit. If a subreddit does not exist for a topic, users may create one themselves. The age demographic breakdown of US adults reported as being Reddit users is as follows: 23% aged 25-29, 21% aged 18-24, 14% aged 30-49, 6% aged 50-64 and 1% aged 65 and over (Lin, 2020). My own poll asking about age posted specifically to the r/Kratom subreddit yielded a distribution out of 246 respondents of 4% being younger than 18, 33% aged 18-24, 35% aged 25-34, 25% aged 35-54, and 3% aged 55+ (To view the poll, see Appendix A). Reddit is the 9th most visited site on the internet and the 3rd most visited 'social media' site, behind Facebook and Twitter (Hardwick, 2020). These facts, paired with my familiarity with the site and prior knowledge of its kratom forum and its preeminence as one of the major places of discussion for kratom users, it was an obvious choice. The only other site with groups similar to Reddit's kratom forum is Facebook, and the most popular group there has only a few thousand members which dwarfs the tens of thousands of members that were on Reddit during the time of the kratom ban.

Reddit is also a common social sphere in which sub-political actions of resistance are manifested and carried out. The most high-profile of these actions is the most recent usurping of Wall Street trading by the subreddit r/WallStreetBets, who by collective action bolstered the value of Gamestop stock and cost hedge funds that were attempting the short sell it billions.

Reddit's knack for facilitating such acts of resistance towards authority and the status quo made

it that much more appealing for analysis regarding what was accomplished against the DEA's bid to schedule kratom. Although the age demographic of the kratom subreddit is skewed slightly older than the demographic of Reddit overall, the age of the users as well as Reddit users' general tendency to be anti-authority may skew the data on the motivations and beliefs of kratom users at large.

The forum on Reddit dedicated to the discussion of kratom, r/Kratom, is a hotbed for communication both between kratom users and organizations such as the American Kratom Association, a non-profit organization that seeks to meet with and inform legislators and officials about kratom in order to stymy ban attempts and to protect people's access to it (AKA, "Our Mission"). This subreddit is a key platform in which people stay informed about the latest developments regarding kratom, be it discussions on methods of consumption, strains and variants, or news on the latest fight for its legality. Boasting nearly 110,000 members (108,851 as of this writing), it is the preeminent source for checking the pulse of the kratom user community.

Because of its value, I decided to utilize Reddit as a source of my data. I engaged in a content analysis of posts to assess the motivations and attitudes of kratom users as they pertained to their relationship with the oppositional forces (such as the DEA and FDA) seeking to ban kratom. The DEA ban was first announced August 30th, 2016 and withdrawn on October 13th, so I pulled the top 200 most commented on posts from August 30th 2016 to October 30th 2016 and compiled them into the AtlasTI program. Posts from this period of time were located by using the Redditsearch.io archival search site, which allows users to search specific subreddits to show what its most popular posts were in a given period of time. Amongst the posts related to the kratom community's efforts to fight the DEA decision were ones pertaining to the subreddit's

daily mundanities like product reviews, kratom utilization advice, and vendors advertising upcoming sales. Posts of this nature were not analyzed due to a perceived lack of relevance for this research. Only posts and comments on the posts were analyzed. Replies to comments on the post were generally only statements of agreement rather than additional sentiments or dissenting opinions and were thus of little practical value to the research.

Of the 200 posts harvested, 148 (73%) of posts were irrelevant/discussions unrelated to news regarding the DEA ruling. Of the 48 relevant posts, 11 (23%) contained themes of anxiety/fear of regression, 19 (35%) contained themes regarding personal liberty/treatment agency, and 34 (71%) contained themes of disdain and distrust of regulatory agencies and the pharmaceutical industry. Discussion threads often contained individual responses that exemplified different thematic elements.

The relatively small number of posts relevant to the study versus the total number of posts gathered may at first seem delegitimating. However, there are circumstances that inflate this contrast. As briefly mentioned, at this point in time on the subreddit kratom vendors were permitted to advertise and were enthusiastic about doing so in order to advertise directly to prospective buyers. Because of this, many posts are simply companies' advertisements for new inventory, sales, and other things of this nature. There is also a distinct possibility that the frequency of these ads increased when it looked like kratom was going to be banned, as it would be imperative for vendors to move inventory before they were stuck with it. Adding on posts that were just about ordinary discussion topics regarding kratom (vendor and strain reviews, how much kratom to take, how to take it, etc.), the grassroots rallying posts are pushed to the margins in terms of their numbers. However, the volume and frequency of discussion on activism related posts was far more substantial than on any of the other threads, providing a sprawling amount of

information and commentary that made up considerably for the comparatively low total number of related posts.

Using ATLAS.ti, I began the process of open coding using keywords that were most likely to pinpoint threads and responses that were relevant to the discussion of kratom's fight for legality against the DEA and all matters related to it. Some words and phrases were related to the motivations people have for using kratom, while others were terms that referred to the entities involved in trying to halt the sale of it. These were phrases such as 'Big Pharma', 'FDA', 'DEA', 'Addiction', 'Heroin', 'Medicine', 'Mental health', and 'Withdrawal' (See Appendix A for a complete list of words/phrases). Having already known the sort of content I would find, these words were coded to seek out the preexisting themes embedded in the posts rather than as a general dragnet. I then reviewed the posts that contained any of these terms for relevance and context and sorted them as being 'potentially relevant' or 'irrelevant'. The axial coding phase then began, with potentially relevant posts read through to gain context and to understand the narrative. From this, common themes began to show themselves that were relevant to the elements of Beck's Risk Society and usually entailed personal and political anxieties that could be attributed to the United States' neoliberal policies in its handling of healthcare, regulation, and legislation. Through selective coding, the common elements were then consolidated into three major themes that best accommodated the recurring elements observed. The primary themes and patterns found were ultimately sorted into three (3) categories:

1) "Desire for Treatment Agency and Personal Liberty" or an expressed belief in the right for people like them to utilize substances outside of the purview of mainstream medicine to self-treat conditions.

- 2) "Fear of Regression and Return to Risk" anxieties expressed about what users would do in the event that kratom was ultimately scheduled and banned, fearing having to get back on prescription painkillers or relapsing into their old addictions.
- 3) "Disdain and Distrust of Regulatory Agencies and Pharmaceutical Industry" regarding a sense of antipathy towards organizational bodies such as the Drug Enforcement Administration and the Food and Drug Administration. This involved a deep-seated conviction that these agencies such as the FDA act against kratom not out of a concern for public health and wellbeing, but at the behest of the pharmaceutical industry who they presume do not wish to see treatments outside the control of Big Pharma for conditions such as chronic pain become commonplace.

In addition to locating the pertinent comments, the coded words and phrases also served to help 'line up' the three themes conceived. Looking for the posts that discussed matters of addiction, drugs that likely fueled that addiction, and comments about the FDA, DEA, and Big Pharma revealed context that pointed to sentiments rife with fear, anxiety, a profound sense of distrust and antipathy towards governmental bodies and the pharmaceutical industry, as well as a strong desire to be left to ones own devices to look after oneself in treating medical issues. Identifying these traits are what ultimately led to the construction of the three umbrella themes conceived of for this analysis.

IV. DATA ANALYSIS, FINDINGS AND INTERPRETATION

In this section, each theme will be individually presented and analyzed through the forum excerpts that best represent them. They will demonstrate how these three primary themes came to be conceived of and the meaning derived from them will be discussed. Themes of resistance begin to surface, as will their connection to aspects of risk society.

The excerpts are rife with equal parts indignation towards the government and fear about what will happen if the kratom ban goes through. There is also a strong air of what would best be described as jaded disbelief: exasperated pointing out of how 'anti-American' the intention is to restrict people's liberty to ingest what they feel is a safe and beneficial plant that does not impact anyone but themselves. The kratom ban in their eyes is the epitome of an anti-democratic, corrupt government that has been insidiously lurching towards this point of authoritarian rule. The most astounding find at the center of these comments is the most likely culprit is unveiled while people are pointing their fingers in the wrong direction.

Forum users unwittingly demonstrate that the long-peddled neoliberal promise of greater freedom with less government was only ever applicable to corporate entities and the economic elite, accomplished by shafting the common citizen. Neoliberalism was sold to the nation at large by trumpeting rugged individualism and personal liberty through free markets while making claims that government overreach is the bane of liberty, and many Reddit users seize upon this point while simultaneously making accusations that the pharmaceutical industry is calling the shots behind the actions of the

FDA and DEA. It is in fact the defanging of governmental regulatory power over the industry coupled with the permittance of corporate interests to have substantial political influence that has produced the conditions that made government so susceptible to carrying out the will of entities such as Big Pharma under the auspices of public interest.

THEME 1: DESIRE FOR TREATMENT AGENCY AND PERSONAL LIBERTY

"It's crazy to think about the government making a plant that grows on its own in nature illegal. Who do they think they are?" (JuicyJay, 2016)

"If what I've been reading is true about the HMFIC [Head Mother Fucker in Charge] of the DEA then it's all about big Pharma screwing us out of our ability to take care of ourselves. Enough is enough! There's no theory involved. It IS a damn conspiracy [emphasis added]" (66asswhuppin1, 2016).

"I just want to be left the fuck alone. That's it. I, as a consenting level minded (I think) adult, wish to be able to choose what substances I wish to put in my body. Obviously there is a limit to this if you believe in a civil society. Deadly highly addictive drugs like meth, coke, heroin, etc. I can get why those are outlawed. But going after fucking plants like MJ [marijuana] and Kratom is insanity. Not only because they're being made illegal, but because they're being listed as a SCHEDULE 1 fucking drug??! Is this a god damn joke? Isn't this the United States of America? Supposedly the most free country on earth!? Now those in possession of an herbal plant become Felons after 9-30-2016?" (QuenHen219, 2016).

The quotations presented above display a strong belief that these individuals should have the right to choose the path they wish to go down regarding the treatment of their conditions. Many found the intended legislation to be an affront to this right. This stems mainly from the third theme found: the perception that the regulatory agencies are not basing their decisions on any real empirical data or concern for public health. Rather, that it is being done to reroute these individuals back into the fold of using pharmaceutical drugs. As such, their trust in the State on such matters is minimal, since the arms of the State have in their eyes been repurposed to serve the interests of the pharmaceutical industry and for the personal gain of the agencies themselves.

"This pises [sic] me off to high heaven. I was a fucking alchoholic [sic] for 20 years. Now that damn near killed me. That's a dangerous drug! But it can be taxed and its scocially [sic] acceptable? Kratom I've been taking for years, it kills my pain, and gets me out the door to work in the morning. Who the fuck is the DEA or any other people pushing this ban, to tell me what I can put in my body. This is a plant were talking about? It groes [sic] out of the earth, therefore an herb or botanical. . . Or if there [sic] so fucking worried, make it 21 and over like booze, which kills thousands, and destroys lives by the millions. . . I don't need daddy or mommy telling me what I can eat or drink. Again I say its an herb in the powdered leaf form, therefore a supplement, and if you don't think its safe don't take it? Like I said they could meet in the middle, 21 and over, if there [sic] worried about the kids? Responsible adults should have access to natural medicine if it has not been altered or modified, its just a plant. Also they better get ready for an opiate epidemic like they've never seen before, cause people depend on kratom for all types of pain, and there going to use something else?... Think about that, DEA Your [sic] going to trade a safe botanical, for death and destruction, why??? To show America who's in charge. Americans, don't need daddy telling them what there [sic] allowed to eat and drink. And I'm not going to live in pain, because you aren't sure if I'm safe. It's about control, and everyone knows it. Not to mention big pharma can't patent a plant!" (BuckSteel771, 2016).

From these and other excerpts it is patently clear that the DEA announcement of their intent to place kratom into the Schedule 1 category of controlled substances was felt by many kratom users as a direct and personal affront to themselves and their rights. How closely this sentiment is tied to a sense of distrust towards the governmental regulatory bodies involved and cynicism regarding their motives is apparent in the statements provided. In conjunction with surveys indicating that confidence in regulatory bodies such as the FDA is diminishing, a crisis of trust is a staple feature at the heart of the kratom controversy at play. Crises of trust are also a feature of risk societies, stemming from the loss of preeminent authority that occurs when the State and other authoritative bodies lose their grip on the monopoly of knowledge (Beck, 1992). This loss of confidence in the guidance of authority was also present in the study involving supplement users in general. Nichter and Thompson conducted a study interviewing dietary supplement users to discern their beliefs and motivations that led them to using supplements and an overarching trend of growing crises of trust was found there as well (2006).

"I am not going to follow this law...I have the right to put whatever I choose into my body because it is MY BODY. This body does not belong to the federal government. I am not property. I don't need someone from the shadows, who I know for a fact doesn't have the qualifications to make decisions about what I can do with MY own body. Sure, science based research is necessary. I have done research online; I trust society. I have confidence in our judgment as rational adults to make those decisions. That works for me. There is also market here. Money is good for us. Money is also good for United States. The DEA has, in what appears, poised themselves to be actively working in the guise of public safety to make financial plays for the pharmaceutical industry. Essentially destroying an entire market for natural medicine. This stance is Anti-Capitalism and Anti-American. We are being painted as criminals for making adult decisions in increasing the quality of our lives. This is a direct threat to our liberty. I am insulted. I have been disrespected. A voice of authority who I did not elect, who does not represent me has made a visceral attack on my quality of life. . . We know the truth and we will not let it slide past in silence without a fight. Not this time. Look what happened with cannabis??!!?" (NoCountryForOldMemes, 2016).

