

IT SEEMS RATIONAL: A CONTEMPORARY REVIEW OF DECISION-MAKING  
MODELS CONVERGENCE WITH ADDICTION IN THE 21<sup>ST</sup> CENTURY.

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A Thesis

Presented to

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Morehead State University

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In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

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By

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September 12, 2018

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Accepted by the faculty of the Caudill College of Arts, Humanities and Social Sciences,  
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Law-breaking behaviors, especially those surrounding the use of illicit drugs and substances, has been an ever-increasing issue within our society, especially with the perceived “addiction as disease” or “disorder” models (see Volkow, 2000, 2016; Goldstein, 2002; Brewer, 2008; Hall, 2015). There is plenty of evidence to demonstrate that drugs alter one’s state of mind, and often leads to “poor decision making.” However, the real question proposed in the debates here is, are levels of alteration sufficient to conclude rational or irrational calculations absent or devoid...does an altered state invalidate all possibilities of one’s free-agency in the function of the “choice” equation. The current arguments of addiction are similar in nature to those which pose “society,” or

external mechanisms are to blame for the choices of individuals, in their restrictive capacity.

Contemporary approaches have largely been ineffective in their methods, as often they remove the capacity of free-agency, mistaking *flawed* logic for being equivalent to no logic. The purpose of this work is to show the need to include rational choice as party to any developing model to the subjects of sociology. Further, to investigate *pre-* and *post-* understanding before and after substance use. Peripheral intent, to explore the ideas of the “*appearance of rationale,*” and adaptational views and concepts, looking towards the future of RCT-based models.

This study explores three areas of inquiry concerning substance use understanding, in an attempt to identify patterns of conflicting personal philosophies or identify potential evidence of decisions based on what “*seems rational*” among the subjective experiences. The primary gaps in the literature, appear to be due to self-created “blind-spots;” by blaming inanimate things as “drugs” or the environment, failing to account in full for how the individual actor may be perceiving, reacting, or interacting within and without a given social atmosphere. There is a large failure to see the individual as a rational being even amidst “bad choices.” Poor decisions do not negate that rationalizing may have occurred, perhaps rather only *flawed, underdeveloped* or perhaps *impaired* rationale. Even the schizophrenic suffering from a state of delusion is acknowledged as making perceived logical and reasoned decisions, accordingly to environmental stimuli, along with the information they believe and perceive themselves to be receiving (see Csukly *et al.*, 2011).

To them, there is an ordered logic, which remains true, present and occurring regardless of how illogical these behavioral choices seem to outsiders.

There is emerging literature which contradicts many of the contemporary ideological approaches to law-breaking behaviors, chiefly among views on substance use, demonstrating that there is a clear conflict and irreconcilable understanding of the issues under current theoretical approaches (see Hart, 2014; Lewis, 2015; Fenton & Wiers, 2017 & Hather, 2017). Many are pushing against those which have adopted excusatory policies, in labeling addiction as “disease.” Theory’s which lead to the labeling of “drug use” and “addiction” as being so simplex or viewed merely as a disease-ridden ailment for the sufferer, fail to account for alternative behavior and free-will exercise. Likewise blaming the environment alone, in exclaiming “they had no choice,” both outlooks significantly diminishes both the capacity and potential of what the human experience is and could be. Hard science-based theory’s, as those built on laboratory experiments (see Yanagit *et al.*, 1965; Alexander & Hadaway, 1981; Peele, 1985), have mixed and often conflicting results, and are insufficient to be translative in terms of conceptualization regarding human thinking and behavior.

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### Abbreviations:

RCT	<i>Concepts, models or fundamentals rooted in or which find their foundations among Rational Choice-based theories &amp; decision-making models</i>
NIDA	<i>National Institute on Drug Abuse</i>
DMM	<i>Decision-making models that fall under choice-based theoretical principles</i>
AAD	<i>“Addiction as Disease” models, to include those which refer to addiction as variant disorders.</i>

\* indicates a crosstabulation

# CHAPTER 1

## INTRODUCTION

The human experience—are we in control of choice and capable of the free exercise of one’s own will and understanding? Are we just mere passengers on a trait train for an already genetically determined venture? These are not new questions. They do, however, rest beneath many of the inquiries concerning the state of humanity. These concepts and similar underlying questions rest at the foundation of such social issues as substance usage, among other deviant behaviors. Rational choice theory (RCT) rests as the overarching umbrella of concepts and ideas for the fundamentals of nearly all decision-based or decision-making models.

### **Intent of Exploring Rationale**

This work primarily focuses upon exploring and discussing ideas surrounding the choices of individuals. This exploration is an attempt to examine those in relation to substance usage from within the framework of the decision-making models. In the hopes to better understand the subjective experience and its related forms of reason, with consideration in the discussions given to thought patterns which deviate from the traditionally held and accepted forms of ordered logic or reason of thought. The focus is to investigate whether individual conceptions surrounding substance use can be measured or explored to identify rational or irrational calculations. Understanding first the “why” of choice justifications or antilogical patterns of thought followed intrinsically may assist in ultimately understanding the behavior which become manifested extrinsically. Self-perpetuating attractions or repetition of behavior are not sufficient to make disease (Lewis, 2017). *Substance use* and the notions of addiction as disease or disorder, fail time and again when compared to other behavioral addictions which are wholly devoid and

completely absent of substances, such as “shopping addiction,” “body image disorder,” “exercise addiction,” “sex addiction,” or “internet gaming disorder.”

### **Lesser Aims**

Secondary to its main purpose, this work seeks to give clear indication of decision-based theories progression over the past few centuries—its untapped potential for evolution, and the hopes for the future of decision-making models. Modern RCT methods and approaches have reached a precipice for being adapted to include subjective perceived logic or flawed reasoning within its framework, while remaining within the decision-making structure. The predecessors of RCT models and works, have paved the way for rational choice theory to become what it was always destined to be—the fullness in understanding of rationale as a solid integrated theory; capable of viewing the antilogical rationality of the deviant. As decision-based theories evolve, the future of such models will help us to be able to better understand and explain behaviors pertaining to the basic underlying truths. Throughout the 21st century, RCT based theories will undoubtedly, develop into better equipped and fully integrated concepts which are able to look at rationality, irrationality, logic and even antilogical thought patterns which are present in the everyday human experience—offering sound explanations upon such topics. Tertiary to the focus of this work, having the potential for RCT evolution in mind, and the future of decision-making models, the peripheral intent is to discuss the potential for new ideas—such as that of the “*appearance of rationale.*”<sup>[1]</sup>

Logic and reason cannot in themselves exist within an indefinable state, as is the case according to RCT opponents, such as nihilism and contemporary relativistic philosophies.<sup>[2]</sup> Rather they, *logic* and *reason*, must act as constants, being innately ordered towards a rule or rules, otherwise there would exist no means by which to measure anything rationally, fairly or

objectively. As reasoning creatures, we can draw conclusively, surmising the logic behind the need for rules and the established parameters which lay behind legitimate thought patterns and worldviews. It stands to reason, that if an individual “feels” that they perceivably made a “valid” choice in behavior according to what they “believe” to be true or correct; then we must consider these decision-making processes—even if antilogical or irrationally natured.

### **Contrasting Natures**

It is this test of time which has proven logic and reasoning’s undeniable worth.<sup>[3]</sup>

However, as often occurs within the state of the world, certainly nature’s law could cry one word to sum itself up...*antithesis*...for where there is, there is not—where there is light, there is also dark, where there is big, there is small, where there is up there is down—so too it is the case that where there is logic, there is antilogic, where there is rationality, there is irrationality, where there is intellectualism, there is anti-intellectualism. Often the philosophical underpinnings of a behavior being studied, or even a methodology’s development, these antitheses are not exhaustively explored or fully accounted for.

The philosophical orientations whether present according to one form or diluted by multiple conflicting forms, in either case should be considered, as these underpinnings will have influence upon perceptions, thoughts and worldviews—these being associated or correlated with the attitude formations and propensities of a given *rational* or *irrational* actor. While attitudes held may be perceived as static, one still has the capacity to alter the proclivities of one’s own current dispositions. Penchant behaviors are not sufficient to infer constants in determinant outcomes; as these can be altered by both extrinsic variables and intrinsic weighted values. Current trends lean towards the antithesis of rational choice-based perspectives; for example, contemporary relativism.<sup>[4]</sup> Free-will and choice have been largely removed from the mainstream

trends in social models and theoretical approaches to addiction, drug usage, as well as other law-breaking or deviant behaviors.<sup>[5]</sup>

### **Areas of Inquiry**

In response to shifting paradigms, this work is aimed at being primarily an exploratory approach, investigating areas of inquiry as:

<sup>(1)</sup>Are there ways to measure subjective rationale, or explore pre- and post-conceptual understandings, beliefs, perceptions, or attitudes?

<sup>(2)</sup>Is there the possibility to explore antilogical and irrational forms of logic and reason in relation to choice(s)?

<sup>(3)</sup>Are extrinsic elements sufficient to diminish or nullify subjective reasoning or rationale?

Much dust has been kicked up into the air concerning the issue of substance use, and it seems perhaps, that both the mainstreams of current thought have missed the underlying causalities for this perpetual query. After the dust settles however, which way are we to go? Are we simply destined to fall back in line within the framework of the two dominant perspectives? Conceivably, in continuing to explore such areas of inquiry as stated, perhaps we may begin to move towards a “*third*” yet unseen path; where from here, future models examine apparent rationality in its relation to “sufficiency of motivation.”<sup>[6]</sup> When previous efforts have not only produced a lack of positive results, but rather a furthering cause of perpetuation, demonstrating ineffectiveness, when do we take a new approach? “An optimal drug policy must aim to minimize not just drug abuse but also the costs to society imposed by drug control measures.” (Nadelmann, 1988, p. 8).

Towards the main purposes of this work, a mixed methods approach was taken. Drawing from quantitative and qualitative methods in examining the objective and subjective points of interest in attempting to identify areas of intersection regarding the inquiries which are being explored. A quantitative based questionnaire was used to approach *pre-* and *post-*conceptual understanding of the individual “before” and “after” substance use. The survey mainly consisted of “closed-ended” lines of questioning. There was in addition several supplemental “open-ended” questions formed in a semi-structured manner. Selected qualitative face-to face interview questions and responses were also included. These selected questions for inclusion have been drawn from a larger, separate study, but which have relevancy here. The intent of a mixed-methods approach was to investigate how the subjective experience and choice behavior may manifest, secondarily examining thought patterns, and how these may influence the identified overlapping factors.

Chapter 2 explores past and present literature perceived as relevant to the topics and points of discussion. It takes a summary view of Rational Choice Models, looks at past and present works. It contrasts perspectives concerning the present substance abuse issues. It takes a look at the economic costs of the issue. This section helps the reader to understand definitions of “addiction” under current models, as defined by the dominant organizations concerning this topic.

Chapter 3 looks at the methods utilized throughout the collection efforts for this work. This chapter gives a more detailed account of the mixed methods used and illustrates the intent of the framework chosen for accomplishing the aims for the areas of inquiry. It begins by demonstrating the primary function of the quantitative questionnaire, which was an attempt to reveal potential underlying personal philosophy(s) of an individual actor—that may be present or

occurring, driving rational as well as irrational behavioral choices. This intent being met by contrasting perceptions held, attained by a “before” and “after” avenue of investigation (a *pre-* and *post-*conceptualized understanding approach). The next portion reflects upon the selected qualitative aspects of data collection. This methodological approach was meant to collect raw, unstructured responses to better grasp levels of potential attitude formation.

Chapter 4 presents the findings and results of both the quantitative and qualitative data collection efforts. The first portion of this chapter begins by presenting the drug and alcohol related responses to the quantitative questionnaire. It is followed by a presentation of questions from the qualitative interviews. The extricated parts were intended to compliment the quantitative investigation and utilized to further explore the focus questions and relevant areas of inquiry.

Chapter 5 begins with a discussion on the potential implications of the quantitative and qualitative data collected. It highlights the points of potential intersections that were identified, which help to express the likely presence of changes in *pre-* and *post-* conceptual understanding or contradictions of perceptions before and after substance use. This chapter then moves into a critique of why many “hard science” approaches, and conversely theories which utilize *lab rat* experiments fail to take account of conceptual understanding. Chapter 5 then proceeds into exploring some of the current research that is being produced by the field of neuroscience upon the topic of substance use and its relation to addiction. This final chapter then discusses the potential implicated limitations of this study, recommendations for future study, and is then followed by a study conclusion.

## **CHAPTER 2**

### **LITERATURE REVIEW**

There are many facets to the human experience, from the many philosophical, psychological, biological, to traits, social norms and law. This chapter provides an overview of the literature surrounding rational choice-based theories, varying theoretical frameworks, contrasting discussions, some of the trends concerning perspectives upon substance usages within the United States, as well as a summary of current definitions of the addiction as disease-based models. The use of illicit drugs and substances, within our society has been viewed from two primary angles, that of the “deterrent” and the “addiction.” This is not to say that deterrence models cannot work, nor to say medical approaches fail, merely, the issue remains, therefore we have failed to truly uncover the “why.” This growing issue of substance usage demonstrates a clear association between drug use and traffic crash deaths, lost productivity, poorer academic performance, and a multitude of health issues (Center for Behavioral Health Statistics and Quality, 2015). These characteristics which affect society, both directly and indirectly, make it worthy of further examination.

#### **Rational Choice-Based Models**

Cesare Beccaria (1764) defined the framework which would later become rational choice theory (RCT). He did so according to the strict traditionally held definitions and philosophical approaches—to maintain logic and reason at the core of his attempts at solving the social problem of the criminal (Akers, 1990). However, the culture of the time, and the nation that Cesare Beccaria grew up, experienced, and resided in, looked at all others who failed to follow strict rules of logic or reason as simple, or intellectually inept, or as invalids of the mind incapable of being calculative. While his underlying logic and reason conformed to the strict

principles in his development of theory, he was clearly influenced too by the culture surrounding him; this in turn created blind spots, and an inability to truly assess certain underlying socio-behavioral characteristics and concepts, such as the effects of social learning, or choice triads influencing behavior(s).

Rational choice is a theory that has been utilized within the field of sociology and criminology for the means in explaining crime; and in this right, has contributed much to the fields and subfields of the social sciences. Generally defined, rational choice theory (RCT) is a principle that views the human as a reasoning actor who weighs means and ends, costs and benefits, and makes a rational choice based upon the information and stimulus input received; often being dependent upon two primary categories—“pleasure versus pain,” while further refined and developed concepts of RCT include expounded upon these ideas. According to this theory, among its original framework, it posits that behavioral choices, including the choice to engage in criminal activity, are based on purposeful calculated decisions upon which potential benefits outweigh the risks and or the consequences of one’s own actions as an actor within the social context.

### **Contemporary Rational Choice**

Many concepts built within varying sociological frameworks have come to share the common value that, most actors upon the world stage are viewed as “sensible” or “predictable.”<sup>[7]</sup> Early twentieth century contributions by those as Sutherland (1924), who under his theory of “differential association,” allowed for more refined concepts to develop and assist in breaking RCT models from within the confines of its past limitations, as did the work of others. Contemporary rational choice thought in the twentieth century, was largely assisted and pioneered by sociologists as, George Homans, who in 1958, laid the basic framework for

“*exchange theory*.” Homans largely grounded his assumptions in behavioral psychology and rational action, among other rational choice-based perspectives of the day. “...While these psychological assumptions have been rejected by many later writers, Homans’ formulation of exchange theory remains the basis of all subsequent discussion.” (Scott, J. 2000, p. 4).

As the mid-1960s and 1970s hit, other theorists such as; Peter Blau (1964) and James Coleman (1973), expounded upon and enlarged the framework that George Homans and other RCT predecessors had begun and helped to develop a more formal model of contemporary paradigms on rational choice theory. The dynamic and evolving RCT models will be greatly assisted in navigating the 21<sup>st</sup> century thanks to these thinkers, as well those such as Nobel-Prize-winning economist Gary Becker. Becker (1968), who contributed his adaptational view of RCT, in viewing criminal behavior as being no different from noncriminal behavior, in that it is the case, that neither the deviant to the law, nor conformer to it, is compelled or forced, in terms of conduct of choice in value adherence or observance.

As RCT based models continue to evolve, social actions are quickly becoming understood as rationally inspired or motivated, viewing *all* action as instrumental to the subjective rationality of the individual—and when examined thoroughly a form of rationale becomes apparent, to include those of an irrational or illogical nature. Many modern RCT based works have already been expounded upon to include more than the mere pain v. pleasure; but also gain v. loss; reward v. punishment; intrinsic v. extrinsic; material v. immaterial, tangible v. intangible (see Akers 1990; Sellers 2013). They include ideas of how these aspects may be calculated, or justified by the individual actor, even if done so according to purely *flawed* calculations of rational thought patterns. This antilogical or *flawed* understanding of rationale was first introduced by concepts developed under Sutherland’s (1924) theory of “differential

association,” though not expressly stated as such. Decision-based theories can be found at the basic core foundation of many fields and subfields, at both the micro and macro levels of sociological perspectives (e.g. sociology theories of religion, industrial sociology, economics, Marxist and conflict theories, prestige concepts). When RCT based models can be widely seen at the varying levels of theoretical perspectives it invites the question, as Goode (1997) framed it, “Why then do so many of us employ rational choice theory at some level, while explicitly rejecting it as an overall exploratory approach?”<sup>[8]</sup>

### **Noted Limitations & Critique**

All theories have in some way, limitations which will arise in their applicability. This is especially true when it comes to applying theory to human behavior, as there is almost an immeasurable number of variables that often cannot be completely accounted for; though some can be controlled for. Even in the cases of proper controls however, there will always be a margin of error observed. Rational choice often, when held within the context of its original definitions, historically speaking, maintains self-limiting boundaries (see Beccaria, 1764), however, within modern perspectives, such parameters have a less crippling effect upon contemporary paradigms of RCT. Conversely though, it must be noted here, that most of the criticisms offered by opponents to decision-making models, are based almost exclusively within the original foundations and framework of RCT; and nearly always fail to account for or consider the more recent literature concerning rational choice-based approaches and perspectives. Instead opponents often isolate small portions or attack historical perspectives of RCT that even most current proponents no longer subscribe to in full.

“It is not very hard to determine the reasons for rational choice theory's failures. The social phenomena that rational choice theory is incapable of accounting for share many

features in common... The first type includes phenomena characterized by the fact that actors base their choices on non-commonplace beliefs. All behavior involves beliefs... [For example] I will look both ways before crossing the street. This behavior is dictated by a belief: I believe that if I don't look both ways I'm taking a serious chance. Here, the belief involved is commonplace, not worth the analyst's while to look at more closely. To account for other items of behavior, however, it is crucial to explain the beliefs upon which they rest...." (Boudon, 2003, pp. 8-9)

As Boudon (2003) continues to explain, rational choice theory is comfortable with prescriptive beliefs as long as they are consequentialist. Rational choice theory has no trouble explaining, for example, why most people believe traffic lights are a good thing. Despite the inconvenience they represent, individuals accept them because they have consequences that are judged as beneficial only.<sup>[9]</sup>

### **A Rational Response**

It is certainly a seemingly impossible task, in venturing to elucidate the ways in which social actors are regularly called upon to evaluate situations and make choices, one does the best they are able with the most current understandings. However, in such a case, the critique here by Boudon (2003) has applied a narrow definition of consequence and what constitutes the "consequentialist." Here Boudon, like so many, misrepresents modern decision-making models, essentially holding them hostage to 18<sup>th</sup> century thinking, refusing to acknowledge the more than two hundred and fifty years of modern development and progression of RCT based works. Boudon, applies a severely restricted understanding and definition of consequence, which is insufficient to disqualify rationale that may be *flawed* or *counter* to a normative understanding of

logic—rather, it may be the case a set of antilogical rules for justification are being followed according to subjectively weighted values.