(For more quotes related to this theme, see Appendix B).

Here a 'crisis of trust' stems from growing cynicism towards the healthcare industry with a waning trust in government to counteract industry-driven subterfuge. The concept behind the label of 'risk society' is that we rely on experts to help us navigate potential harms we may incur in circumstances throughout our lives, but because of the sheer volume of differing perspectives and sources of information (combined with the growing sense of distrust of various entities and institutions) presented, it is ultimately up to us to decide what information to utilize. Such a necessity resonates strongly with Americans, because the neoliberal ideals we are steeped in greatly emphasize the importance of self-determination and personal responsibility in securing our own wellbeing.

Aside from the practical barriers of healthcare costs and the potential scarcity of doctors in a given location is a phenomenon borne out of our development into a risk society. Beck believed that the way in which people interact with the profession of medicine has changed substantially from the past couple centuries up to the contemporary period. When the area of

medicine became a more standardized and professionalized field in nineteenth century Europe, patients would enter hospitals to be assessed and healed by physicians while remaining ignorant to what the cause of their affliction was and how the actions taken by doctors remedied it (1992). He goes on to say:

"Today, conversely, the sick, who were systematically made and kept ignorant in dealing with their illness, are being left to themselves and other institutions, also totally unprepared for them: the family, the occupational world, schools or the public sphere. . .As a result of diagnostic 'progress' also, disease is being *generalized* [emphasis the author's]. Anything and everything is 'sick' or can actually or potentially make one 'sick'—quite independently of how a person actually feels. Accordingly, the image of the 'active patient' is being brought out again; demands are being made for a 'working alliance' in which the patient becomes the 'auxiliary doctor' for the state of illness ascribed to him by medicine" (Beck, 1992:205).

Here Beck's prime example in mind for this shift is that of the AIDS epidemic, in which the field of medicine could successfully determine what the afflicted was suffering from but had yet to have any efficacious treatments for it, leaving the afflicted to make do with whatever generally inadequate support systems they had available. The conditions kratom purportedly treats are not quite so hopeless or deadly as AIDS was in the 80s; addiction, chronic pain, and many mental illnesses have various pharmaceutical and therapeutic options available to attenuate the suffering they cause. Kratom users' desire to be their own 'auxiliary doctor' here is due not because the medical profession has no options for them, but because they feel that the options offered have been ineffective, expensive, or carry too heavy a side effect profile that causes the cons to outweigh the pros. Assurances made about these options, whether it be in terms of safety, efficacy or both has led these people to feel lied to or taken advantage of. When combined with the deluge of dissenting voices and alternative suggestions, crises of trust inevitably develop and

the compulsion for the individual to manage their own decisions or actions on medical matters is encouraged by the tenets of neoliberalism.

It is because of these tenets that many people use supplements as a form of harm reduction; It is a way in which an individual can personally handle taking measures against exposure to harmful or risky elements in their life whether the source be environmental, genetic, or lifestyle based. This helps to produce a sense of control or mitigation of these risks in circumstances where they might otherwise feel powerless. An example used by Nichter and Thompson is of working or living in an environment contaminated by pollution: risk could be reduced by environmental legislation intended to improve these conditions, but this would require the cooperation of industries and members of government, many of whom would actively try to prevent such legislation from passing. Instead of dedicating time and effort towards this Sisyphean task, a person could in theory just take supplements that are supposed to cleanse the body of free radicals or toxins and provide themselves personal and immediate aid against the threat this macro-level condition poses to them (2006).

For kratom users, the macro-level threat stems from the once-hidden dangers of pharmaceutical drugs (namely narcotic painkillers) and the failures of the FDA to properly assess and police the pharmaceutical companies and their products, leaving it to them to seek out their own treatment whether it be for chronic pain, addiction or otherwise. The suppression of the addiction potential of these drugs and the epidemic levels of addiction that followed more liberal prescribing practices of said drugs. In the realm of risk society, this can be considered a 'latent side effect'.

"Risks can be legitimated by the fact that one neither saw nor wanted their consequences. Risk positions first have to break through the protective shield of taboos surrounding them, and 'be born scientifically' in scientized civilization.

This generally happens as the status of a 'latent side effect'. Which simultaneously admits and legitimates the reality of the hazard. What was not seen could not be prevented, was produced with the best intentions, and is an unwanted problem child of the objective in mind" (Beck, 1992:34).

Beck's contention that consequences cannot be known in advance is applicable to innovations like new prescription drugs, where additional risks are often undetected until after the drug has been put on the market. This is especially true in the United States given how lackluster the assessment process has come to be. A number of substances have managed to pass muster only to be pulled from the market years later due to previously-unknown side effects (ProCon.org, 2014). Sometimes this can happen simply because clinical trials are comparatively short in terms of participants and time and so fail to turn up side-effects that only appear when a larger number of people take the drug over longer periods of time. Although some instances are due to such innocent shortcomings of clinical trials, what has been discussed about the pharmaceutical industry's relationship with and influence in the FDA tells of a more insidious possibility. On top of its efforts to undermine the FDA's functionality, the pharmaceutical companies themselves are typically the ones funding the clinical trials of their drugs, allowing them greater opportunities for subterfuge. They sometimes even have researchers and experiment designers conducting the study that are on their payroll (Llamas, 2015). Alternatively, they may "hire private physicians or third-party companies called contract research organizations (CROs) to run trials for them" many of whom, like the pharmaceutical companies, are generally more interested in profits than true scientific research and accuracy (Llamas, 2015)

The primary alternative to Big Pharma-funded or influenced clinical trials are those done by the National Institute of Health (NIH), which is an independent body with no financial incentive to skew the results of their data. Unfortunately, the ratio of studies conducted by the

NIH and those conducted by pharmaceutical companies is heavily skewed towards the pharmaceutical companies, a trend that has been growing and can be directly linked to the neoliberally-driven outcome of reducing government oversight of Big Pharma. A story published by DrugWatch on the subject of Big Pharma-funded drug trials revealed ". . . a report from John Hopkins University showed that the number of clinical trials funded by the pharmaceutical industry has increased each year since 2006, while those funded by the NIH decreased. In 2014, Big Pharma paid for 6,550 trials, while NIH funded 1,048, according to a study by Stephan Ehrhardt and colleagues published in JAMA" (Llamas, 2015) in which such information was simply concealed or withheld by the drug manufacturer in order to push their product to market, as turned out to be the case with drugs like Halcion (Associated Press, 1993) and Risperdal (Sullivan, 2019).

In a similar vein, the most infamous and impactful case of misrepresentation came from Purdue Pharma's marketing of OxyContin, in which they grossly misrepresented the addiction potential of the drug in as part of an aggressive marketing strategy to encourage doctors to prescribe it more broadly than merely to those suffering pain as the result of cancer (Van Zee, 2009). Rampant overprescribing of painkillers such as OxyContin is considered to be one of the major factors of the opioid epidemic in America today.

Of course, evidence has mounted that the risks *were* known earlier than they were publicly acknowledged and were in fact actively suppressed or downplayed for as long as it was possible to do so. Efforts such as this to conceal wrongdoing and prescient knowledge of its potential consequences contributes to the undermining of preeminent authorities' monopoly on knowledge. Per Ulrich Beck, ". . .science's monopoly on rationality is broken" (1992:29). This is to say that the official channels of scientific assessment are no longer the ultimate authority on

scientific matters in the eyes of many individuals. The advent and subsequent ubiquity of the internet has allowed for dissenting or alternative viewpoints to be more readily discovered and disseminated. Aside from dietary supplements versus pharmaceutical drugs, other topics that have seen contesting ideas become mainstream and in competition with official scientific proclamations are the notion that vaccines cause childhood conditions such as autism, climate change is greatly exaggerated or an outright hoax, and that the Earth is flat. Criticism of the scientific mainstream is equally present when it comes to the legitimacy of dietary supplements. "Several of the supplement users we interviewed seemed somewhat ambivalent about, if not skeptical of, scientific assessments of supplements—with a few informants suggesting that conventional medicine has its own agenda for negatively evaluating supplements and discrediting other healing systems, namely, because of the close ties between the pharmaceutical industry and conventional medicine and to reinforce biomedical authority over alternatives", going on to say "They perceived these practitioners to be engaging in 'boundary work' that entailed defining the "other" in negative terms. Scientific evidence about supplements was received with some degree of latitude" (2006:208).

Nichter and Thompson attribute this sort of thinking to the aforementioned overarching phenomenon taking place in society in which science's 'monopoly on knowledge production' is called ever more into question as "...people are open to the possibility of multiple and differential sources of knowledge" due to "lay involvement in the coproduction and evaluation of knowledge" (2006:200). As previously highlighted, the Nichter & Thompson interviews also discovered that this apprehension did not simply compel supplement users to shun modern medicine and accept alternative medicine without question. The risk society element to the big picture becomes apparent once again, as those interviewed held suspicions about supplements as

well and sought out methods for determining their safety and the veracity of their claims for themselves.

"Most of the supplement users we interviewed struck us as being cautious, if not skeptical, consumers of public information—not passive consumers accepting information at face value. Informants maintained doubts about both product promotional literature and product quality. They came up with their own litmus tests for measuring safety and quality such as the 'Costco test' or by equating cost with safety quality. Few informants rejected biomedicine and most thought that 'amazing breakthroughs are occurring in science all the time'. On the other hand, they did not feel that conventional medicine was a panacea, and many suspected that some biomedical practitioners and researchers rejected CAM [complementary and alternative medicine] modalities, including dietary supplements, 'out of principle, not practice'" (Nichter and Thompson 2006:208).

It is because of this possible boundary work and the lack of confidence in medical authorities to be honest with themselves or others that kratom users have taken the onus of responsibility of their own health upon themselves rather than looking to established medicine for the conditions they utilize kratom for. They have determined through their experiences with various drugs and by the personal research they have done online that kratom's benefits make any potential risks from it acceptable and superior to that of whatever substances they used prior, despite the oppositional (albeit contentious) statements made by the FDA and DEA. The result of this decision making is the reason members of the kratom subreddit faced the DEA's mandate with such angst and frustration. They had settled comfortably on a therapeutic regimen, only for a decision that seemed at the time a definitive one to take that treatment of choice away from them and thrust them back into assessing the risk of other alternatives.

THEME 2: FEAR OF REGRESSION/RETURN TO RISK

"I can honestly say that if kratom gets banned and my doctor is unwilling to prescribe me something, I'm not going to have a choice but to start buying street oxy by the pallet. I don't want to do this. I'm scared as hell that I'm going to get a pill that's got fentanyl or whatever in it and die. Or that I'm going to walk into a sting and go to prison, where I will absolutely without question hang myself. Or that my dealer will be some psychotic tweaker and shoot me in the throat when he thinks my wallet is a grenade. I've never so much as gotten a parking ticket, but if my choice is between feeling like I used to and illicit drugs, I'll take the illicit drugs. I have a million reasons to not buy street drugs, but all it takes is one very compelling reason to do it" (SpectroSpecter8, 2016).

"Broke my 3rd and 4th vertebrae 3 1/2 months ago and stopped taking my pain pills after the first month. Switched completely to Kratom. I stopped because I was addicted to oxycodone for over 8 years and almost overdosed 2 times. I didn't want to go back down that road again. Now who knows what's going to happen. :(I'm very scared for the future. I will be in pain for the rest of my life" (Rhino2366, 2016).

Fear and anxiety are prevalent emotions conveyed throughout many of the posts made during this tenuous period in kratom's legal history. As such, a great deal of the motivation behind the political activism undertaken by the members of this forum was driven by the anxiety and assumed risks in the future should kratom become illegal. Beck argues the modern risk society's political movements are often fueled by anxiety in contrast to class-driven needs:

"There are corresponding differences in the basic social situation in which people in both societies live and join together, and which moves them, divides them or fuses them. The driving force in the class society can be summarized in the phrase: I am hungry! The movement set in motion by the risk society, on the other hand, is expressed in the statement: I am afraid! The commonality of anxiety takes the place of the commonality of need. The type of the risk society marks in this sense a social epoch in which solidarity from anxiety arises and becomes a political force" (Beck, 49:1992).

It could be argued that in the instance of kratom's legality, political movement was driven both by anxiety *and* need, as many members of the forum feel kratom's accessibility is a necessity for them to continue to lead productive and pleasant lives.

"I would just like to say that when I hear the definition of a schedule one drug (high potential for abuse/addiction and no medical value), two things come to mind. Alcohol and cigarettes. Of course these things will be legal till the end of time. I am a recovering alcoholic and drug addict. Kratom has helped me through 2 years of sobriety. I am afraid of what I may allow to happen to me when it is

gone. Guess I should check into a treatment center now or start hitting those meetings more often. Either that or I will die drunk on a street corner with a 40 in one arm and a needle in the other. Depressing" (momurda971, 2016).