The consequences in a case as described by Boudon, contrary to the stated position, the rational and calculative may be present, only intrinsically or intangible form that, at the time, was unable to be measured or controlled for. This misconstrued view, like many RCT opponents, fails to consider more modern works of RCT (see Merton, 1938; Homans, 1958; Blau, 1964; Hechter, 1987; Coleman, 1990; Agnew, 1990, 2011 & Paternoster *et al.* 2017). Boudon goes even further by postulating the extrinsic actor’s weighted values would be in agreement with the conceptualized established outcomes, on the prime basis of such conceptualizations being viewed as, “*the matter is closed.*” By doing so, he critically limits the possibility of rational capacity of the individual actor, in being capable in applying methods of structural logic or reasoned form beyond one’s own intrinsic state of being to reinterpret information. Boudon arguments however, demonstrate the varied perspectives on human actions.<sup>[10]</sup>

### **A Review of Substance Use in America**

Since its contemporary inception in 1971, the drug policy within the U.S. has been primarily driven by a “hard-liner” attitude. In the mid-20<sup>th</sup> century, the contemporary hard stance on substance was initiated by President Nixon. This posture was meant to combat the issue of illicit substance use and abuse, in attempt to quell the perceived “drug problem” (Stanford University Web, 2016). The objectively held outlook of these hard approaches, has led to the creation of and allowed for many stringent laws, aimed primarily at the substance user. On the other end of the spectrum, after the hard-objective position had begun to wane, in came the mechanism of opposition, the “soft” posture. Entering the picture, in the early-to-mid 90’s came the “soft-liner” approaches. Only these approaches became nearly the exact opposite of the

objective accountability approaches to that of the hard stance. Seeking to rectify the perceived “social mechanism problem.” The soft-liner approaches in effect defend the individual at the behest of extrinsic forces or social pressures separate from the individual, instead focusing upon pointing out identified systemic pressures of a social or cultural nature, as root causal of deviant behaviors.

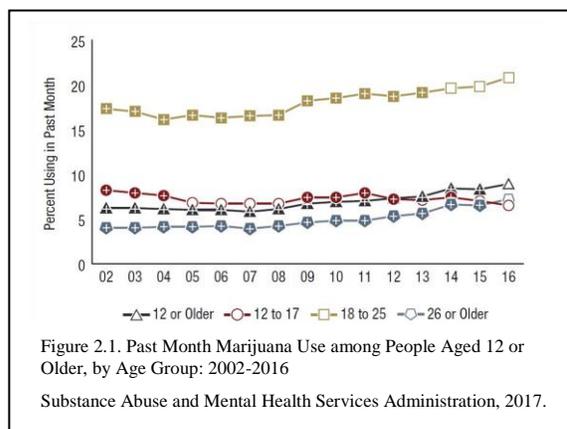
### Overview of Substance Use

The data collected over the past few decades shows there has not been a decrease but, rather an increase in general usage, health related issues, and the number of drug related incarcerations (DEA, Resource Center for Statistics, 2018). Modern trends reflect little-to-no diminishment of the issue concerning illicit drug

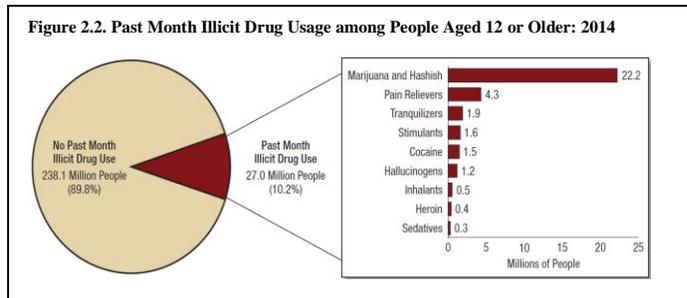
usage, rather it does not appear to be on a decline but on the rise. Studies as that of the Substance Abuse and Mental Health Services

Administration, (2017), reflect and demonstrate that illicit drug usage for persons aged 12 and older in the United State has been on a generally

upward increase. The longevity view in Figure 2.1 from the National Survey on Drug Use and Health (NSDUH), demonstrates that the overall number of usages among all age populations in the U.S. since 2002, has increased from approximately from 5.7% to nearly 10.1% (NSDUH-FFR1-2016, p. 15)—and when translated into millions, this is an increase of over 24 million regular users; which indicates current trends and approaches to understand or fix the underlying causality(s) may be ineffective.



In a study conducted by the Center for Behavioral Health Statistics and Quality (CBHS & Q), in 2015 it was estimated that 27.0 million people aged 12 or older had used illicit drugs within the past month. The rise in illicit drug use among age groups is also reflected in illicit drug use by adults aged 26 or older and, to a lesser extent, increases among young adults aged 18 to 25, relative to the years previous to 2009. Slightly more than 2.3 million adolescents aged 12 to 17 in 2014 were current users of illicit drugs, which represents 9.4 percent of adolescents. The 2014 percentage was lower than the percentages from 2002 to 2004 and was like the percentages



between 2005 and 2013. In 2002, for example, 11.6 percent [when asked in contextual relation] of adolescents used an illicit drug “in the past month.” More than 1 in 5 young adults aged 18 to 25

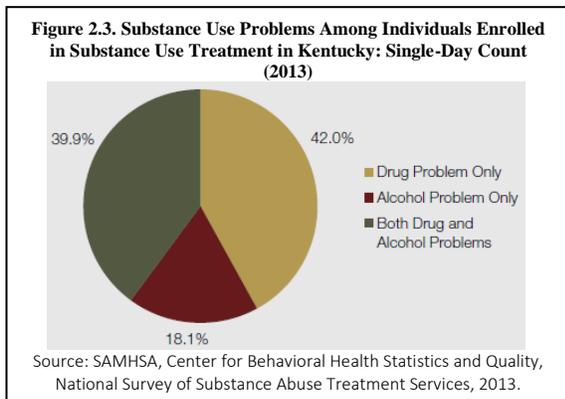
(22.0 percent) were current users of illicit drugs in 2014 (see Figure 2.2). This percentage corresponds to about 7.7 million young adults in 2014 who were current users of illicit drugs.

The percentage of young adults who were current illicit drug users was stable between 2009 and 2014. However, the 2014 estimate was higher than the estimates from 2002 through 2008. In 2014, an estimated 1.4 million adults aged 26 or older were current nonmedical users of tranquilizers, which corresponds to 0.7 percent of adults in this age group. The percentage of adults aged 26 or older in 2014 who were current nonmedical users of tranquilizers was like the percentages in most years from 2002 to 2013 (CBHS & Q, 2015 p. 13).

The differentiation in the data from 2002 to 2008, and from 2009 to 2013 seems to demonstrate there is a disconnected sense of a general increase of the issue, and the rising financial costs. From 1995 to 2005 alone (see Appendix A), there was a steady increase in

substance trafficking, this is reflected in the Drug Enforcement Administration’s data collected during these years. From this ten-year period the overall amount of illicit substances measured in kilograms had increased by 152% with several years having more significant increases than others. For the illicit substances of Hallucinogens, which were measured in “dosage per unit,” from the same ten-year period, seizures had increased by 220%.

While the nationwide contextual view of this issue shows margins of sustained illicit drug participation, focused studies reflect the issue in a similar light. When viewed at a more focused



point on the meso level, the percentage gaps appear to increase, potentially demonstrating a sense of what is experienced on a day to day basis within communities around the nation. When partitioned out and polarized upon a certain segment of the population it becomes easily

identifiable that we have a health crisis in relation to illicit substance usage. In Kentucky for example (see Figure 2.3), among those enrolled in substance use treatment in a single-day count in 2013, 42% were in treatment for drug use only, 18.1% were in treatment for alcohol use only, and 39.9% were in treatment for both alcohol and drug use (Substance Abuse and Mental Health Services Administration, 2014). With the inclusion in cases of where both drug and alcohol problems existed, illicit usage totaled 81.9%.

### **U.S. Strategies on Drug Control**

The United States Office of National Drug Control Policy (US-ONDCP) has several strategies on how to effectively combat the increasing health issues and problems being created by the use of illicit drugs. The policy focuses on three primary areas: focusing upon that of

“substance abuse prevention, treatment, and recovery—including four supplemental strategies...” (US-ONDCP, 2016), with supplemental strategies being: “...The <sup>(1)</sup> Prescription Drug Abuse Action Plan; <sup>(2)</sup> Increasing Security along the Southwest Border; <sup>(3)</sup> Strategy to Combat Transnational Organized Crime and the <sup>(4)</sup> National Northern Border Counternarcotic Strategy.” (ONDCP, 2016). The policy places coequal weight upon each primary area of focus; and being equally as important to that of the four supplemental strategies, all incumbent in the effort to unilaterally defeat the epidemic of illicit drugs and usage within our nation

The prevention strategy of the National Drug Control Strategy contains eighteen actions related to drug prevention, organized under five overarching principles. Those core principles being:

“(1) A National Prevention System Must Be Grounded at the Community Level; (2) Prevention Efforts Must Encompass the Range of Settings in Which Young People Grow Up; (3) Develop and Disseminate Information on Youth Drug, Alcohol, and Tobacco Use; (4) Criminal Justice Agencies and Prevention Organizations Must Collaborate; (5) Preventing Drugged Driving Must Become a National Priority on Par with Preventing Drunk Driving. Prevention is stressed in their outline for combating the drug epidemic, and specifically educating and reaching the youth of the nation; this is a seemingly important structure within the overall strategy, being defined as one of the most basic and key fundamental ways in which to win over the battle of illicit substance use; as this allows first for the effective neutralization of the problem, before it has even been given the opportunity to take root. “If we can prevent substance use and dependence before it ever begins, we can save lives and cut costs...” (US-ONDCP, 2016).

## **A Costly Endeavor**

War is a costly endeavor; no matter in what form it manifests. The war on drugs has been ever increasingly growing in cost to our nation, in both financial and human losses. The lack of success from both hard and soft-liner approaches, among the policies built from them, has taken a significant toll—and leaves one to question, have we truly identified the underlying causality of the substance use problem? From the hard-liner approach “...political figures endorse increasingly repressive measures to try to stamp out drug use. There are calls for more widespread drug testing, increasingly powerful investigative tools for drug enforcement agencies, and greater expenditures on all aspects of drug enforcement” (Nadelmann, 1988, p. 83). While on the other end of the spectrum you have those calling for a lessening, and in some cases a desire for complete removal of restrictions. Will this “soft” approach however, be sufficient then, in uprooting underlying causalities of such a persistent issue?

The damage is growing immensely in many aspects, from the individual home, to the national front; as well as for the flawed logic and reasoning of both extreme approaches, which has led to an overburdened criminal justice system and overwhelmed social welfare programs, which contributes to a large portion of the cost. “Economic Cost in 1995 of illegal drug use accounted for an estimated \$110 billion in total expenses for law enforcement, incarceration, treatment, and “lost revenue.” Health care expenditures associated with drug use cost another \$12 billion. Since the early 1980s, the criminal justice system has felt the impact of the substance abuse problem as the number of offenders arrested on drug-related charges has increased dramatically and prisons throughout the nation have become inundated with drug offenders.” (McNeece, 2003, pp. 194-195).

## Defining “Addiction as Disease”

Current trends of substance use have overwhelmingly been defined under the concept of, “addiction as disease,” particularly as a “brain disease” or “brain disorder.” The mainstream notions have come to view this “social” dysfunctional state more as a “disordered ailment of disease” in need of medical intervention or treatment. Here it will be revealed how some of the leading agencies of the United States define or establish boundaries concerning substances as *disordered disease*. According to the National Institute on Drug Abuse (NIDA), “Addiction is defined as a chronic, relapsing brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences.” (Lewis, 2017, p. 8).

### Purported Axioms of the Disease Addiction

Several of the leading institutions within America have been defining addiction in a manner, that until the past several decades, had never been seen before. Based on this definition, much of the current literature being produced has the tendency to liken addiction to a disease, or in some texts a severe disorder. The American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders [5<sup>th</sup> ed.] (DSM-5) concerning substances states:

“The substance-related disorders encompass 10 separate classes of drugs: alcohol; caffeine; cannabis; hallucinogens (with separate categories for phencyclidine [or similarly acting arylcyclohexylamines] and other hallucinogens); inhalants; opioids; sedatives, hypnotics, and anxiolytics; stimulants (amphetamine-type substances, cocaine, and other stimulants); tobacco; and other (or unknown) substances... All drugs that are taken in excess have in common direct activation of the brain reward system, which is involved in the reinforcement of behaviors and the production of memories. They produce such an intense activation of the reward system that normal activities may be neglected. Instead of achieving reward system activation through adaptive behaviors, drugs of abuse directly activate the reward pathways... In addition to the substance-related disorders, this chapter also includes gambling disorder, reflecting evidence that gambling behaviors activate reward systems similar to those activated by drugs of abuse and produce some behavioral symptoms that appear comparable to those produced by the substance use disorders. Other excessive behavioral patterns, such as Internet gaming, have also been described, but the research on these and other behavioral syndromes is less clear... The essential feature of a substance use disorder is a cluster of cognitive,

behavioral, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems...The involved substance/medication is capable of producing the mental disorder.” (DSM-5, pp. 481-488).

Looking at other national definitions of the perpetual substance use issue, according to the American Society of Addiction Medicine (ASAM), addiction is:

“a primary, chronic disease of brain reward, motivation, memory and related circuitry... addictive behaviors, which may or may not include alcohol and other drug use, supplant healthy, self-care related behaviors...[and may result in] altered impulse control, altered judgment, and the dysfunctional pursuit of rewards (which is often experienced by the affected person as a desire to “be normal”... Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.” (ASAM, 2011, p. 1).

In summary, these three prominent organizations within the U.S., agree upon the axioms of substance abuse being, (1) it is a clear and inherent “brain disorder/disease;” (2) it contains a debilitating nature or gripping characteristic of being “chronic;” (3) is caused by extrinsic factors, experienced by the disease ridden, potentially as response to biological or external mechanisms; and (4) without treatment it may result in permanence of disability or even death.

This chapter was intended to prepare the reader for later discussions. It began by looking at rational choice-based theories, contrasting frameworks concerning addiction, reviewed current numbers and strategies concerning substance use within the United States. The next chapter will look at the methods used during the data collection portions of this study. Chapter 3 gives a more in detail account of the mixed methods used and illustrates the intent of the framework chosen for accomplishing the aims for the areas of inquiry. It is anticipated that the collected data will demonstrate there are ways to measure subjective rationale and explore *pre-* and *post-*conceptual understandings, beliefs, perceptions or attitudes. The next portion begins by demonstrating the primary function of the quantitative questionnaire, and then reflects upon the qualitative aspects of the data collection.

## **CHAPTER 3**

### **METHODS**

A mixed methodology was ultimately utilized to provide a comparative outlook on the data which was to be collected, drawing from both quantitative and qualitative methods in examining the objective and subjective points of interest concerning the areas of inquiry. For the quantitative questionnaire there were over a hundred surveys returned. For the qualitative interviews, there were a total of 42 individuals who had agreed to participate. The data was sorted, categorized, and analyzed in a manner to draw from areas which might yield indications towards areas of choice influence and intersecting contributing factors. The primary method used for the quantitative survey was controlled questioning. The main method used in data collection for qualitative purposes was semi-structured interviews. The focus of the survey questions and interviews was to examine pre- and post-conceptions of individuals before and after their experiences with alcohol or substance use.

#### **Quantitative Questionnaire**

The survey is composed of thirty questions in total (see Appendix B). The survey was aimed at being an exploratory investigation and utilized a convenience, non-probabilistic sampling approach. The survey was anonymous, requiring no identifying information; it was primarily disseminated for data collection via invitation by way of social media outlets, networks, email, and to targeted audiences with a \$1 incentive per response, offered through a paid survey collection platform. There were a total of 105 completed questionnaires returned, giving a total sample population size of  $N = 105$ ; there was a threshold of 25% placed on completion rates. Those who failed to respond or those returned with 25% or more incomplete or refused to give an answer on 25% or more of the survey were not included and omitted from the

analysis pool (see Appendix C). These will be indicated by 25%(>) = I ; indicating 25 or greater percent incomplete (or unusable). This was done to prevent largely skewed data, as pre- and post-conceptual understanding about substance interaction before and after use, was the focus for much of the survey, it was necessary to have both—without the “before” and “after” attitudes or perceptions held, there would be no reasonable way to attempt an analysis.

The questionnaire (survey) is primarily a quantitatively based approach, exploring conceptions or self-perceptions of the individual rational actor, in relation to drug and alcohol usage—mainly consisting of “closed-ended” lines of questioning (see Appendix D). In addition, there are several supplemental “open-ended” questions. The intended population for the survey was participants who had used a mind-altering matter illicitly, or in an abusive manner at least once. The mind-altering matter considered here, are those substances found in the common forms of alcohol, illicit substances and licit (prescription) drugs. An abusive manner for the purposes of this work, is any action, application, effort, activity or operation in the carrying out or use of a mind-altering substance—which <sup>(1)</sup> is not in accordance with applicable laws; <sup>(2)</sup> use where local law permits, but federal statute does not; or <sup>(3)</sup> any case where it can be reasonably concluded the substance, has been utilized in a way which constitutes a misuse or abuse of the substance.

The question formatting, while largely linear, had two primary goals. The primary purpose of the questionnaire was to have a better understanding of or assist in identifying the intrinsic thought patterns, in its potential relation to interactions with extrinsic social atmospheres. Secondly, it was intended to be an attempt, in a quantitative approach, to measure *pre-* and *post-*conceptual understandings, attitudes and perceptions concerning drug or alcohol use. For the pre-conceptual understanding, the lines of questioning sought to identify the

participants attitudes and understanding prior to substance usage (“before”)—the lines of questioning for the post-conceptual understandings, sought to identify respondents’ attitudes or perceptions held “after” their usage. The primary function was to attempt to reveal potential underlying personal philosophies of an individual actor—that may be present or occurring, driving *rational* as well as *irrational* behavioral choices. This being revealed by contrasting perceptions, based on a “before” and “after” approach. The goal of this was aimed at revealing changes in logic, reason, or personal philosophy. This being indicated if, what was held previously had changed, altered, or was modified in some way from the perspective of the subjective experience of the individual—or in ways which showed clear conflict among rationalizations.

### **Survey Methods & Approach**

The first objective of the questionnaire was aimed at identifying if a relative set of personal philosophies were present. This is important to understand, as many varying philosophical approaches (worldviews), lead to the formation (whether licit or illicit) of logic, reason or decision-making systems (see Zinberg, 1984, “Drug, Set, and Setting”). These forms of logic or DMM systems have a correlation to attitude formations. The second function was meant to be an attempt in demonstrating pre- and post-conceptual capacity—that the human being is capable of re-evaluating. For values “yes” = “1” and “no” = 2. Among the survey, there were several nominally scaled questions used, due to the nature of the question and intended outcome. The raw information was organized into a data set for review (see Appendix E). These questions (Qs 10, 18, 29 and 30) explore the respondents specific subjective experience, in their relation to the atmosphere or personal exposures, in relation to drugs or alcohol use.

Respondents to Qs 10,18 and 19 could select multiple choices, a “select all that apply” method to collect data on whether first time usages contained more than one value or aspects present during and in relation to the experience. The nominally scaled questions are coded as following: A1 – A6; B1 – B5; C1 – C5, & D01 – D50. There are two ordinal coded questions, both dealing with the “age” of participants in relation to the circumstance described. The first ordinal question, number 9, found on the survey deals with relations to illicit substance usage. As the use of illicit substances per federal statutes remains illegal for all ages, it has been coded to reflect only two groups—those under the legally recognized age of 18 for adulthood, and those over age 18 for comparative purposes. The second ordinal question, number 19, deals with relations to alcohol. As it is per federal statutes, illegal for one to *purchase* or *consume* alcohol under the age of 21, this question has been coded to reflect only two comparative groups—those participating who were under the age of 21, and those 21 years of age and older during first time usage. These two are coded as follows: Q/9: 00-17 = 1 & Q/19: 18-99 = 2.