For others, the fears stemming from kratom's scheduling is two-pronged: not only do they not wish to return to pharmaceutical opioids or their former vices, they also simply cannot afford to participate in mainstream healthcare.

"I'm poor, so my only option is to go to a dealer if kratom is banned or to buy off the Dark Net or whatever. If I had private insurance or something, I bet I could get at least Tramadol, but as it stands it's cheaper and easier for me to get them illegally in the mail probably. Even when I got a tooth pulled, they only let me get 5 5mg hydrocodone, and barely wanted to do that. They said something like 'they're watching us like crazy so this is it don't call for more'. . .Fuck this drug bullshit in our country, it makes you have to turn to illegal shit because everything is impossible to get, and now they want to ban kratom too. (nodnizzle, 2016).

"The ounce of Kratom I've been using for 6 years doesn't even cost me \$5 a day. If I attempted to substitute with suboxone that would be an additional \$40 a day. At my income level that means my child suffers. He won't get new sneakers. He'll have to eat low quality food. He won't get to go to college. I may even have to put him into foster care for six months while I go through protracted withdrawal from long term use. And even if I do decide to... fuck [over] my child and spend his money on treatment the only doctor in my rural area that prescribes suboxone charges \$2500 a visit. And suboxone sucks. It's too strong. It's not a minor buzz like Kratom" (iforgetpasswordsbruh, 2016).

(For more quotes pertaining to this theme, see Appendix C).

The debate on whether or not healthcare is a right or privilege and who should be responsible for overseeing it has been a hot-button issue for at least twenty years. Costs have continued to rise over the decades (Doyle and Amadeo, 2020) leaving many people in desperate circumstances. Attempts made to alter this trend have largely been stripped down and lackluster. According to David Harvey, "If 'corporate power steals your personal freedom' then the promise of neoliberalism comes to nothing. . . It is one thing to maintain, for example, that my health-care status is my personal choice and responsibility, but quite another when the only way I can satisfy

my needs in the market is through paying exorbitant premiums to inefficient, gargantuan, highly bureaucratized but also highly profitable insurance companies" (2007:79-80). In neoliberal theory it is ascribed that it is up to the individual to look after themselves and their loved ones and that if the healthcare market has proven too costly, new competition or new markets altogether will spawn to adjust for consumer demands. The dietary supplement industry has sought to occupy this niche, and by the same token kratom has been presented to consumers as the cheaper, natural alternative to what is being peddled by mainstream healthcare. The previous statements provided by kratom users show they are clearly aware of the overarching trends that put them in the position they are in and so feel like they are being cornered by the powers that be into compromising positions that are unwarranted.

This also raises the point that more risk is assumed by poorer or lower-class individuals than the wealthy and well-off. "...[T]he wealthy (in income, power or education) can purchase safety and freedom from risk" (Beck, 1992:35). Those that can afford excellent healthcare (and by the same token, excellent doctors and surgeons) are theoretically less likely to be mismanaged or have their health concerns dismissed. Another issue this raises is that of wealth inequality. Wealth inequality has been a disconcerting phenomenon in the United States and abroad, with the wealth gap growing to greater and greater disproportion over the years (Kent, Ricketts, and Boshara, 2019). This gap will only grow worse at its current trajectory—and is occurring on top of the growing cost of healthcare. This means that unless remedied by some measure, healthcare and health-related products will grow further and further out of financial reach for the majority of the population.

Kratom users make it abundantly clear that it is their preferred method of treatment above all else, having already determined for themselves that either the pharmaceutical alternatives are

too risky or expensive in comparison, or that the healthcare system itself is too dysfunctional to be of sufficient help. Some admit they will begrudgingly return to being at the mercy of doctors and insurance companies to secure medication, while others are steadfast in their determination to never need to rely on these gatekeeping forces ever again. They will either attempt to source kratom after it has been banned or will brave the risk of buying prescription drugs illegally, all for the sake of rejecting a system that they feel is inadequate and counter-productive in treating their conditions.

THEME 3: DISDAIN AND DISTRUST OF REGULATORY AGENCIES AND PHARMACEUTICAL INDUSTRY

"Anybody who thinks the DEA, FDA, or any number of ABC agencies are operating for the benefit of the people needs to have their head examined. They don't give a shit about you. They don't give a shit how their decisions effect you. They could care less if what they decide is reasonable or what is best. Their whole game is to take in money. . . and finding ways to justify their budget increasing under the guise of 'improving or maintaining the ability to enforce the law'" (MisanthropicZombie, 2016).

"It's quite interesting, these events like this 'opioid awareness' BS. All the pretend concern for those of us ruined by the 'painkiller epidemic' they (FDA, DEA, Big Pharma) helped create, if not single-handedly. And on the flip-side, the DEA's blatant hatred for those of us ruined by 'the war on drugs', the 'druggies', which they also helped to create, single-handedly. Big Pharma gives us the high-powered opiates/opioids, and also the Narcan to reverse their effect should we happen to consume too many. They give us the addiction and ever-so-caringly 'treat' it with their further destructive Subs [suboxone] and 'done [methadone]." (ViragoRider4814, 2016).

"I find it hilarious that 'science' is used when convenient. 'Science' clearly shows that Kratom produces hallucinations, delusions, etc., but somehow can't prove that it's medicinally beneficial. Either these scientists conducting this 'science' are only looking for any/all negative side effects, or the DEA is only telling half of the story the 'science' is showing. Most prescription drugs have a

longer list of side effects. Those are totally safe, because 'science,' right?" (dad_pants, 2016)¹.

From the day the DEA announced its intent to ban kratom right up until they announced they would refrain from doing so (and ever since), the users of the kratom subreddit were convinced that the events set in motion were never about a genuine concern for public health. Cynicism about the true motivations abounded, primarily on the notion that the DEA was acting both at the behest of the FDA and to drum up a new element to the opioid public health crisis in order to increase their funding. In turn, it is surmised that the FDA crusades against kratom at the behest of the pharmaceutical industry, who they suspect is greatly entrenched into the functions of the agency and has considerable influence. Although statements made during this time period are usually emotionally charged, this is not to say that the accusations amount to mere hyperbole. Given the ways in which the FDA operates in contemporary history, there is a substantial foundation for these assertions.

Throughout the 1980s, critics of the Food & Drug Administration claimed that the rate at which the agency approved prescription drugs was too slow, costing pharmaceutical companies money in lost sales time as well as potentially risking the lives of those who could stand to benefit from the availability of awaited medicines and medical devices. Under the Reagan administration's guiding neoliberal principles of limited government spending and market deregulation, the FDA saw a 30% reduction in their work force as a cost-cutting measure (Anrig, 2007). Those assigned to head the FDA claimed that budget reductions had improved consumer

48

Reddit user dad_pants is expressing frustration over the FDA's two-faced assessment of kratom, accepting reports of the most adverse reactions to be definitive evidence while discounting or ignoring reports that are endearing to kratom's efficacy and safety profile.

protections, arguing that "tight budgets force efficiency as industry cooperation increases", though consumer advocacy groups strongly contested this claim (Molotsky, 1987).

This mentality soon begot a different way of conceptualizing the nature of the regulator and the regulated's relationship than had been previously employed and signaled what would be a turning point in the chain of events that led to the compromised state of the FDA's drug review process. "In a 1982 speech to the drug industry that is now being cited by both supporters and critics of the agency, Vice President Bush said, 'I think we've started to see this philosophical shift, the end - or the beginning of the end - of this adversarial relationship. Government shouldn't be an adversary. It should be a partner'" (Molotsky, 1987). After ten years of a modest back-and-forth between diminishing and augmenting the FDA's functionality, Congress passed the Prescription Drug User Fee Act (PDUFA) in 1992, a law that permitted the FDA to levy user fees against pharmaceutical companies submitting new drug applications for review and approval. These fees would be used to allow the FDA to hire more drug reviewers and support staff; the surface-level benefit to the pharmaceutical industry would be this boost in staff allowing the backlog of new drug applications to be cleared and for the process to move more swiftly going forward (LaMattina, 2018).

"Kratom use is taking money from Big Pharma. That's the only thing the DEA is concerned with. \$\$\$" (testeffens1, 2016).

(For more quotes pertaining to this theme, see Appendix D)

In the initial years of the PDUFA's inception, user fees accounted for about 35% of the drug review sector of the FDA's total budget (Hilzenrath, 2016). As of 2019, user fees now account for 75% of that budget (Sullivan, 2019), making the agency more reliant on a symbiotic relationship with the pharmaceutical industry than ever before. Following the PDUFA's passage came a deluge of hindrances and consequences for the FDA: "From 1994 to 2007, according to

former FDA chief counsel Hutt, the agency's appropriated personnel declined from 9,167 to 7,856, while its funding increased by only two-thirds of the amount that would have been needed to keep up with inflation" (Anrig, 2007).

Adding further strain is the stipulation that must be met for the PDUFA to get renewed, as it is up for congressional review every five years.

"Before Congress considers renewing it, the FDA must negotiate with industry to keep the money coming. That's what the law demands: 'negotiations with the regulated industry.' In practice, the FDA has interpreted that to mean negotiate over how it spends the money and assesses drugs. The negotiations produce recommendations for Congress and an FDA 'commitment letter' laying out goals for the agency. It's unclear what would happen to the user fees if the FDA and industry didn't agree on terms' (Hilzenrath, 2016).

All of these stipulations and caveats tying the FDA intimately close to the pharmaceutical industry generally indicates that there are numerous areas in which some glad-handing and outright corruption would inevitably fester—a prescient point of interest in the context of the FDA's uncharacteristic crusade against kratom. Such stipulations also contributed to the agency being not as much of a vigilant protector against ineffective or exceptionally risky drugs as the common person may believe, as the constraints to the FDA's manpower and the nature of its funding lead to serious compromises in its approval process.

In 1993, the approval rate for submitted drugs was just 36%. In 2015, 95% of all drugs submitted were approved *on their first try* (Hilzenrath, 2016). The rate at which the agency moves drugs through this approval process also skyrocketed. It took the FDA about 19 months to move a 'novel molecular entity' (the official terminology for describing new drugs) through the approval process in 1993, whereas in 2015 this time had been cut down to 8.5 months (Hilzenrath, 2016). As of 2018, this makes the FDA's drug approval process the fastest amongst

any regulatory agency in the world (Chen, 2018). Evidence that the speed and apparent ease in which drugs are approved by the FDA is coming at the cost of quality and accuracy in their assessments is mounting.

One study examined the rate at which drugs were pulled from the market or assigned a black box warning (a disclaimer that alerts patient and provider of potentially serious or fatal side effects associated with the drug) both before and after the passing of the PDUFA and found ". . .drugs approved by the FDA after the passage of PDUFA were more likely to be withdrawn from the market or receive a black box warning than medications approved prior to its enactment (26.7 per 100 drugs vs 21.2 per 100 drugs at up to 16 years of follow-up)" (Gabay, 2018:88).

The reality of the new demands on shorter processing times was that they simply did not allow for proper review. In an interview with the Project on Government Oversight, former FDA drug reviewer Ron Kavanagh stated ". . . when he was at the agency from 1998 to 2008, PDUFA's target dates for FDA action left too little time to review drug company submissions, which could total 160,000 pages not counting supporting data. Reviewers were told not to worry about studying all of the material, Kavanagh said. 'There's a lot of things I simply didn't look at,' Kavanagh said. 'And even without looking at things I barely made the deadlines'" (Hilzenrath, 2016).

Although the drug approval process certainly has more hoops to be jumped through to reach the market than dietary supplements do, it appears that the contemporary way in which the FDA goes about it makes for safeguards that are only modestly more protective in nature. Given this, the risk-averse consumer is tasked with determining the validity of the product regardless of the avenue they take. The need for individualized risk assessment is not unique to medicinal needs nor the healthcare market at large. It is a phenomenon that has touched nearly every aspect

of society. The new 'risk society' of the modern era has hefted the onus of risk assessment onto the individual, as the current dominance of the neoliberal ethos has diminished the state's role in such matters.

"Politics is said to have migrated from the official arenas—parliament, government, political administration—into the gray area of corporatism. The organized power of the interest groups is said to produce prefabricated political decisions which others must then defend as their own creations" (Beck, 1992:188). The American neoliberal ideology simultaneously being about personal liberty and free markets in theory while being restrictive on the former and protectionist on the latter in practice begins to have a tangible explanation. When corporate interests pervade policy decisions, 'liberty for me, but not for thee' is the motto. Industries lobby for leeway on matters such as reduced taxes or regulations while angling for directives that help quash competing industries or companies that lack the lobbying power they do to fight back, effectively rendering their respective markets monopolized or oligarchized.

All the while, these businesses such as Big Pharma run marketing campaigns that depict themselves as altruistic innovators of medicine for the benefit of humanity and regulatory industries such as the FDA continue to publicly maintain that they are always at the service of and acting in the interest of the general public. While substantially true at one point in time, this has diminished significantly in contemporary history.