### **Qualitative Interviews**

The purpose of the qualitative portion was to draw from interviews with participants to identify intersecting points of vulnerability and attempt to measure how the subjective experience and choice behavior manifested—by examining thought patterns, and how these may hold influences upon the identified overlapping factors. For this work, only instances of drugs, alcohol, choice, or perceived relevant data has been extracted from the interview study for analysis. In seeking to explore the subjective, or micro-level perspective, the best approach seemed to be a mixed methodological approach. The main method used to this aim was semi-structured qualitative interviews (see Appendix F). The semi-structured interview was composed of one hundred and seventy-one questions in total; and due to the confidentiality nature, an

informed consent statement was read aloud to each participant prior to the start of the interview (see Appendix G).

The study's pilot region was primarily the city of Louisville, Kentucky as the epicenter, and the immediately surrounding urbanized areas. The questions extracted from the qualitative interviews, are aimed at assisting this exploratory investigation, and utilized a probability, population sampling approach. Participants were selected based upon gender (males), with current or previous experience with homelessness and age (between 17-25). The sample population was offered incentives for participation, which included a "goodie bag" containing various items; each bag equaling up to a total of \$20 in value. The interviews were conducted at various homeless shelters and areas which had high traffic or large concentrations of homeless populations. The typical interview lasted approximately 45 minutes, with the shortest being around 20 minutes and longest nearly 90 minutes.

While the coding methods of a qualitative nature can shed light into correlations, quantitative structures were added to lend in offering objective observations. This was intended as a supplement in support to the subjective positions of the participants—as the sample group encompasses both objective and subjective environments. Variables and characteristics of life surrounding the sample group, would no doubt present themselves in a wide and varying degree, which was why a dual method was chosen. This, to understand the paradigm construction of the individual's awareness to their relation to resources, education, region, vulnerabilities or susceptibilities. This to understand the level of effect the beliefs held may have upon the attitude(s) shaped towards the behaviors surrounding the issue. The independent variables being meant to measure what role current cultural and societal views play into shaping attitudes or how

it effects the individually perceived construct of fairness would need to be explored and its relation to homelessness, choice patterns, and behavioral manifestations.

### **Qualitative Methods & Approach**

One strategy used to assist in bridging the quantitative and qualitative was that of triangulation. Triangulation with the research field can assist with multiple data-gathering techniques, such as a quantitative-qualitative approach. As Berg (2017) discusses, triangulation has been utilized within the social sciences as a means towards multiple operationalism and convergent validation; utilizing the frameworks which underlay the formation of the triangulation approach, it is designed to assist the researcher(s) to measure a single concept or construct in its reliability and validity. Another big strategy utilized in identifying patterns reflected in the data was cross-tabulations. To address participant perceptions and concepts, the interviews included questions in which respondents were presented with a series of statements which pertained to past and future events and were asked to describe in their own words' past feelings and expectations for the future. The constructs presented were meant to help assist in more accurate triangulation applications. The statements were meant to help with looking at self-perception, and how it may potentially play into or what impacts it may have on manifesting an individual's response to the presented stimuli or environment(s) (see Shapiro, 1998).

From the interviews, the questions drawn for objective analysis included question 4, 5, 15, 18, 29, 32, 128 and 129 (see Appendix H). Questions were coded in varying ways for logging purposes; for refusals to answer or skipped questions on the part of the participant, these will be indicated by "no answer given" or "NAG." Identifying migratory patterns was the aim of questions 4 and 5. Question 4 asks, State of Birth, and 5, City of Birth. These questions revealed location of origin and were broken into three subcategories for analysis—(a) location originating

within the City of Louisville; (b) location of origin occurring outside the City of Louisville (Continental United States); and (c) location of origin occurring outside the Continental United States. This question may reveal potential contributing factors by region or by choice in relocation.

In measuring academic background, question 15, “What is the highest grade you completed in school,” was used to reveal participants subjective level of education and was placed into four subcategories for comparison and analysis. The four subcategories included, Q/15a: those respondents (r) who have less than a high school diploma ( $r < HS$ ); Q/15b: those who have attained a high school diploma ( $r = HS$ ); Q/15c: those who participated in some college (SC) but did not attain an associates, bachelors, graduate or doctoral level degree (D) ( $r = SC < D$ ); & Q/15d: those respondents who had received a degree in higher education to include associates, bachelors, graduate or doctoral level degrees ( $r = A +$ ).

In examining further potential factors of circumstance, question 18, “How long have you been homeless or in the life,” served a dual purpose, it revealed (a) length of homelessness and (b) length of exposure. For this work the data primarily being drawn from Q/18 part (a), in order to develop an understanding on length of homelessness as a potential contributing factor in relation to choice. Q/18a: For logging and coding purposes the respondents were identified alphanumerically by days, months and year(s) for example— 30D, D = Days; 8M, M = Months; & 1Y, Y = Year or Years. For application usages those who were a minimum of 30 days homeless, but not exceeding 1 year, will display as ( $r = 30D < 1Y$ ); those who were 1 year or more homeless ( $r = [1] > 1Y$ ); and those who gave no response or did not wish to disclose their personal information in response to this question = NAG. For calculating this portion, 3M =

0.25; 6M = 0.50, and 9M = 0.75. This question may help in identifying the earliest point a participant may have become vulnerable to cases of extremes in choice.

Investigating what role choice or non-choice in regard to the age participants vacated the home for the first time, question 29, “How old were you when you first left your family home, if you left,” this, reveals the earliest age the participant left the home. This question may help to identify points of conversion for contributing factors of choice or behavior. It may also reveal characteristics inherent to the subjective experience of the individual actor. Looking at comparative generational patterns, question 32, “What is the highest level of schooling any of your parents completed,” was aimed at collecting data on the respondent’s parents (*rp*) highest level of education attained. This question was placed into five sub-categories for further analysis and review. Those sub-categories being, Q/32a: those respondents [parents] who have less than a high school diploma (*rp* = > HS); Q/32b: those who have attained a high school diploma (*rp* = HS); Q/32c: those who participated in some college but did not attain an associates, bachelors, graduate or doctoral level degree (*rp* = SC < D); Q/32d: those who achieved a bachelors (BA or BS) level degree (*rp* = UG); Q/32e: those who achieved a graduate level degree or higher (*rp* = G +). This question may assist in determining consistency or deviation during the life cycle; with the aim of attempting to identify how choice factors or influences.

Looking at the participant(s) engagement with alcohol or drugs, question 128, “Do you use any of the following drugs: Alcohol, Cocaine/crack, Heroin, Marijuana, Methamphetamines, N/A, Other:?” Question 129, “How old were you when you first started using drugs or alcohol,” these questions were aimed at revealing participant substance use history, and the age of the respondent at the time they first tried it. These were drawn as a comparative measure to the quantitative questionnaire. For separate comparative analysis, question 128 was placed into two

sub-categories—Q/128a: those who had used illicit substances; and Q/128b: those participants who engaged in the consumption of alcohol. For logging and coding purposes (see Appendix I), substances being examined have also been given the following codes: Alcohol = ALC; Marijuana = MAR; Meth / Methamphetamines = MET; Heroin/Opioids = HEO; Cocaine/Rock form or Crack = COR; [illicit] Pills/Prescription Pills = PIP; Ecstasy = ECS; Mind Altering Mushrooms = MUS & [if applicable] Other = OTH.

This chapter laid out the basic framework for intended outcome. It moved into discussing the compositions of both the quantitative, as well as the qualitative methods which were utilized. This chapter was aimed primarily at preparing the reader for understanding the results section, by highlighting the important aspects of the data collected, that addressed the areas of inquiry. Chapter 4 focuses on the results analyses of the data gathered throughout the course of this study.

## CHAPTER 4

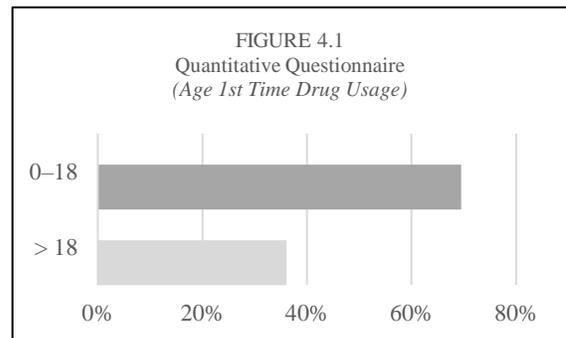
### RESULTS & FINDINGS

This chapter will begin by demonstrating the results of the collected data analysis. During the discussion portion, other questions which will be compared for analysis concerning *pre-* and *post-*drug use understandings will be covered. The results contained here, were aimed at aiding in the exploration of the areas of inquiry. They will be the foundation for later analyses and comparisons from which to draw inferences and identify potential correlational relationships or contributing factors, variables, or values found within the data sets.

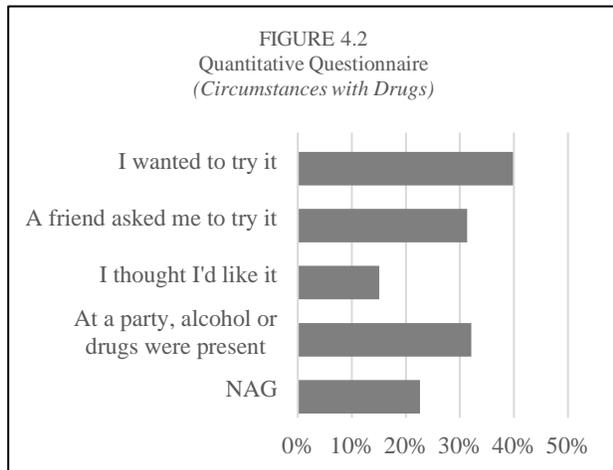
#### Quantitative Results on Substance Use

Beginning with a look at question 9, “At what age did you first try a drug or drugs,” of those who responded between the age(s) of 0 – 18 made up 66.7% of first-time drug use; while those over the age of eighteen made up 33.3% of the first time drug use sample population (see Figure 4.1). Of those first-time drug use instances which were reported, the mean = 13.7 average

years in age of first time encounter; the median age was 17, and the mode was 16. The youngest age reported being 12, and the highest being 62 among respondent. Question 10, “What did you try,” respondents indicated the highest reported



substances being: Marijuana 73.3%; [illicit] Pills or Prescription Pills 15.1%; Cocaine/Crack Rock 6.7%; Ecstasy 5.7%; Meth/Methamphetamines 1.9%; Heroin .95%; Mushrooms .95%; & LSD .95%. Moving into the characteristics surrounding drug usage, for those who responded, question 18 (see Figure 4.2) reveals this, and here participants were allowed to “select all that



applied” if subjectively they felt it was a value which factored in to them. This question asked, “What were the circumstances of your first experience with drugs?” Of those that reported the highest reason given was the value of “I wanted to try it” 38.1%; followed by, “At a party, alcohol or drugs was present”