"Kratom saved my life. I haven't taken it in 2 weeks. I've abstained way easier than heroin and I still have Kratom in my possession. They don't care about us. . . It's all about securing the market for subtex, subsolv, Suboxone, methadone. . . With Kratom an addict can treat themselves. . . With these other options it results in a lifetime of prescriptions and or clinic visits.... Or switching on and off with these medications and street drugs as is appropriate. . . I love America. I cannot stand the way those with power make it worse and worse. In this case we have the blind leading the sick. . . It's not bad enough we have hundreds of OD's [overdoses] a week due to fentanyl.... Now they're going to

push some people back in that direction. The whole thing is one step away from a silent genocide with profits" (Ibvulpine12345, 2016).

The accusation that the pharmaceutical industry creates the sickness and then sells the cure is not new or novel. Per David Harvey, "Technological developments can run amok as sectors dedicated solely to technological innovation create new products and new ways of doing things that as yet have no market (new pharmaceutical products are produced, for which new illnesses are then invented) [emphasis added]" (2007:69). The FDA complacently shepherded in all manner of powerful opioids and permitted them to be utilized for a much wider breadth of conditions than was sanctioned in the past, then dragged its heels to instate any meaningful revisions to its advised prescribing practices even while the signs of an addiction and overdose epidemic grew glaringly apparent. All the while pharmaceutical companies began to roll out new drugs meant to assuage opioid related side effects, such as Sennekot for opioid-induced constipation and Narcan to reverse opioid overdoses. As of 2017, Purdue Pharma has made \$37 billion from Oxycontin (Keefe, 2017), while producing Narcan has become worth \$274 million a year to the industry (Jaffe, 2019). To wit, "The industrial system profits from the abuses it produces, and very nicely, thank you" (Beck, 1992:56).

Beck also discusses the manner in which the modern risk society has seen what was once firmly in the political sphere slip into the purview of scientific, technological and economic fields in the name of their modernization (1992). Now industry is more involved than ever with the government's presence in its respective markets, having more definitive say and control of public and political matters. The popular sentiment evidenced in the forum passages identifies this phenomenon as being the true motivator behind the efforts of government agencies to step in on things such as kratom use, being done not in a genuine concern for public health but as the

result of the corporate interests seeking intervention in matters they feel are counterproductive to their own goals. "If one wished, one might say that the devil of economy must sprinkle himself with the holy water of public morality and put on a halo of concern for society and nature" (Beck, 1992:186).

Dissent and disbelief of the authoritative bodies that produce 'risk definitions' such as the FDA and DEA is according to Beck an expected manifestation in a risk society since the monopoly on knowledge no longer belongs to the state or any other major authoritative body. The emergence of a risk society also entails a "science, media and information" society (Beck, 1992:46). As a result, conflicts between the risk definition producers and the consumers of risk definitions are virtually inevitable.

Though at first glance it seems the state has largely been rendered invalid save for when it is enforcing the will of 'corporatocracy', there is another side to this coin in risk society. In what Beck calls 'the boomerang effect,' the risks and hazards produced by those who profit from them comes back to collect, no matter how wealthy or powerful the individual or organization may be. "The formerly 'latent side effects' strike back even at the centers of their production.

The agents of modernization themselves are emphatically caught in the maelstrom of hazards that they unleash and profit from" (Beck, 1992:37). For the pharmaceutical industry at large, repercussions for releasing drugs for public consumption that failed to be properly scrutinized have been extant. "As of November 2016, when ranked by the amount paid in fines and settlements since 1995, drug firms took three of the top four spots. . ." (Hilzenrath, 2016).

Pharmaceutical companies have subsequently paid out tens of billions dollars for things including but not limited to ". . . [settling] allegations of hiding dangerous side effects, [and] promoting drugs for uses not approved by the FDA. . ." (Hilzenrath, 2016). In the case of Purdue

Pharma in particular, these repercussions have now cost the very life of the corporation itself. On October 21st 2020, Purdue plead guilty to three criminal charges, admitted wrongdoing in fueling the opioid epidemic, and was ordered to pay \$8 billion in various fines and fees as well as being forced to dissolve (Isidore, 2020). The Sacklers, the billionaire founding family of Purdue was forced to personally pay \$3 billion (Balsamo and Mulvihill 2020).

The righteous indignation towards the FDA, DEA, and pharmaceutical industry that comes with being a proponent of kratom arguably stems from feeling as though they have seen past the curtain and are wise to the true forces that drive policy decisions like the ones made against kratom and the ones that allowed liberal prescribing practices of powerful narcotic painkillers to go unhindered. The determination of federal agencies to try and seal off easy access to kratom products would hamper people's ability to continue boycotting prescription drugs and the medical system at large, forcing them into a paradigm where they know there are better alternatives but are largely powerless to utilize them. Compromising the ability to swear off conventional prescription medications in turn jeopardizes the ability to resist the system and its facets that many kratom users have grown disillusioned and jaded towards.

V. DISCUSSION

This research project collected forum posts from Reddit during the time which the fight for Kratom's legality was at its most dire in an effort to explore the themes that arose and their relation to Beck's Risk Society. These narratives demonstrated forms of resistance towards the healthcare system as it has manifested in our current risk society. In the first theme, "Desire for Treatment Agency and Personal Liberty" was closely associated with the Crises of Trust and a loss of Monopoly on Knowledge Production elements of risk society as well as the developmental shift from being a passive to an active patient in the medical treatment process. The second theme, "Fear of Regression and a Return to Risk", a telltale shift was displayed from class-based to anxiety-based needs sparking political action, another trait of risk society. From the third theme, "Disdain and Distrust of Regulatory Agencies and Pharmaceutical Industry", shares the risk society trait of the first theme, the loss of monopoly on knowledge. Additionally, it demonstrates the realms of science and technology intruding into the political sphere and the development of 'corporatocracy' corrupting the regulatory and legislative bodies meant to keep them in check.

The narratives of resistance to current healthcare standards starts with the very act of using kratom for self-treatment of medical conditions. Users call on the American neoliberal ideals of liberty and self-reliance to establish their right to seek medical alternatives to their ailments and to be active patients. Though some professed that they would resign to falling back under the yoke of doctor supervised prescription drug therapies should kratom be banned, others remained adamant that they would continue

seeking kratom or other illicit alternatives in order to continue their own health management free of the constraints of the medical system. Their determination to break away from the ascribed methods of seeking treatment was fueled by the conviction that the effort to demonize and prohibit kratom was carried out under the auspices of greed and corruption, with the pharmaceutical industry as the proverbial puppet master pulling the strings of governmental bodies.

The resistance that spawned from attempts to ban kratom have their roots in risk society. Beck contends that in the economic and technological drive towards modernity, conventional notions of what is considered a political matter has grown too small to accommodate the new realities of social change. Because of this, 'non-political' matters manifest political action outside of the political sphere (citizen initiatives, social movements, etc). This new niche is described as 'sub-politics' (Beck, 1992). Beck elaborates further:

"The modernization process furnishes the gradually emerging centers and fields of action it makes possible for sub-politics with opportunities for extraparliamentary monitoring with and against the system. . .the 'heads' of the political system are confronted by cooperatively organized antagonists. . .citizens transform themselves from the loyal addressees of political decrees into political participants and attempt to sue for their rights in court *against* [emphasis the author's] the state, if need be" (1992:194).

Through grassroots organizing in the kratom forum, people were encouraged to call their state representatives and the DEA, urging them to put a halt to the kratom ban while urging one another to sign petitions and to make donations to the American Kratom Association. Through public pressure and lobbying efforts by the AKA, a historic victory was achieved against the machinations of government bureaucracy and corporate interests. The forum is what allowed individuals from all over the country to share a virtual space in which they could collectivize and their personal desires for being in greater control of their treatment, their worries about what

would become of them should kratom be banned and their rage towards the government and pharmaceutical industry's interloping into their medical care could coalesce into tangible political action. Their individual acts and expressions of resistance were given a vehicle to be effective weapons against legislation they did not agree with and felt trampled upon their liberties.

The existence of the kratom subreddit allowed for news and information about the plant both in terms of its pharmacology and legal battles to spread more rapidly, which in turn promoted evidence of kratom's safety that contradicted official announcements and allowed for swift response whenever kratom's legality was threatened by any level of government. The American Kratom Association also took advantage of this forum by directly addressing the kratom community about news regarding such fights, keeping those informed who may not receive their newsletters or even knew of their existence prior to joining the subreddit. Since the DEA's kratom ban attempt was thwarted, the progress of ban bills at the state, city and county levels have been stymied, with many such bills being halted or overturned. One such example is of Tennessee, where in 2017 kratom was initially included in a substance ban bill but was later removed from it thanks to lobbying efforts from the AKA and public pressure. Instead, only synthetic derivatives of kratom were banned and an age requirement was mandated that required a person be aged 21 or older to buy kratom (Autler, 2018). In 2020 Monroe County, Mississippi overturned their kratom ban after hearing from advocates (Roberts, 2021).

The continued success against kratom bans is what is known in risk society as the 'amplification effect', which entails ". . .that the basic rights can be observed successively and expanded in a mutually reinforcing way and thus can amplify the 'resistance power' of the 'basis' and the 'subordinate agencies' against unwanted interventions 'from above' (Beck,

1992:195). The culmination of this 'amplification effect' appears to be coming in the form of the Kratom Consumer Protection Act, a bill drafted up by the AKA intended to regulate the kratom industry in a manner similar to medical marijuana. AKA spokesman Mac Haddow laid out what the bill entails:

"...every kratom distributor has to register with the state that they're selling a kratom product...they have to submit a lab analysis of the products they propose to sell from an independent lab that meets federal requirements...the products can have no greater than the alkaloid content that shows up in the natural plant...you have to manufacture it according to good manufacturing standards and you can't add any deleterious ingredients to the product — and you have to list all the ingredients on the package, so people know what they're getting and what the serving size is" (Roberts, 2019).

The bill would also encourage an age restriction for purchasing kratom for anyone under the age of 18. The idea behind this bill is that bringing self-imposed regulation to the industry will attenuate the health and safety concerns that prompt the creation of ban bills throughout the country. So far, Utah, Nevada, Georgia and Arizona have signed the bill into law, with other states such as Colorado and Wisconsin currently taking the bill through the legislative process (Roberts, 2019).

Personal and collective resistance concentrated into a sub-political collective proved powerful enough to sway decision making within the political arena. It now enjoys the benefits of its own momentum, with victories against similar efforts to restrict access to kratom being abated. For now, it would seem that kratom users have overcome their trials in the risk society and the unique threats to true personal liberty and democratic representation that economic elites such as Big Pharma pose within it.

VI. CONCLUSION

The findings of this research displays that the roots of the kratom controversy reach to far deeper and pervasive issues contributing to America's development into a risk society. Remedying the greater issues that fuel events such as these will be a colossal and onerous undertaking requiring a complete cultural shift and revision to the idea of what makes the country what it is. Given how deeply entrenched the odious nature of our country's inner workings is, broad-spectrum solutions will take decades to implement and take hold. When it comes to our medical and healthcare systems, permitting more accessible alternatives to conventional medical treatment such as dietary supplements is a way to create a release valve to assuage the pressure growing from our unsustainable method of healthcare. Measures must also be taken to properly oversee the dietary supplement industry to ensure the therapeutic potential of such substances are not confounded by poor manufacturing standards and deceptive labeling.

Kratom is a substance that holds great potential for a variety of ailments ranging from chronic pain to mental illness but is not without risks. Its potential to interact with other medications and substances is largely unknown, as are the consequences of long-term habitual use. Although what has been discerned of its safety profile places it in better standing than its typical opiate and opioid counterparts, it is still a potentially addictive substance.

Furthermore, what is currently known about kratom's safety is entirely in the context of the unadulterated plant; extracts and isolated alkaloids may not be as favorable to one's health and might move the needle on kratom from botanical to drug in the eyes

of undecided policymakers. If these enhanced products end up having risks comparable to traditional opioids, it is in the best interest of kratom for these products not to be sold.

The possibility for negative health consequences and addictiveness do not automatically make kratom ineligible to be a legally available substance. Alcohol, tobacco and other nicotine products are still permitted and widely consumed despite their well-established potential for addiction and bodily harm. Like these substances, making the public aware of the risks and placing an age restriction for purchase would be reasonable and acceptable measures for permitting kratom in a legal market. The Kratom Consumer Protection Act would provide ample regulatory measures for selling the botanical, as it includes age restrictions and forbids adulteration, all while filling in the gaps currently present in the regulation and oversight of the dietary supplement market at large.

LIMITATIONS

Utilizing Reddit to collect data may prevent this research from being generalizable, as the site is known for being home to several resistance movements against 'the powers that be'.

Emotions were also running high during the time of these posts which may have overinflated people's true views that they hold when not confronted with such a scenario. The study may have also been limited by the lack of available academic data surrounding such a topic.

Additionally, a bill has recently been introduced by Democrats that contains drug price negotiations and other provisions intended to curb the power of the pharmaceutical industry that may diminish the influence they currently have over the political system.

FUTURE DIRECTION

The similarities shared between kratom and medical marijuana opens up a potential avenue of research regarding their parallels. Additional research could be done about the DEA's history of scheduling drugs and the historical or political context that surrounded such decisions.