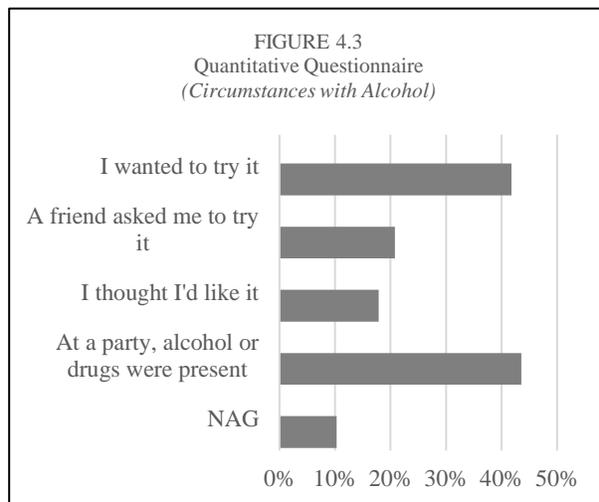
30.4%; “A friend asked me to try it” 27.6%; and “I thought I’d like it” 13.3%.

### **Alcohol Relation Results (Quantitative Survey)**

Looking at relationships to alcohol consumption in response to survey question 19, “At what age did you first try alcohol?” Those who responded between the ages of 0 – 20 made up 88.6% of first time alcohol use; while those 21 and over the legal age to purchase and consume alcohol consisted of 7.62% of participants. Of those first-time drug use instances which were reported, the mean = 13.0 years old in age, for first time encounter with alcohol consumption; the median age was 16, and the mode was 16. The youngest age reported being 10, and the highest being 55.

In examining the events surrounding respondent’s initial introduction to alcohol, question 29 asks, “What were the circumstances of your first experience with alcohol?” (see Figure 4.3) Of those that reported an answer: the highest reason given was “At a party, alcohol or drugs was present” 41.9%; followed by, “I wanted to try it” 40.1%; “A friend asked me to try it” 19.1% and “I thought I’d like it” 16.1%. In a follow up to the pre-conception in relation to that of alcohol usage, question 30 asks, “What would you say factored into your personal justifications, for the first time you used drugs or consumed alcohol? i.e. I just really wanted to, peer pressure, I

wanted to be cool, I had no choice if I wanted to be accepted etc. or any other factors you feel are reasonably applicable?” For this question of “personal justification” for either drugs or alcohol use, there were clear trends and patterns, with many similarly stated responses being frequently reported. From these I have drawn the three most frequently found responses—<sup>(1)</sup> those which indicated a clear explicit intent upon use, i.e. “I wanted to;” <sup>(2)</sup> those statements which indicated a purpose explicitly or implicitly of “experimentation;” and <sup>(3)</sup> those which explicitly implied “peer pressure” or indicated cases where peer pressure may be present. The highest subjective justification was, “I [just]/really wanted to” with 31.42%; followed by “experimentation” 27.61%; and “peer pressure” 24.81%.

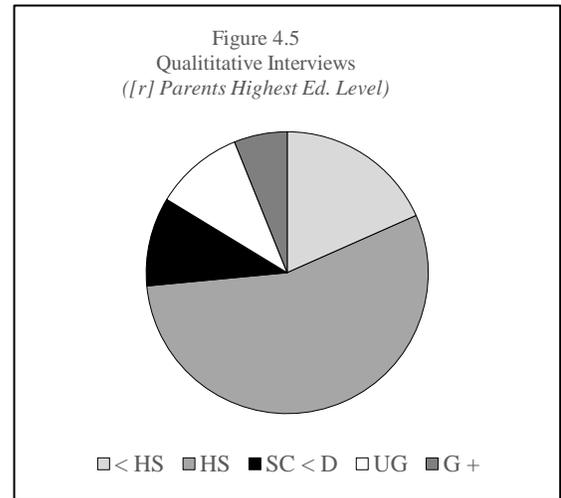
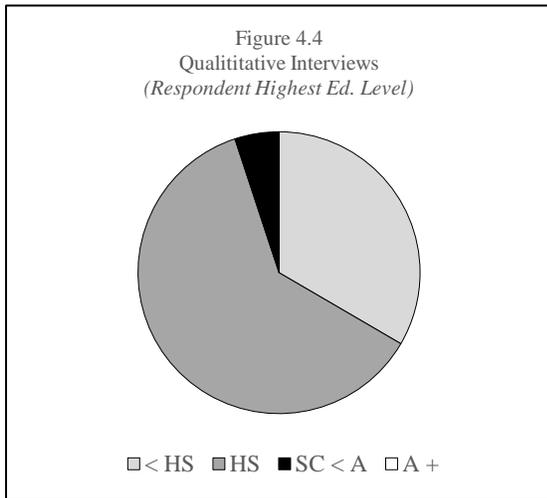


### Data Results (Qualitative Interviews)

Question four and five revealed the location of origin or region of the participants. Through this question, it was revealed that only 42.8% of respondents indicated originating from the immediate area of Louisville, KY. Over half of participants 54.7%, had origins outside of Louisville, KY; and 2.4% who had come outside the continental United States.

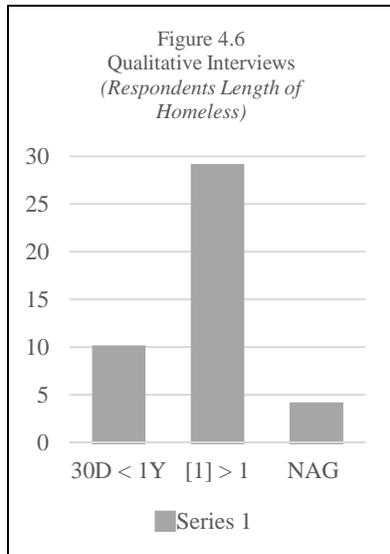
Question 15 examined educational levels of participants (see Figure 4.4). Thirty-one percent reported they never graduated from high school, while 57.1% stated they had graduated from high school/GED, while 4.7% had some college courses but no degree. Exploring further sociocultural, or perhaps generational patterns, question 32 revealed the respondents’ parents’ highest level of education attained (see Figure 4.5). Of those respondents who reported parents

that had less than a high school diploma was 21.4%; those who had at least a high school level degree was 64.3%; those who had received some, but not completed higher level education was 14.2%; those of undergraduate attainment was 11.9 and of those reported who had achieved a graduate level degree or higher was 7.1%.



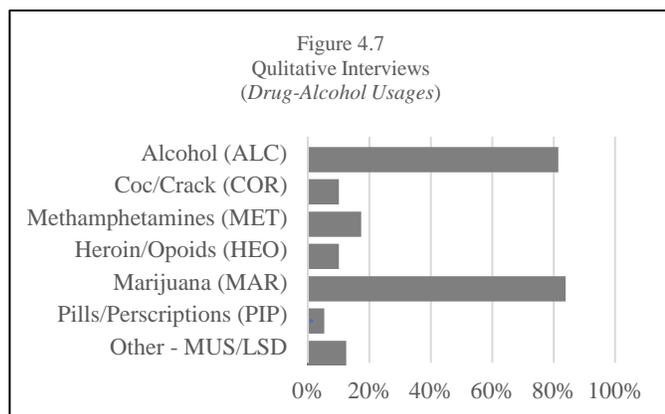
In identifying peripheral contributing factors which may influence rational or irrational decisions, question 18 revealed length of time homeless (see Figure 4.6). Those 30 days or less homeless was 19.0%; those who spent 1 year or more homeless was 73.8%. This question revealed a higher percentage of “long-term” homelessness, as opposed to “short-term” homelessness. Of those reported, this question indicated the mean = 1.74 average years spent homeless. The median = 1, and the mode = 1 year as most frequently occurring amount of time spent homeless.

Question 29 collected the age of participants at the time they first vacated their family home. This question revealed those under the age of 18, accounted for the largest grouping at 47.6%; followed by those aged 18 = 26.2%, and those over the age of 18 = 26.1%. The



respondents who had reported to have vacated the home for the first time at 18 years of age and younger totaled 73.8% of the total sample population. The mean = 17.0 average years in age of first time having left the home; the median age was 18, and the mode was 18. The youngest age reported being 8, and the oldest being 23.

Concerning question 128a (drugs) and 128b (alcohol), (see Figure 4.7), beginning with the highest reported usages among illicit substances (drugs), it was revealed, Marijuana = 80.9%; followed by, Alcohol = 78.5%; Meth/Methamphetamines = 14.3%; Cocaine/Crack Rock = 7.1%; Heroin = 7.1%; [illicit] Pills/Prescription Pills = 2.3%; Mushrooms = 2.3%; & LSD = 2.3%. Of those reported 76.2% aged 0–17 of participants had tried drugs or alcohol for the first time under the age of 18; 97.2% aged 0–20 of respondents had tried alcohol under the age of 21; with only 2.7% having tried it at or above the legal age (21) for purchase and consumption. The mean = 14.3 average years in age of first time substance use; the median age was 15, and the mode was 16. The lowest age reported being 6, and the highest reported being 21.