BIBLIOGRAPHY

- Abdulla, Naseem Mohammed, Balazs Adam, Iain Blair, and Abderrahim Oulhaj. 2019. "Heavy Metal Content of Herbal Health Supplement Products in Dubai UAE: A Cross-Sectional Study." *BMC Complementary and Alternative Medicine* 19. doi: 10.1186/s12906-019-2693-3.
- AKA. n.d. "Mission." *American Kratom Association*. Retrieved December 5, 2019 (https://www.americankratom.org/abou-aka/our-mission.html).
- American Osteopathic Association. 2019. "Poll Finds 86% of Americans Take Vitamins or Supplements yet Only 21% Have a Confirmed Nutritional Deficiency." *American Osteopathic Association*. Retrieved January 20, 2021 (https://osteopathic.org/2019/01/16/poll-finds-86-of-americans-take-vitamins-or-supplements-yet-only-21-have-a-confirmed-nutritional-deficiency/).
- Anon. 2019. "The Beginner's Guide to Kratom | Kratom Science Europe." Retrieved February 28, 2021 (https://beginners_guide_kratom_europe).
- Anon. n.d. "Dietary Supplement Quality: The Meaning of the USP Verified Mark." *Pharmacy Times*. Retrieved November 24, 2019 (https://www.pharmacytimes.com/publications/issue/2014/april2014/r636_april2014).
- Anrig, Greg. 2007. "Who Strangled the FDA?" *The American Prospect*. Retrieved August 19, 2020 (https://prospect.org/api/content/fe0790aa-72e5-5885-a970-8f2a22ad840b/).
- Arnst, John. 2017. "The Science behind Kratom's Strange Leaves." *ASBMB Today*. Retrieved March 5, 2020 (https://www.asbmb.org/asbmb-today/science/060117/the-science-behind-kratom-s-strange-leaves).
- Associated Press. 1993. "\$1 Billion Lawsuit Accuses Upjohn Co. Of Concealing Drug's Side Effects." *AP NEWS*. Retrieved March 21, 2020 (https://apnews.com/8684771eef267098765f36e770a59009).
- Autler, Posted by Alanna. 2018. "Confusion Persists over Kratom Law in Tennessee." *WSMV Nashville*. Retrieved February 26, 2020 (https://www.wsmv.com/news/confusion-persists-over-kratom-law-in-tennessee/article_5533da4f-2c4a-5c3f-98df-0c498f853eaa.html).
- Balsamo, Michael, and Geoff Mulvihill. 2020. "OxyContin Maker Purdue Pharma to Plead to 3 Criminal Charges." *AP NEWS*. Retrieved November 5, 2020 (https://apnews.com/article/virus-outbreak-business-criminal-investigations-opioids-epidemics-5f0679ffee14577b1696a94b64abc9c2).
- Bengtsson, Mariette. 2016. "How to Plan and Perform a Qualitative Study Using Content Analysis." *NursingPlus Open* 2:8–14. doi: 10.1016/j.npls.2016.01.001.

- Berger, Jan, Jeffrey Dunn, Margaret M. Johnson, Kurt R. Karst, and Chad Shear. 2017. "How Drug Life-Cycle Management Patent Strategies May Impact Formulary Management." *AJMC*. Retrieved February 17, 2021 (https://www.ajmc.com/view/a636-article).
- Cameron, Charley. 2015. "FDA Finds Majority of Herbal Supplements at GNC, Walmart, Walgreens, and Target Don't Contain What They Claim Instead Cheap Fillers like Wheat and Soy Powder." Retrieved October 9, 2019 (https://inhabitat.com/fda-finds-herbal-supplements-at-four-major-retailers-contain-asparagus-houseplants-and-no-herbs/).
- Chen, Caroline. 2018. "FDA Repays Industry by Rushing Risky Drugs to Market." *ProPublica*. Retrieved August 24, 2020 (https://www.propublica.org/article/fda-repays-industry-by-rushing-risky-drugs-to-market?token=_ZxdeE_wocC45nxQoi4TRYZ4jEdTGjPb).
- Cinosi, Eduardo, Giovanni Martinotti, Pierluigi Simonato, Darshan Singh, Zsolt Demetrovics, Andres Roman-Urrestarazu, Francesco Saverio Bersani, Balasingam Vicknasingam, Giulia Piazzon, Jih-Heng Li, Wen-Jing Yu, Máté Kapitány-Fövény, Judit Farkas, Massimo Di Giannantonio, and Ornella Corazza. 2015. "Following 'the Roots' of Kratom (Mitragyna Speciosa): The Evolution of an Enhancer from a Traditional Use to Increase Work and Productivity in Southeast Asia to a Recreational Psychoactive Drug in Western Countries." *BioMed Research International* 2015. doi: 10.1155/2015/968786.
- Cooper, Lauren. 2017. "Liver Damage From Supplements Is on the Rise Consumer Reports." *Consumer Reports*. Retrieved October 9, 2019 (https://www.consumerreports.org/health/liver-damage-from-supplements-is-on-the-rise/).
- Doyle, Michael J., and Kimberly Amadeo. 2020. "See for Yourself If Obamacare Increased Health Care Costs." *The Balance*. Retrieved November 5, 2020 (https://www.thebalance.com/causes-of-rising-healthcare-costs-4064878).
- Duffin, Erin. 2020. "Leading Lobbying Industries U.S. 2019." *Statista*. Retrieved August 28, 2020 (https://www.statista.com/statistics/257364/top-lobbying-industries-in-the-us/).
- FDA, Center for Food Safety and Applied. 2019. "FDA Investigated Multistate Outbreak of Salmonella Infections Linked to Products Reported to Contain Kratom." FDA.
- FDA, Office of the. 2019. "FDA and Kratom." FDA.
- Fintel, Bara, Athena T. Samaras, and Edson Carias. 2009. "The Thalidomide Tragedy: Lessons for Drug Safety and Regulation | Helix Magazine." Retrieved February 17, 2021 (https://helix.northwestern.edu/article/thalidomide-tragedy-lessons-drug-safety-and-regulation).
- Foley, Katherine Ellen. 2019. "Trust Issues Deepen as yet Another FDA Commissioner Joins the Pharmaceutical Industry." *Quartz*. Retrieved September 1, 2020 (https://qz.com/1656529/yet-another-fda-commissioner-joins-the-pharmaceutical-industry/).

- Gabay, Michael. 2018. "The Prescription Drug User Fee Act: Cause for Concern?" *Hospital Pharmacy* 53(2):88–89. doi: 10.1177/0018578718757519.
- Goodnough, Abby, and Margot Sanger-Katz. 2019. "As Tens of Thousands Died, F.D.A. Failed to Police Opioids." *The New York Times*, December 30.
- Grand View Research. 2020. "Dietary Supplements Market Worth \$194.63 Billion By 2025 | CAGR 7.8%." Retrieved November 4, 2019 (https://www.grandviewresearch.com/press-release/global-dietary-supplements-market).
- Grinspoon, Peter. 2019. "Kratom: Fear-Worthy Foliage or Beneficial Botanical?" *Harvard Health Blog*. Retrieved October 9, 2019 (https://www.health.harvard.edu/blog/kratom-fear-worthy-foliage-or-beneficial-botanical-2019080717466).
- Haddow, Charles M. 2018. "The FDA Has Failed to Provide Credible Data and Science to Justify the Scheduling of Kratom as a Schedule I Substance." 27.
- Hardwick, Joshua. 2020. "Top 100 Most Visited Websites by Search Traffic (2021)." *SEO Blog by Ahrefs*. Retrieved March 23, 2021 (https://ahrefs.com/blog/most-visited-websites/).
- Harvey, David. 2007. A Brief History of Neoliberalism. Oxford, UNITED KINGDOM: Oxford University Press, Incorporated.
- Hess, Peter. 2019. "As Indonesia Plans Kratom Crackdown, FDA Denies Involvement." *Inverse*. Retrieved December 4, 2019 (https://www.inverse.com/article/57247-aka-versus-fda-indonesian-kratom-ban).
- Hilzenrath, David S. 2016. "FDA Depends on Industry Funding; Money Comes with 'Strings Attached." *Project On Government Oversight*. Retrieved August 10, 2020 (https://www.pogo.org/investigation/2016/12/fda-depends-on-industry-funding-money-comes-with-strings-attached/).
- Isidore, Chris. 2020. "Purdue Pharma Pleads Guilty to Federal Criminal Charges Related to Opioid Crisis CNN." Retrieved November 5, 2020 (https://www.cnn.com/2020/10/21/business/purdue-pharma-guilty-plea/index.html).
- Jaffe, Adi. 2019. "Profiting From Death The Naloxone Money Story." *Psychology Today*. Retrieved November 5, 2020 (https://www.psychologytoday.com/blog/all-about-addiction/201901/profiting-death-the-naloxone-money-story).
- Jones, Daniel Stedman. 2013. "The American Roots of Neoliberalism | History News Network." *History News Network*. Retrieved September 21, 2020 (https://historynewsnetwork.org/article/151023).
- Keefe, Patrick Radden. 2017. "The Family That Built an Empire of Pain | The New Yorker." Retrieved November 5, 2020 (https://www.newyorker.com/magazine/2017/10/30/the-family-that-built-an-empire-of-pain).

- Kent, Ana, Lowell Ricketts, and Ray Boshara. 2019. "Wealth Inequality in America: Key Facts & Figures | St. Louis Fed." *Federal Reserve Bank of St. Louis*. Retrieved November 8, 2020 (https://www.stlouisfed.org/open-vault/2019/august/wealth-inequality-in-america-facts-figures).
- Kent, Jessica. 2019. "FDA: Data Analytics, New Policies Will Curb Opioid Abuse in 2019." *HealthITAnalytics*. Retrieved September 15, 2020 (https://healthitanalytics.com/news/fda-data-analytics-new-policies-will-curb-opioid-abuse-in-2019).
- Kuttner, Robert. 2019. "Neoliberalism: Political Success, Economic Failure." *The American Prospect*. Retrieved September 21, 2020 (https://prospect.org/api/content/a3fdb883-29e3-5102-b2a7-2699b3e18cd4/).
- LaMattina, John. 2018. "The Biopharmaceutical Industry Provides 75% Of The FDA's Drug Review Budget. Is This A Problem?" *Forbes*. Retrieved August 20, 2020 (https://www.forbes.com/sites/johnlamattina/2018/06/28/the-biopharmaceutical-industry-provides-75-of-the-fdas-drug-review-budget-is-this-a-problem/).
- Levinson, Daniel R. 2013. "FDA LACKS COMPREHENSIVE DATA TO DETERMINE WHETHER RISK EVALUATION AND MITIGATION STRATEGIES IMPROVE DRUG SAFETY." 38.
- Lin, Ying. 2020. "10 Reddit Statistics You Should Know in 2021 [Infographic]." Retrieved February 11, 2021 (https://www.oberlo.com/blog/reddit-statistics).
- Llamas, Michelle. 2015. "Big Pharma & Clinical Trials Funding, Influence & Corruption." *Drugwatch.Com*. Retrieved August 31, 2020 (https://www.drugwatch.com/featured/clinical-trials-and-hidden-data/).
- Malerba, Franco, and Luigi Orsenigo. 2015. "The Evolution of the Pharmaceutical Industry." *Business History* 57(5):664–87. doi: 10.1080/00076791.2014.975119.
- Mammoser, Gigen. 2019. "What to Know About Heavy Metals in Kratom Products." *Healthline*. Retrieved December 4, 2019 (https://www.healthline.com/health-news/what-to-know-about-heavy-metals-in-kratom).
- McCall, Rosie. 2020. "Big Pharma Companies Earn More Profits than Most Other Industries, Study Suggests." *Newsweek*. Retrieved February 17, 2021 (https://www.newsweek.com/big-pharma-companies-profits-industries-study-1490407).
- McCarthy, Justin. 2019. "Big Pharma Sinks to the Bottom of U.S. Industry Rankings." *Gallup.Com*. Retrieved October 12, 2020 (https://news.gallup.com/poll/266060/big-pharma-sinks-bottom-industry-rankings.aspx).
- McGreal, Chris. 2019. "Big Pharma's Response to the Opioid Epidemic: Pay But Deny." *The New York Review of Books*. Retrieved August 10, 2020