### Results concerning Area of Inquiry I

Most of the respondents to question 15 (68.57%) firmly believed, prior to their first-time drug use, “felt they were doing something wrong,” however, 72.38% also believed at the time

many substances should not be illegal, yet 71.43% of respondents to question 16 (Did you reasonably feel at the time drugs were not good for your body?) firmly felt “drugs were not good for their body” but used anyway, being inconsistent with their beliefs or attitudes. Half of

Table 4.1		(post) marijuana perceptions		Total
		Yes	No	
(pre) marijuana perceptions	Yes	29	0	29
	No	8	68	76
Total		37	68	105

Table 4.2		(post) harder drugs perceptions		Total
		Yes	No	
(pre) harder drug perceptions	Yes	80	0	80
	No	6	19	25
Total		86	19	105

respondents (50.48%) felt “alcohol consumption was not good for their body,” and 69.52% of

Table 4.3		(post) alcohol perceptions		Total
		Yes	No	
(pre) alcohol perceptions	Yes	73	0	73
	No	26	6	32
Total		99	6	105

respondents to question 21 firmly believed prior to first time [underage] use of alcohol consumption, “that it should be restricted” and agreed with current laws. However, 85.41% of all participants tried alcohol, despite many who felt it was bad for their body, and for the first time (aged 0—20) under the legal restricted age limit, with the mean average being 13 years of age—while there was only a small percentage 14.59% who observed the restrictions held by law, and consistent with their belief, partaking at 21 years of age or older. The highest post conceptual understanding and perception increase was that of alcohol use, increasing by 24.76%. Marijuana pre- conceptions, from question 6, 27.62% of respondents felt “it should be illegal” with post- conceptualized understanding and perceptions increasing by only 7.6%. while the majority at 72.38% believed marijuana should not be illegal; with “harder drugs” 76.19% positively indicated a pre-conception belief they should be illegal, with a marginal post-conception increase of only 5.7%.

### Results concerning Area of Inquiry II

71.43% of participants positively indicated that prior to their first-time substance use, they perceived and believed in responding to survey question 16, that “drugs were not good for their body, including marijuana;” yet of the total participants, 73.33% tried one or more drugs in

their first experience with substance use. This along with other values already expressed indicates a pattern of inconsistency of pre- and post-conceptual belief.

Many of the interview responses indicated that logic and reason is being applied during the decision-making processes, even if by inappropriate standards or flawed logic. Environmentally speaking the rational actor engages with their senses accordingly in their actions and interactions with the world around them.<sup>[11]</sup> During the interviews one respondent who had experienced long term homelessness, when asked about their expectations for the future and how things could get better, the participant commented, “being homeless makes everything worse, you’re forced into a world you don’t want but have to do what you gotta do to survive and getting arrested comes with it, the streets can be mean if you are in the wrong area.” The sense of “doing what you gotta do” by the participant was described in relation to criminal activity being conducted in order to survive. Another participant commented, “When you’re out on the streets you do things you might not previously, ya now doing what have to... I’d even steal a bunch of DVD’s or CD’s and sell ‘em to people for five bucks \$5, \$10 or \$20, whatever they would take ‘em for, then get my meals on the cheap from McDonald’s.” Looking at a third respondents’ comments, known only out on the streets as “Ducky” or “the Duck,” when asked where do you see yourself in ten years—he simply responded, “Dead.” When asked why he thought this, he responded, “...yeah sure there’s programs, but none of them actually stop the hurt occurring out on the streets and once you’re in, you’re in, ain’t no way out once youse in too deep, you just keep doing what you gots to and the drugs man it’s the only way to get by.”

In these cases, all three respondents demonstrated a form of rationalization concerning behaviors which are, by social standards deviant. The thought processes, even if flawed logic or reason was used, certainly shows a pattern of reasoning and justifications being made on the part

of the actor, in response to the stimuli, options, environment or choices they “*perceive*” they are being presented with. Each case here had different and varying degrees and manner in which the respondents approached their rationalization for justifying the actions they had taken, in coping with the struggles of street life. Still, in all three cases, they demonstrate a clear pre-conceptualized understanding, that what they’re now doing conflicts with present laws. The expressed subjective experiences of participants, as the ones discussed here, do give rise to the possibility for exploring antilogical and irrational forms of logic and reason in relation to choice behavior.

### Results Concerning Area of Inquiry III

In response to survey question 3, “the first time you used drugs or alcohol, were you reasonably in control of making the decision to use;” 96.15% strongly held the belief “they were in control” as determinants in their own choice behaviors. While the total participants, in

Table 4.4		could you reject			Total
		Yes	No	NAG	
feel you shouldn't be doing it	Yes	67	0	0	67
	No	34	3	1	38
Total		101	3	1	105

Table 4.5		were you in control			Total
		Yes	No	NAG	
feel you shouldn't be doing it	Yes	67	0	0	67
	No	33	4	1	38
Total		100	4	1	105

Table 4.6		could you reject			Total
		Yes	No	NAG	
reasonably know this was illegal	Yes	92	0	0	92
	No	9	3	1	13
Total		101	3	1	105

Table 4.7		were you in control			Total
		Yes	No	NAG	
reasonably know this was illegal	Yes	92	0	0	92
	No	8	4	1	13
Total		100	4	1	105

response to survey question 4, “the first time you used drugs or alcohol, is it reasonable that you could have chosen to reject this act or to say no... for example, was the power to say no in your hands?” — 97.12% held the firm attitude, belief and perception that the “power to alter the choice-choice outcome relationship” or the ability, and full faculty to change the path manifested rested solely with their own will, and free-agency thereof in exercising it. This demonstrates the ability to be in accordance with or against commonly accepted conceptions of freedom.<sup>[12]</sup> This was reflected in the following ways:

(1) Full Knowledge: [i.e. knew it was illegal] “At the time did you reasonably know doing this act was illegal” (drugs), 86.67% said “Yes” & “If underage, at the time did you reasonably know doing this act was illegal” (alcohol) = 88.57% said “Yes.”

(2) Clear Understanding: [i.e. it was wrong, alters the mind or harmful to the body], “At the time did you know that drugs alter a person’s state of mind” (drugs), 91.43% said “Yes;” “At the time did you know that alcohol consumption alters a person’s state of mind” = 88.57% said “Yes.” Participants belief pre-conceptual usage, “harmful to the body” for drugs 71.43% said they did believe this, for alcohol it was 50.48%.

Perceptions of wrong concerning alcohol, 65.71% believed it was wrong, and for drugs 68.57% believed it wrong and 63.81% felt intrinsically “they shouldn’t be doing it.”

(3) Full or Complete Consent of the Will: this simply is a result of the first two. In short it is an offense against the logic, reason or right conscience (becoming therefore *illogic* or *disordered reasoning*), which was applied to other or similar circumstance and stimuli.

As reflected from the collected data in this work, the majority of participants demonstrated they had full knowledge of illicitness, a clear understanding of harmfulness, and they did it anyway by full consent of the will over the environment, presented stimuli, or potential alternate options or choices.<sup>[13]</sup> This clearly reflects that external elements, regardless of type, are not always sufficient to diminish or nullify the intrinsic subjective reasoning or rationale; even if such reasoning of the individual

actor is entered into according to flawed logic or illegitimate thought patterns.

Table 4.8	What did you try?					Total
	Marijuana	Coc/Crack	Heroin	Pill/Perscrips	Meth	
drugs were not good for your body? Yes	75	0	0	0	0	75
No	2	7	1	2	18	30
Total	77	7	1	2	18	105

Chapter 4 presented the results of analysis for both the quantitative and qualitative data collected for the purposes of this study. The next chapter begins with a discussion on the potential implications of the findings. It gives a summary of current research being explored in relation to substance use and addiction. It progresses into limitations of this study, recommendations for future study, and finally a study conclusion.

## CHAPTER 5

### DISCUSSIONS & CONCLUSION

This chapter will begin with a discussion of implications from the results. It will then move into a discussion of other theoretical and scientific approaches and offer critique about why they are insufficient amid models defining addiction as disorder or disease. It will offer a look at recent and current research being conducted surrounding this social issue. Finally, it will offer a conclusion to this study, along with ideas and recommendations for future research.

#### **Discussion Upon Areas of Exploration & Inquiry I-III**

While identifying the specific or detailed justifications for why an individual did or didn't choose to partake in substance use is difficult, we can draw inferences from the reflected data. It is clearly reflected by the data that there does appear to be a set of pre- and post-conceptual understandings, attitudes or perceptions concerning substances—with measures of subjective rationale being implemented upon the presented values. Further there is indication of underlying philosophical underpinnings present in the pre- and post-conceptual understanding and nature of the rational actor's choice; with noted abilities for re-evaluation of previously held beliefs.

Overall concerning illicit substances and alcohol, there are negative associated perceptions with both, as overwhelmingly participants believed, according to demonstrated *pre-* and *post-*conceptual understanding, that substances should either (a) be largely restricted, as is the case with alcohol, or (b) cumulatively 72.61% believed drugs are harmful to the body, wrong and should be illegal. Marijuana makes for an interesting outlier, as it is only in this case with perceptions upon this substance that there is a clear and present differentiating and contradictory position of the held pre- and post-conceptual beliefs when compared to other substances. By all other indications of the data, marijuana should also be considered by participants to be harmful

to the body, wrong and illegal. In both cases of substance and alcohol usage, the respondents general behavioral decisions and attitude changes which indicate clear instances of cognitive dissonance, partaking in actions which are inconsistent with their worldviews.

### **Reasoning & Perceptions**

Perceptions towards illicit substances and alcohol seems to be inconsistent, indicating potential conflicting personal philosophies and contradicting dichotomies in approaching *pre-* and *post-* beliefs when concerning substances and substance use. There appears to be unequal weighting and systems of grading being utilized when the individual actor rationalizes between the varying substances, in the value relation and perceptions they choose to attach to each. Some perceptions demonstrating a contradiction of one another within the same value, as is the case with alcohol. This differentiating approach to all substances except the one may indicate the very potential for unequal forms of equational logic or reason being applied to the same or similar stimuli when presented to the actor within a scenario or circumstance. Perhaps these large discrepancies (1) demonstrate the potential presence of flawed logic or illegitimate reasoning being utilized in the thought processes surrounding the personal philosophies in relation to choice justification, when concerning substance usages. (2) Intentional or unintentional weighting; (3) unequal grading systems by ill-informed worldviews in relation to the available, accessible or sufficiency of an alternate choice path. (4) Willfully overriding systems of legitimate thought, by allowing extrinsic circumstances to sway their thinking. This, in turn causing them to reject ordered logic, *irrationally* accepting a corrupted value, which, under normal circumstances, or in the presence of other sufficient alternative options, would otherwise be considered *undesirable*. However, in cases as these, perhaps the desire of the “undesirable” itself is sufficient for the actor to override sound reason.