- (https://www.nybooks.com/daily/2019/11/11/big-pharmas-response-to-the-opioid-epidemic-pay-but-deny/).
- Molotsky, Irvin. 1987. "Critics Say F.d.a. Is Unsafe in Reagan Era." *The New York Times*, January 4.
- Nichter, Mark, and Jennifer Jo Thompson. 2006. "For My Wellness, Not Just My Illness: North Americans' Use of Dietary Supplements." *Culture, Medicine and Psychiatry* 30(2):175–222. doi: 10.1007/s11013-006-9016-0.
- Noah, Barbara A., and Tia Powell. 2005. "Dietary Supplements: Balancing Consumer Choice & Safety." *The Journal of Law, Medicine & Ethics; Boston* 33(4):860–65.
- nutraingredients.com. n.d. "EGCG Warning: EFSA Safety Assessment Suggests Green Tea Supplements Should Come with Warning." *Nutraingredients.Com.* Retrieved November 20, 2019 (https://www.nutraingredients.com/Article/2018/04/19/EGCG-warning-EFSA-safety-assessment-suggests-green-tea-supplements-should-come-with-warning).
- Pharmaphorum. 2020. "A History of the Pharmaceutical Industry -." Retrieved February 16, 2021 (https://pharmaphorum.com/r-d/a_history_of_the_pharmaceutical_industry/).
- Piller, Charles, Jia You, 07/05/2018, and 2:00 Pm. 2018. "Hidden Conflicts? Pharma Payments to FDA Advisers after Drug Approvals Spark Ethical Concerns." *Science* | *AAAS*. Retrieved August 28, 2020 (https://www.sciencemag.org/news/2018/07/hidden-conflicts-pharma-payments-fda-advisers-after-drug-approvals-spark-ethical).
- ProCon.org. 2014. "FDA-Approved Prescription Drugs Later Pulled from the Market Prescription Drug Ads ProCon.Org." *Prescription Drug Ads*. Retrieved March 21, 2020 (https://prescriptiondrugs.procon.org/fda-approved-prescription-drugs-later-pulled-from-the-market/).
- Prozialeck, Walter C., Bonnie A. Avery, Edward W. Boyer, Oliver Grundmann, Jack E. Henningfield, Andrew C. Kruegel, Lance R. McMahon, Christopher R. McCurdy, Marc T. Swogger, Charles A. Veltri, and Darshan Singh. 2019. "Kratom Policy: The Challenge of Balancing Therapeutic Potential with Public Safety." *International Journal of Drug Policy* 70:70–77. doi: 10.1016/j.drugpo.2019.05.003.
- Roberts, Michael. 2019. "Inside Plan to Bring Kratom Consumer Protection Act to Colorado." *Westword*. Retrieved March 8, 2020 (https://www.westword.com/news/kratom-consumer-protection-act-may-be-coming-to-colorado-11542480).
- Roberts, Michael. 2021. "Kratom Ban in Monument and Bid to Overturn It." *Westword*. Retrieved February 25, 2021 (https://www.westword.com/news/kratom-ban-in-colorado-town-and-bid-to-overturn-it-11902363).
- Semeco, Arlene. 2017. "10 Benefits of Green Tea Extract." *Healthline*. Retrieved March 8, 2020 (https://www.healthline.com/nutrition/10-benefits-of-green-tea-extract).

- Sifferlin, Alexandra. 2016. "Is the FDA Too Cozy With Drug Companies?" *Time*. Retrieved August 20, 2020 (https://time.com/4510025/fda-drug-companies-pharmaceutical-industry-medical-reviewers/).
- Singh, Darshan, Suresh Narayanan, Oliver Grundmann, Eshal Bin Dzulkapli, and Balasingam Vicknasingam. 2019. "Effects of Kratom (Mitragyna Speciosa Korth.) Use in Regular Users." *Substance Use & Misuse* 54(14):2284–89. doi: 10.1080/10826084.2019.1645178.
- Sullivan, Mark. 2019. "FDA Adviser: Opioid Approvals Are Controlled by Big Pharma." *Fast Company*. Retrieved August 20, 2020 (https://www.fastcompany.com/90296853/fda-advisor-opioid-approvals-are-controlled-by-big-pharma).
- Sullivan, Thomas. 2019. "Johnson & Johnson Still Dealing with Risperdal Lawsuits." *Policy & Medicine*. Retrieved March 21, 2020 (https://www.policymed.com/2019/11/johnson-johnson-still-dealing-with-risperdal-lawsuits.html).
- Talev, Margaret. 2020. "Axios-Ipsos Poll: Distrusting Big Pharma and the FDA." *Axios*. Retrieved October 12, 2020 (https://www.axios.com/axios-ipsos-poll-distrusting-pharma-fda-coronavirus-index-7605a67b-606d-4e0a-b85f-1887147aa8f8.html).
- Van Zee, Art. 2009. "The Promotion and Marketing of OxyContin: Commercial Triumph, Public Health Tragedy." *American Journal of Public Health* 99(2):221–27. doi: 10.2105/AJPH.2007.131714.
- Váradi, András, Gina F. Marrone, Travis C. Palmer, Ankita Narayan, Márton R. Szabó, Valerie Le Rouzic, Steven G. Grinnell, Joan J. Subrath, Evelyn Warner, Sanjay Kalra, Amanda Hunkele, Jeremy Pagirsky, Shainnel O. Eans, Jessica M. Medina, Jin Xu, Ying-Xian Pan, Attila Borics, Gavril W. Pasternak, Jay P. McLaughlin, and Susruta Majumdar. 2016. "Mitragynine/Corynantheidine Pseudoindoxyls As Opioid Analgesics with Mu Agonism and Delta Antagonism, Which Do Not Recruit β-Arrestin-2." *Journal of Medicinal Chemistry* 59(18):8381–97. doi: 10.1021/acs.jmedchem.6b00748.

APPENDIX A: CODED WORDS, KRATOM AGE DEMOGRAPHICS POLL

A complete list of coded words and phrases with the number of times they were detected:

Addiction: 193

Big Pharma: 123

Chronic Pain: 106

DEA: 1436

FDA: 310

Health Insurance: 18

Heroin: 334

Industry: 369

Medicine: 274

Mental Health: 398

Painkiller: 13

Withdrawal: 221

My Age Demographic Poll Posted to r/Kratom:

Age Demographics of the Users of this Subreddit: How old are you?

Hi all, I am writing a thesis surrounding kratom and its usage in the context of the period of time in which the DEA announced it would ban it and then opted not to do so and am using a cross-section of the posts made on this subreddit during that span of time. In benefiting this paper I'd like to know the age demographics of this subreddit.



APPENDIX B: DESIRE FOR TREATMENT AGENCY AND PERSONAL LIBERTY

"This country needs a revolution! Why dont they ban some of these additives whith twenty letter names there putting in our food. We sure dont know if thats safe? Or cell phone microwaving our teenagers brains. Were not sure if thats safe? Somebody doesnt like drugs period, even if its a plant. Well they shouldnt take it than? Its all about political correctness, these days. People need to get a fucking life, and start running there own program. Dont worry about what other people are doing. If you want to take my kratom so I cant work anymore, than come pay my fuckin bills if your so worried about my safety" (BuckSteel77, 2016).

"Yup, my doctor was a nurse practitioner a year ago so I changed to another because she did the same shit with anti depressants and ibuprofen or whatever. Then the actual doctor I see now did the same fucking thing, even though there are records that these things make me worse. No matter where I go, as long as there's not a bone sticking out of me they won't do shit about anything but waste my time. It's just nonsense, I'm better off looking up shit online and just ordering shit to help myself. They think of poor people as annoying bugs even though they still get paid by our state insurance. I remember having a real doctor when I could afford it. They would bend over backwards to make sure I was okay, and it was great. Now I feel like I'm an asshole for even going and wasting their time" (nodnizzle, 2016).

"Doctors have and will always pick and choose what is valid and what is not, and also when it's appropriate to prescribe and when it's not. Really, getting pain meds has nothing to do with how bad your condition is or if it's verifiable. It's all a roll of a dice, depending on which clinic you go to and what doctor you speak to. There is no rhyme and reason to it. Really, it's no wonder people switch to kratom. You order it, and then you get it in the mail, and that's that. None of these mind games these doctors play, bouncing you from clinic to clinic and yet still not giving you what you need. I mean, I got years of therapy and psychiatric visits under my belt, with my depression and anxiety documented. I've tried so much shit that has screwed up my head and failed miserably at what it was supposedly intended to do, and yet I can't even get a measly prescription for 10 attivans. It just don't make sense" (kfctw_x, 2016).

"It's not that the DEA may be unaware, these people are just naturally ignorant corrupt morons. They left marijuana as schedule 1 this month too, claiming marijuana has 'no medicinal value'. This isn't a Kratom issue, this is a 'corruption big brother 1984 issue' where THEY tell us what to take. Pharmaceuticals = legal but deadly. Kratom = not deadly but let's make it illegal. Same with marijuana in place of Kratom. It's pathetic that we've allowed our government to have this much power over our own well being" (whyalwaysm3, 2016).

"This is why doctors need to be eliminated as the gate keeper for drugs. Problems like this will always happen. What needs to happen is people need to take control. Sure, the government tells us what to do but only because we want it to. If the people wised up to this nonsense then we could buy any drug OTC we want, with the advise of a doctor, if we so choose. Sure, people would die, but ask yourself. Would it change YOUR behavior? Would you go and buy random blood pressure medicine or cancer medicine for no reason? Or would you go to the doctor and get diagnosed and then buy it? But if you have a terrible headache, why not go get 10mg of morphine, or 5grams of kratom, or whatever? Sure, people will hurt themselves sometimes, but that is a problem of education. It worked perfectly fine when it was like this in the 1900s. The problem then was snake oil. The FDA could ensure that things were legitimately what they were and did what they claimed to do today and that is all that's needed" (Throwawayhelper420, 2016).

"It IS our responsibility to engage in civil disobedience. Complacency and laziness is the dystopian society we had hoped to avoid in the modern world. I still care about my freedom. I DON'T THINK somebody else knows how I ought to live my one life better than I do. I am no fool" (Canibeyourdoctor, 2016).

"Just fucking ban water while you're at it. Too much of that can kill you too. I'm sick of these people thinking they have the RIGHT to dictate what the rest of us can and can't injest down to the micro level. This system is archaic and the people who run it are fucked in the head" (Craaycraig, 2016).

"...I said this is America! I have the right to ingest whatever the fuck I want (I didn't say fuck) but then I said ok the government says they are banning eye glasses because its a safety hazard if you break them-would you say ok I will give it up because the government says so?? Um no he says-I can't see without my glasses. Ok I said. I can't function without my herbs. I have tried other options. they didn't work. This works. What's the problem??" (foxxy1974, 2016)

"I have a huge fear that big pharma is desperately trying to take advantage of this 'miracle' plant, Kratom. If they succeed then they will end up making insanely addictive pain medications. Kratom does not cause any serious health risks as far as I am concerned, ime [in my experience] anyways. I have been using for chronic debilitating pain for a decade now and it has been a blessing from God for me, I try to avoid any actual opiates or opioids, and I am very proud to say that I haven't touched those in over 5 years now. . . It just blows my mind, it is sad living in a 'free country' yet we aren't even 'allowed' to purchase and use healthy, natural herbs. As long as it's safe (which it is), and you're not putting others in danger (which hasn't happened as far as I know), we definitely need rules and regulations for pharmaceuticals but kratom?! Seriously? there is much bigger at play with this thing than most realize" (Username Deleted, 2016).

"... You must be approved by a doctor who will arbitrarily decide what you need to take and how much. Each doctor you say may have a different opinion but hey, they have medical degrees so obviously they know more about

your situation than you, the person in pain, does. Perfect example of this. I was having panic attacks and this doctor put me on Effexor XR, one of the most powerful SNRIs on the market. This medication has horrible withdrawals, enough to keep you in bed for over a week with head spinning and passing out type shit. He could have easily gave me something light to start off with, like gabapentin, or pregbalin, baclofen, etc, but no, let's start off with the strongest medication out there. So here I am on year 3 of effexor 'addiction' when I don't want to take this shit because it gives me massive mood swings and if I don't take it I have incredibly bad anxiety and can't focus on anything for 1 second without getting dizzy. Our system is beyond broken, doctors are not as knowledge about medications as one would think" (DerkBerk, 2016).

"Why can't we make our own decisions about our body. Why do we always have to get doctors involved. The fact that we have a rigged healthcare system and the dea is concerned with 'self medicating' is troublesome. Who are they protecting by fighting a war on self medication?" (kamelizann, 2016).

"Unfortunately, Americans have been in somewhat of a slumber the last 20 years...perhaps due to the fog and haze that prescriptive medications induce or maybe because we have subscribed to the notion that our government really is protecting our best interests... However, we ALLOWED our constitutional/human rights to be compromised, minimized in lieu of of the government's averments that their call to action when passing legislation is for the benefit of public safety. And, perhaps, in its infancy, laws passed to protect the public was innocent enough. However, we are now suffering as victims of these same laws, laws that are being exploited in ways the initial proposals were not intended, circumnavigated to enable legal corruption as our elected and appointed public servants, zealously, capitalize on these laws for private and personal gain. It's time to take back our country. We can no longer sit back and watch the government ban 3000 natural supplements, no longer accept legalized 'stop and identify' maneuvers by law enforcement that hinder and compromise our rights as citizens of the US, a conceptually free society. The ignominy these public servants have exerted upon Americans in pursuit of individual incentives has become clearly obvious. Whatever becomes of Kratom's legal status, may this be a lesson to us--legislation needs correction, and proactive, preventive measures need to be enforced by the people of this country, to stop this madness. 'When injustice becomes law, resistance becomes duty.' -- Thomas Jefferson" (Gummybears-Lollipops, 2016).

"'But we are concerned with the public self-medicating itself' When was it decided it was the governments job to manage my medication, and supplements? I'm a grown ass man who is smart enough to know the risks involved with putting ANYTHING in my body. Whether that be bleach, or a harmless plant" (Mudsnail, 2016).

"Its really crazy be many Kratom users have been through the circuitous route of prescription medication. Many prescriptive medications either do not work well or possess considerable side effects that minimize functionality and quality of life. What is the recourse other than self-medicating for this group of

people? And what exactly is so unethical or immoral or illegal to CHOOSE to self-medicate? It's pathetic that a non-controlled prescriptive medication such as Requip or Mirapex, indicated to treat Restless Leg Syndrome, can cause sudden narcolepsy during daytime--meaning you can fall asleep abruptly and knowingly while driving or at work. Joke! And this isn't even a medication that is scheduled! Awesome, trying to legitimately treat s bad bout of RLS during nighttime and I could feasibly put my children at risk as I'm driving them to football practice. Here's the deal with the FDA...they are required to list every single side effect that is reported by patients that contact quality control--regardless if they have any evidence to support their claims and these adverse events are updated in the drug's package insert. The FDA is doing the same thing with Kratom, they are going to tally up the adverse events associated with Kratom based upon user testimony. This is why you see their claims of: psychosis, hallucinations, and so forth. This is their template of science. Kratom's safety profile in terms of mortality is pristine. They got nothing there. They can claim that Kratom's efficacy compared to a narcotic is statistically significant, however, it won't kill you unlike a true opiate, at least at doses we consider as normal. What they may do, as they have with antidepressants in clinical trials to demonstrate safety is to outrageously overdose and see what happens. If all fails, they will resort to the side effects that the public reports during the public comment period. The FDA is very crafty at manipulating outcomes. But I'm sure the AKAs legal team has the foresight and the ammunition to hopefully overcome these tactics. Again, keeping Kratom legal and accessible is a small issue of a much bigger problem. The government is controlling our ability to seek alternative therapeutic relief by making nature illegal and that is plainly unconstitutional" (Gummybears-Lollipops, 2016).

"Why are you [DEA head Melvin Patterson] concerned with the public self medicating....we own ourselves motherfuckers. You aren't my mother fucking parents. You don't and can't know what's right for me or anyone else in the godamn country. Fuck off with that shit!" (leffingsuck, 2016)

"Since the FDA is already inciting that Kratom users are self-medicating, they already perceive Kratom as a drug. And self-medicating equates to abuse, that dirty, seedy word that gains public approval and congressional support. The FDA will lose safety and efficacy arguments with Kratom--the safety profile is close to pristine, and subjective, testimonials lacking evidentiary scope will aid in their efforts to feverishly tally those awful side effects--but they plan on winning this based upon abuse. Their deflection from Kratoms safety will be abuse and perhaps the negative side effects reported that the FDA is required by law to disclose. . Personally, I think it's absurdity, but this has become a legal and politicized battle that needs to be won to set a future precedent that citizens will be willing to fight to preserve their rights and to lessen the reins that the government had upon the people" (Gummybears_Lollipops, 2016).

"Essentially, it needs to be treated like a methadone prescription and not politicized like marijuana. No. Not everyone uses it that way! Most people use it for pain, not addiction. Also, people like me use it to help with mental health

issues. If it was treated like a methadone prescription as you said, it will never be prescribed. No one can patent it. It will be as if it were banned - impossible to get. Unacceptable. We can regulate without making it a prescription only plant! Why shouldn't 'any idiot' be able to buy it if it is safe anyway? How do you determine who an 'idiot' is? Kratom is regulated as a natural health supplement in Canada and that's what it should be here" (carpet_munch, 2016).

"OK, lets ban alcohol. Lets ban tobacco. Lets ban coffee. Lets ban soft drinks, cheeseburgers, sex, and loud music. Or... lets let adults make decisions as long as it doesn't hurt anybody else. Especially when it is something as ridiculously benign as kratom" (sonicode, 2016).

"Perfectly stated...Dear overly intrusive government agencies, biased medical community, corrupt multi-national pharmaceutical institutions, et al., please stay out of my personal dietary and recreational bodily intake practices. I am harming no one, and only benefitting personally from what I decide to put into my body. Please stop your war against the good, tax paying citizens of this country. That is all" (mushroomsmoke, 2016).

"Yup, us Americans have been so brainwashed into thinking nobody can make the decision of what's best to put in their own body. They literally claim suboxone/methadone are legit medicines with NO withdrawal yet heroin is seen as the worst drug ever. . . " (showmethetiz, 2016).

FEAR OF REGRESSION/RETURN TO RISK

"I injured my spine and received surgery. The surgery was a trade off. *Immediate relief of relentless pain and increased mobility for a lifetime of* treatable pain. Unfortunately, treatable pain meant taking prescription narcotics. The narcotics dulled the pain, but did nothing for the inflammation. Which meant there would be weeks where I wouldn't leave the house because of how painful it was to move. It was still an improvement from life before surgery though. But, then came the side effects of the narcotics. A constant pain in my abdomen eventually landed me in a gastrointestinal doctor's exam room. After some tests he determined there were problems with my liver and stomach. There were also some very embarrassing issues with my colon due to the hardening of stool caused by the narcotics. I had to immediately stop taking all pain medications and was placed on a strict diet of broth and water for 3 months until my digestive tract returned to normal. The pain with narcotics was tough, without the narcotics it was unbearable. I searched the internet for anything that would help. After trying a few things I came across kratom. Nothing was working and I didn't expect kratom to work either. But, it did wonders that still shocks me to this day. It acts as an anti inflammatory and a pain reducer. It is also very easy on my digestive tract. I still have pain, but it's a manageable pain now. I can leave the house and have returned to a somewhat normal lifestyle. No narcotics, no addiction, no side effects. The government, the citizens, and the economy also saw a boost from my use of kratom. I was able to get off of disability and go back to work. People sometimes believe those on disability are lazy. I actually called the SSA and told them to stop my benefits. That's how thrilled I was to get back to normal. I owe that all to kratom. Now what though? What happens if it becomes illegal? I go back to prescription narcotics, the pain and inflammation come back, the internal digestive issues come back, and I'm afraid I will be filing for disability again while I'm stuck living my life in bed with constant pain. I wish the DEA actually cared about Americans more than they care about pharmaceutical corporations" (TheDEAHatesPlants, 2016)

"Kratom saved my life. I was addicted to methadone for over a decade. I was able to quit with the help of Kratom. If this ban does go through, then it looks like I'll be updating my Tor Browser and getting my Bitcoin account in order. I hate to be treated like a criminal but I refuse to let the DEA destroy my life" (Username Deleted, 2016).

"I would just like to say that when I hear the definition of a schedule one drug (high potential for abuse/addiction and no medical value), two things come to mind. Alcohol and cigarettes. Of course these things will be legal till the end of time. I am a recovering alcoholic and drug addict. Kratom has helped me through 2 years of sobriety. I am afraid of what I may allow to happen to me when it is gone. Guess I should check into a treatment center now or start hitting those

meetings more often. Either that or I will die drunk on a street corner with a 40 in one arm and a needle in the other. Depressing" (momurda97).

"I was just thinking about how crazy the 'imminent public health crisis' part of the kratom scheduling really is. It has always been ridiculous due to how mild and non-harmful it is, but hearing all of these testaments of how many people were able to finally get off of harmful pain medications and worse with the help of kratom has made me realize that the DEA truly has it backwards. How? With the great number of people who used kratom to stop using narcotic pain pills now having less than ONE MONTH to make an appointment with a healthcare provider to get back on the harmful pain medications, how many do you think will end up on a waiting list that lasts until long after kratom is scheduled? Then, what do they do? No kratom, because that is then just as illegal as heroin, yet even more difficult to get. How many people are going to switch to something even worse than those harmful pain prescriptions they so successfully were able to reduce the use of or totally stop using due to kratom? Scheduling Kratom will cause an imminent public health crisis, and the DEA is going to destroy the lives of people that people worked so hard to get off of harmful, life-destroying narcotic prescriptions...SAD!" (Username Deleted, 2016).

"This is so ridiculous. I was seeing a pain management doctor addicted to benzos, morphine, oxycodone from a car accident. I could not work kratom has helped me stay off pain medication. I have also taken time away from kratom I had no issues other than the return of my pain. I guess when the DEA and pharmaceutical companies can't make money off of drugs they ban them. Because let's be honest if they had concern about calls to poison control centers they would ban Tylenol too. I guess I'll have to go back on some type of pain medication or stock up. The DEA are a bunch of scumbags" (Paul8211, 2016).

"Heh Kratom saved my life and now the DEA wants to kill it. Nice. I'll be sure to address my goodbye world letter to all of the top executives at the DEA and congress who were spearheading this decision. (This coming from someone who has never been in jail, never smoked or done drugs or even pot and never wants to). Kratom took my chronic pain and depression and anxiety and took it away and made me feel like a normal person. Now the dea wants me to kill myself. Letters written, messages posted, but if it goes thru with the ban, I probably will just end it. Don't feel bad for me. It is what it is. Tired of the chronic pain game and don't wanna be a slave to the pharmaceutical companies and my doctors willingness to write me prescriptions. I truly feel the DEA is evil at this point along with all of congress R and D alike" (Iamkratomplzlisten, 2016).

"I AGREE its literally backwards, did we not lean anything from any type of past prohibition?? i guess not at least they should allow it and control it and the sale of it like they do with every other imported good in america, kind of weird right well ill be around to supply everyone until the end of the month ** DirectFromIndo.com ***then i will have a list of new things for sale that are alternatives keep an open mind, kratom was an alternative for something (painmeds mostly) and that worked out very well, while it lasted too! so maybe kratoms will be a great thing too, if it aint broke dont fix it, unless they make it

illegal and supress us, then its contradicting to what we are trying to do, find a healthy legal way to us manage in our life" (AnthonyBeee, 2016).

"DEA doesn't know the difference between drug dependence and drug addiction... a 30 day supply of pain pills lasted me 2 or 3 days, a 30 day supply of kratom will last, uh, 30 days. I don't want to go back to the life I had 4 years ago before I found kratom... I'm calling my Congresswoman Monday, and I encourage everyone else to do the same" (twentykillerhurts, 2016).

- "... I will continue to use Kratom. I will not stop. Fuck the DEA. I'm really not worried about supply because if there is demand for something then someone will find a way to supply it. My biggest concern however, is the price after the ban. I have a feeling that it will be through the roof. Maybe after a while on the black market the price of Kratom will drop and level out somewhat" (Danielcmk3, 2016).
- "...For people like me (ex painkiller addict, switched to kratom for price and health) with no money, it means a lot to see you guys stepping up. I have no kratom now, and it's been rough trying to quit. I sincerely hope things get reversed so life can go on. At this rate, I'm in big trouble. I don't want to go back to methadone. That stuff has so many side effects, it's basically not worth it for me" (CedarCabPark, 2016).

"By simply doing this the DEA has labeled this a dangerous drug in the minds of anyone who doesn't know, so now we're addicts. It's hilarious because we are actually the opposite. We are actively trying not to take narcotics. What a ridiculous country we live in" (Rygar82, 2016).

"I dislike that my husband takes Kratom, merely bc it's one of his 4 habits that we pay for and bc I hate seeing green powder everywhere, however; I'm totally terrified for it to become illegal. When we first got together he was trying to get out of years of pill addiction. He got out of it, had a few slips, and then picked up a DXM habit. He got off of that and would drink. Not alcoholic, always drunk. But the man would knock back some shots once the kids were in bed. He tried Kratom on a whim when he was trying to quit DXM and obviously liked it. It hasn't even been a year since he started taking it and he doesn't even drink anymore. We've had the same half-bottle of Kraken [rum] on the counter for about 4+ months now bc Kratom makes those desires just nonexistent. Why people can't see this is a literal positive life changing substance I simply don't understand" (lexieesmith, 2016).

"Seriously! I actually teared up a little thinking about this the other day. Very rarely in history does the DEA ever back down from a decision. I will remember for the rest of my life the ominous dread I felt when I saw the first post on r/kratom saying that it was going to be illegal. I remember reading some posts going like, 'The DEA is going to get a nice little footnote in my suicide note,' and honestly I almost felt the same way. It felt so hopeless back then, but then we actually started winning some battles. I hope that the people that fought back on kratom don't just stop when it becomes legal. We have shown that we can do a lot

once we unite. Hopefully we can come together to disband the corruption that is the DEA. It needs to be cut off like the parasite it is on society" (drazzy92, 2016).

"I use kratom medicinally for anxiety, concentration difficulties, and IBS. It is significantly more effective than any pharmaceutical for my purposes, and I know that many others have had the same experience. If this is outlawed, the only places we will have to turn to (narcotics or prescription cocktails) are so much more dangerous" (Username Deleted, 2016).

"This is a great great help and I really appreciate you putting so much time into writing this out for us. I really hope you will be able to continue putting your time into this very valuable cause. Kratom saved my life as well. I found kratom in 2010 and was able to kick an evil pain pill problem that all stemmed from permanent injuries in a motorcycle accident. I did however already move out of the USA because I feared kratom would be banned. So luckily I can still legally use kratom except with the times I come back to the USA. This is a horrible horrible thing they are trying to do. I estimate at least 1000 overdoses and deaths within a week if this bill is passed. The craziest part of it is their outright lie about why they feel the need to ban it. They claim they need more time to study its effects but processing it as a schedule one eliminates the legality of clinical studies. We have been conducting clinical studies in the University of Missouri I believe already and have so much scientific evidence already that kratom is a great herb. I have used kratom since 2010 literally on an hourly basis with zero side effects. I have so many bolts in my body I can't walk without it and refuse to go back on big pharma pain killers that previously were destroying my life" (higherdistro, 2016).

"This really kills me... I have been a heavy addict of prescribed pain medications for more than 5 years now. I have struggled with trying to get off of it, hitting the Withdrawals and crawling back to them because I cannot be functional while I am withdrawing. I recently discovered Kratom, and haven't even so much as had a craving for any of my prescribed medications. This really has been a life changing plant for me and it scares me that it's going to be taken away from me. I really don't wan to relapse... again" (VoxVirtus, 2016).

"Well, here goes the past three pill-free years down the toilet. I know people will say 'Well, just don't get back on pills, ya coconut.' but I know me. I have to have something. I've been like this my entire life, and I finally got to the point where only kratom was that something. I know they have read the success stories from kratom. You can't do research on kratom without stumbling across some success stories. But that doesn't matter to them. They get to choose what I can and can't put in my body. They don't care if I get high or not, as long as it's from one of their 'approved' drugs. I knew something was up when the CDC launched their little campaign not long ago. I knew someone had to benefit from a bullshit study like that. I guess I've actually had a sense of impending doom about kratom since I replaced that first pill with a scoop. It's a bad day for us that are trying to give ourselves a better life" (ViolentHallucination, 2016).

"Sigh... i am literally scared. I have horrid back pain including numb circles all around my left shoulder blade and spine. I work 58 hours a week... this is literally what gets me thru my day without pain.... idk what to do... i can get the pain killing effect from about 3.5 gram doses.... its not like i abuse it, i dont even do other drugs... i refuse to put opiods into my body, because ive watched people destroy themselves with it... sigh. Any advice... its pretty much illegal there issnt anything to change that.. is there something else just as effective...? Any advice helps..." (grantking 2256, 2016).

"Kratom has been a godsend for my anxiety, depression and tool to stay away from the deadly amount of booze I was drinking (at least a bottle a day). I haven't had a drink since I found kratom almost a year ago. I will taper down and use kava as my crutch now. I came close to losing everything from my job, to my house, to my family and more and i think it would have been way harder for me to make it this far without kratom. I feel sorry for those who have it even worse than me" (alfalfamale81, 2016).

APPENDIX D: DISDAIN AND DISTRUST OF REGULATORY AGENCIES AND PHARMACEUTICAL INDUSTRY

"This law isn't worth the paper it's printed on. The problem with this situation is that most disenfranchised groups in impoverished areas don't have access to the good health care that most if not all of their Canadian and European counterparts do. Thus, they must self medicate. However, this is made more difficult when politicians create these opposition-oriented laws. . . This may inherently cause problems in the future when more of the previously mentioned under-privleged [sic] are inducted into the justice system. However, cannabis and related drugs have also been a boon for the robber-barons occupying the courts, and a serious setback for not only those in the lowest castes, but even all the way up to the upper-middle class. I mean, it's not rocket science. Anybody who wants kratom to be illegal needs to come and catch these hands [fight me]" (BIGMANSCOOBS, 2016).

"Unfortunately the DEA gets funding to fight the drugs that are banned. The bigger the heroin and fentanyl epidemic, the more funding they will receive to fight the battle against the drug cartels" (chilrum, 2016)

"It's worth noting that as all of this is going on, there is a very very large pharmaceutical company who have synthesized some of the alkaloids in Kratom and are in the process of making it into a 'new drug' called PZM21. Ban something that's made by nature, synthesize its ingredients, potentate it x1000 and make it deadly to users whilst earning massive profits in the process. 'Merica' (IWillNotBow123, 2016).

"No one who works for the DEA would have a job without us. They are supposed to keep us safe. That's their whole function. to keep US safe. You and me. They are not supposed to be the pharma complex's personal army. They are a function of the Government. Our government. The one we are PAYING for with our tax dollars, the one we elect representatives to express OUR views in" (Username Deleted, 2016).

"Big Brother is always looking out for your best interest! Because we're not responsible adults with free will or anything" (Shroom_Cat, 2016).

"The government is simply trying to ban These RC's [research chemicals] because in my opinion they attempt to ban every recreational drug they can besides caffeine, nicotine, and alcohol, while pharmaceuticals become scheduled prescription only drugs" (EverSpinningSpiral, 2016).

"Politicians \neq scientists. Through a generation of political apathy and being disengaged in the political process, Gen X, Y, and millennials have allowed these idiotic politicians who know nothing about science, technology, or anything beyond being career politicians to get into office. This is why we are slowly turning into a plutocratic oligarchy of big corporations controlling the interests

of the people. And we have no one to blame but ourselves for the mess we're in. WE HAVE THE RIGHT TO PUT INTO OUR BODIES WHAT WE WANT AS LONG AS IT DOESN'T HURT OR INFRINGE ON THE RIGHTS OF ANYONE ELSE But our nanny state government doesn't see it that way. They believe the drug war is a war about restricting access to drugs under the assumption that reducing access to drugs will make people quit using them. In fact, at this point, I don't even believe that is true and I don't believe they believe it themselves. They want to use the powers of the DEA to control foreign governments and domestic dissidents, since they know many free spirited people with their own minds will most likely experiment with drugs. Not only that, they want to continue the control of the prison industrial complex" (Starscream777, 2016).

"Every word that comes out of these stupid fucks' mouths just really grinds my gears. The height of arrogance! I will never let this issue go as long as they don't go through the correct scheduling process. I will be a life long detractor of the DEA (and I'm still gonna take Kratom). Fuck this irrelevant organization, period" (Lawofnot2but1, 2016).

"They [DEA] are protecting Big Pharma. The 'protecting us' thing is the most unbelievable aspect of this whole absurdity" (Aldo3927, 2016).

"The DEA must be short on revenue. Time to add something else to seize and fine people for. There is no logical reason for this. These DEA people know nothing about the stuff, clearly" (thedisintegrator, 2016).

"If kratom is banned and we turn back to harder drugs, I fully believe we are playing right into the DEA's hand. I think that is a major motivator for the ban: keeping addict\$ on hard drugs. They know if a ban occurs, kratom will largely stop being available. But hard drugs and prescription meds will always be around and those alternatives are money makers for the pharmaceutical industry, the prison system, local law enforcement agencies, rehabilitation companies, etc; the list goes on. I bet the methadone & suboxone clinics in the US will see a big boost just from ex-kratom users alone. It's sad. We can control our own lives! =)" (Aldo3927, 2016).

"How do these assholes in the DEA still have a job? Why don't we come together and get the head cocksucker who's trying to ban kratom fired from his job? That should send a message to the corrupt, anti-American pieces of shit in Washignton DC who bend to the wills of their corporate masters vs bending to the will of the American people (as a whole, not individually). Why does the head of the DEA hate America so much for?" (Fuherincarnate, 2016).

"This ban smacks of pharma influence to me. There is just not enough evidence to justify a schedule 1 label, but if big pharma is making synthetic opiods from Kratom alkaloids, suddenly a whole new meaning to this bs emerges" (uhHuh_uhHuh, 2016).

"The entire population self medicates with aspirin, ibuprofen, acetaminophen, caffeine, alcohol, anti-histamines, laxatives, herbs, fruits and so forth. So, WHAT'S THIS BS ABOUT SELF MEDICATING???? Is it only a

problem when it's kratom, or some other natural substance, that big pharma wants to modify and present as a prescription drug? This baloney has nothing to do with safety or protecting the public" (time_has_come_today, 2016).

"How can you not see what Big Pharma has to do with this? They are developing drugs based on kratom alkaloids, therefore they do not want the cheap, raw form of the drug to be so readily available to the public. They also want to stop the thousands of people who are already using this as an alternative to the more dangerous and more expensive prescription opiods that are currently available. We are hurting their current and future bottom lines" (Rob3755, 2016).

"As a vaper of many years, seeing what the FDA did to shit all over the budding ecigarette industry makes me fear them. While I suppose that the global and even national user base of nicotine products is many times larger than that of Kratom, I still see the \$ signs they are going to inevitably grab for. I hope my analysis isn't skewed by that, but financially they, along with their power brokers, Big Pharma, have a massive incentive to bury Kratom forever. I'm also a former opiate addict who managed to get free from the snare that they helped create. Maybe my perspective is pessimistic, but to a certain extent I think they want people addicted and suffering, so they can get them on suboxone for years and years. I managed to un-bind myself from 6 years of Sub, but it was brutal as fuck. You really can't make money from patentable forms of mitragynine. Much like they cannot patent cannabinoid compounds" (Username Deleted, 2016).

"I think what it boils down to is money. They've seen kratom use go up year after year. Now they realize how many people actually use it. And since they see it as people self medicating they can't make money off that like all the deadly drugs they approved. Just like they stepped in with all the vaping stuff. Now they're making money off all that by placing their approval on it and making distributors pay money to them. Now they're stepping in here. Either way it goes they're gonna start making money from it. Best case scenario it won't be scheduled. But they won't just leave it as it is. They'll make all these conditions and have taxes on it and make vendors pay for all this extra stuff. I'm speaking about the FDA stepping in" (Mikeukblue, 2016).

"I think we all know the real problem here.. The big pharma companies that make billions on pain killers and depression meds need to ban kratom. I am completely in favor of petitions but after seeing this shit I'm almost certain we have no chance clearly someone made a back room deal or lobbyists paid the right people tons of money I seriously don't understand how this isn't up to voters and a state by state basis what the fuck government. Then they can pay certain large media establishments to write horror stories of how bad it is. Fuck this mess" (jackets19, 2016).

"I'm so sad about this, I just seen this last night ...kratom got me off alcohol (which I was having trouble with the law and drinking too much before)...now I don't drink and just take this plant for the last 2 years to help with anxiety and my quality of life has went up so much. I don't understand how they

can do this or why. It's just cause they can't make money off it the way they want. I wish they would just tax it, I don't mind paying a tax like alcohol and cigarettes just don't take it away. I signed petition but I don't think there is really anything we can do. I'll write letters or whatever too but I actually cried last night when I saw this. I can't stand our government anymore, I'm sorry but it's the truth. I don't see how it's legal to just ban and make laws without the people voting. They can use their reach and make anything illegal and put people in jail for whatever they want without having to vote on it just cause they don't like it. Making up bs about this plant and listening to the rich drug companies over the people. This isn't a democracy anymore, the people don't want this, big pharma wants this and probably paid someone off to come up with the bs" (MaggiezSoPimp, 2016).

"The US sucks. Our Gov is corrupt as hell and does deplorable things under the guise of trying to legislate morality. This country is what the early settlers were escaping. America is officially nothing more than a corporate whore who sucks the life out of it's people for \$. Doing drugs is not a crime, millions of people take tylenol every fucking day, not a crime, still a drug. I hope that this doesn't go through. America seems to like to make it's money off of imprisoning people, bullshit taxes on everything, sucking corporate dicks and hostile takeover of other countries with resources in the name of democracy. I tend to be a realist and am 99.999% certain that our shit ass government and the DEA will not 'hear the people'. Kratom inevitably has put a dent into pharma sales. Since the US is the bitch of pharma, they will retaliate. Maybe all kratom 'addicts' can go to their doctor to get hooked on a 'safe' alternative like Fentanyl or Opana or Oxys. So fuck you DEA, you pieces of trash, the war on drugs is a civil war on your own people and no one wins. Fuck congress too while we're at it. Make America America again. (Not Trumps way). While I agree protest and standing up is a good theory, until the people militarize themselves, there will never be change in this country until the people get there own military. Seriously. It's so far fucked up that there is no chance for middle ground, it has to completely fall and rise up again. This sucks. And BTW [by the way] political anything is fucking nonsense doesn't matter how much noise you make unless of course you have money. This country is a corrupt piece of shit fucked place to live. I know others are worse, but honestly, just let people live their lives and leave them the fuck alone" (deaneedstogo, 2016).

APPENDIX E: POSITIONALITY STATEMENT

I became interested and involved with dietary supplements out of necessity. A year into my undergraduate program I developed intense, treatment-resistant insomnia that only grew worse. Because of this, I witnessed firsthand the ineffectiveness and ineptitude a person may face in the healthcare system; doctors would prescribe a couple of first line treatments that didn't work, shrug their shoulders and then hand me off to someone else so that they cycle may repeat. By this point I realized I was going to have to do most of the heavy lifting myself and began researching every possible aid, both prescription and over the counter. In this search I eventually came across kratom. This is what led me to discovering the r/Kratom subreddit. All of those gave me a unique insight into the mentality of individuals who attempt to solve their problems on their own through accessible products that do not require doctors or insurance.

Alongside this experience was bearing witness over the course of my life to a government that over-policed the behaviors of its common citizens while only begrudgingly doing the bare minimum for them in terms of social and economic policy. This was a sharp contrast to the degree of leniency and support it provides to the economic elite—the ultra-wealthy and monolithic corporations—in terms of criminal penalties, taxation, and financial safety nets. It is these two beliefs and experiences that led me to conceptualizing the project in the manner that I did.