### **Subjective Rationale Persists among External Elements**

The majority of participants in both the quantitative survey and qualitative interviews demonstrated they had full knowledge of actions which were illicit, a clear understanding of harmfulness to self or society, and they chose their action anyway by full consent of the will, despite the environment, presented stimuli, or potential alternate options or choices. It stands to reason by this reflected data, that social mechanisms are not sufficient to diminish or nullify subjective reasoning or rationale. The external known factors present for the participants, were conceptually understood as holding the potential for “*punishment*” or “*repercussions*,” and clearly maintained a directness of truth—that the actions went against societal laws. This directness in understanding however, was not sufficient to dissuade the free-agency of the individual to enact their own consent of will, in committing to an opposing behavior.<sup>[14]</sup> The commitment of self, to the conflicting action, may demonstrate clear understanding of the attitudes surrounding the choice—by partaking in substance and alcohol use despite perceptions, this may potentially be revealing discord among pre- and post-conceptual understandings, beliefs or attitudes. The attitudes and perceptions held, were often not sufficient to dissuade the rational actor from committing to a choice behavior, even one in which they knew held the “*capacity*” of self-harm, or damage against themselves as a result. There is a clear lack of fear of reprisal from the exterior social institution or mechanism, by their choosing to engage in the act and giving consent of will. It reflects an apparent opposition between good and bad choices.

### **Addressing the Hard Science Approaches (The Lab Rat)**

There are many reasons why “lab rat” studies should not be used as major supporting factors for theories concerning human social behavior. First, animal experimentation cannot be translatable or accurately transferrable into the human subjective experience. Secondly, animal

trials are extremely limited in the scope of the scenarios which can be introduced for testing prime and alternative behavioral choice patterns. Thirdly, there exists no measure which can test *pre-* and *post-*conceptual understanding, belief, perception or attitudes of the choice path being chosen in itself, on part of the lab rat. Fourth, conceptual understanding is not equivalent to either perpetual (repeated) or abstinent (refraining) behavior. Lastly, many animals may demonstrate knowledge-based abstinence or repetition through learning trials—however, these behaviors remain purely mechanical and are not sufficient alone to demonstrate knowledge-based “cognitive understanding” of conceptual gain or consequence according to any set of rationale, logic or even antilogic (see Schuster & Thompson, 1969).

Varying “addiction as disease” models fail to make full account of the individual subjective experience (see Zinberg, 1984). Many perspectives and policies regarding addiction models are often too broadly applied from “*lab rat*” experiments, utilizing animal responses as hard evidence(s) to social behavior. While such testing on animals can help us to gain some insight, the inferences they offer will be reactionary based behavior with no underlying knowledge of why or potential to reveal *meaning*. Testing in this manner gives the basis for inconclusive or unsubstantiated inferences only—in short you can never ask the animal what the experience meant to them, nor put a cognitive justification to the “*why*” they choose a certain behavior to become manifest. This kind of exploration is insufficient for entry as evidentiary offerings of the human experience. Such evidence should not be used or viewed largely as valid for supporting human rationale in relation to social behaviors. Using such experiments as hard evidence gives an oversimplified account of findings, due the fact that lab rats simply, are not human. (see Yanagita, Deneau, & Seevers, 1965; for contrasting see also Alexander, 1981; Hadaway 1982 & Peele, 1985).

## **Addressing Hard v. Soft Approaches Toward Substance Usage**

The hard-liner approaches largely fail often due to this perspectives inability to account for effects among the micro level. Conversely so, soft-liner approaches widely fail, often due to this perspective inability to account for the effect upon the macro level. They at their core, respectively, appear to be stark contrasting paradigms, with an inability to make a conducive environment to anything other than this way or that. The extreme cultural shift in focus from hard to soft approaches, allowed for the relativistic models to be more widely created, and ultimately, they only shifted blame almost completely from person to system. Secondly, it has led to both excusatory behaviors, as well as failing to wholesomely address the issue itself. The soft-liner approaches have helped some, just as the same is true for the hard-liner approaches. However, both viewpoints have overwhelmingly proven themselves to have failed in solving the issue, or even to diminish it—which still yet persists and appears to be growing.

The substance use issue as a societal focal point of investigation still maintains interest, even in a 21st century environment, where drug restrictions have been loosened to a degree not seen before within the past near eight decades, there is still a clear appearance that substance use, abuse or misuse persists. Many states have legalized means of use, along with scheduled drug distribution, including marijuana—yet the problem seems to only worsen (see McCarthy, 2003; Jackson & Owens, 2011; Maxwell, 2012). Kids now have easier access to opioid derivatives, through their parents' prescriptions, this allowing for the age population range of users to be expanded. Nearly a hundred years later, we can still see that the loosening of alcohol laws in a post-prohibition America still poses challenges (see Moore, 1989). From increasing DUI's, resulting in an innumerable number of innocent victims as the result of death or injury from car crashes, to the college campuses across America where “rape culture” can be found; in such

scenarios, it is often alcohol, which is the binding agent between poor- or impaired-choice and a violent outcome (see Stringer, 2018). It is logical to conclude, after witnessing in history the two opposing approaches, “*constraint*” and “*loosened*,” both widely failed in their own rights, that neither restricted, nor lessened approaches possess the ability to be successful in solving or understanding the potential underlying characteristics for why the problem persists—even among an ever-increasing amount of data calling for policy and institutional revision.

### **Addressing the “Addiction as Disease” Model**

From the objective evidence being produced by the neuroscience field, and related sub-fields, it can no longer be logical or reasonable to simply suffice in saying addiction is disease. Marc Lewis (2015), who argued that the occurring brain-changes, which are correlated to addiction are not any more dissimilar to that of any other normative everyday changes occurring or happening within the brain. From this perspective there is no significant distinguishment between good or bad habitual behavior; rather simply that habitual patterns are being followed. Addictions as a result becomes, according to present cultural definitions, nominally categorized, by either being “perceived” as simply being good or bad in conceptual understanding or perceptions. Therefore, it stands to reason, that addiction(s) is/are no more than “bad habits,” which can be disrupted in terms of cyclic patterns, broken or halted completely, equal in weight to that of potential disrupting its opposing counterpart, “good habits.” There can however, be “severe cases where addiction indeed tips over into the category of brain disease, but that does not prove that every case of addiction fall into the disease category...” (Fenton, 2017, p. 157). In short, the disease model and definition cannot be applied to every case, as the exception to the rule does not establish the rule.

“Poor” choices made in an influential state or altered frame are not sufficient to conclude that choice or autonomous functioning is not present or holds no sway, or significant ascendancy within the manifested behavioral outcomes. The definitions surrounding the language of addiction as disease models, is often timid and delivered in an obscure manner with uncertainty rather than concrete confidence. In the literature surrounding the issue, the addiction as disease supporters, in part, though done with a great reluctance, must acknowledge choice as a possibility, as even they struggle to completely explain it away.

“...[as shown] the dominant perspective in the biomedical sciences, clearly stated by the influential scientist and president of the National Institute on Drug Abuse (NIDA), Nora Volkow...Addiction is related to choices that are (potentially) beneficial in the short-run, at the expense of long-term positive outcomes, a facet of impulsivity known as delay-discounting. However, association does not imply causation, and indeed there is both evidence that impulsivity traits ‘*can*’ become more pronounced through engaging in addictive behaviors.” (Fenton, 2017, p. 157).

### **Addiction is Incapable of being Disease**

Addiction is often referred to as any other disease. Though impulsivity “can” become more pronounced as a result in the individual engaging in substance usage, this is however, often directly correlated to a choice to introduce the substance, especially so, in cases where it is the initial introduction of substance into the body. The second area which no doubt exists in the role choice plays, is when a person “relapses,” as substances under such conditions have been absent and void from the body beyond the point at which the substance itself can be effectual in impairing choice. In a sense, in cases of relapse, it is a subsequent *initial* or re-introduction by choice of substance to the body. In either case, where initial or re-introduction occurs, the substance itself has no account to be made, and simply cannot be blamed, for it did not choose itself.

When addiction is portrayed as disease, it is often compared to other medical diseases which remain “unaided” and in a state of natural etiology within the life cycle of the ailment. Under the ideas of “aided” v. “unaided,” this is however, where addiction as disease tends to deviate from traditional understandings of diseases or disorder. Substances exist strictly extrinsic to our bodies, and can only be introduced, as opposed to being produced by the body under normal conditions. Therefore “substance abuse” as a disease operates in an opposing manner to that of traditionally held understandings of disease. Substances remain in an external state, it is only by the introduction of them does the “disease” of addiction become initiated, making it rather an acute aided ailment, which cannot persist at the ceasing of use. In short, the disease begins to dissipate almost immediately, the moment the user desists in receiving an external substance into the interior of the body. In halting use, the disease ridden merely suffer deuterio-effectual outcomes, which are no longer directly attributed or associated to the substance itself. Often these secondarily felt effects can, with sufficient time, be recovered from, even to the extent, the individual returns to a normative state and orderly level of functioning (see Lewis 2015, 2017).

Are the disease-based or AAD models the right path for this social query? Perhaps it is in changing cultural and sub-societal norms that lay at our foundations for our relation to substances which may lend to greater impact. Might we fare better in engaging with the exploration of rational and irrational thought to solve such an issue, rather than creating “soft” excusatory policies intended only to outweigh and offset the “hard” policies? We are fighting this battle on the wrong fields, charging up mountains of legalities, sailing upon vast oceans of medical interventions and delving into deep valleys of pharmacological aids—however, it is within the mind, amid the endless rational or irrational possibilities, perceptions, attitude

formations and thoughts, where this war is being waged. The faster the two dominant perspectives can acknowledge this, the sooner we can begin to work towards taking a different, clearly needed approach.

### **A Look at Current Research**

Helping to pioneer the reshaping of how we view rational choice in its relation to drugs is the work of Dr. Carl Hart (2014), a neuroscientist and associate professor at Columbia University. Hart, in his efforts in seeking a solution and neurological cure for those it seemed were enslaved by crack, heroin, and other substances, recognized the potential overlap of rational choice action being manifested. For the past five decades, it has been traditionally believed to be irrational or nonsensible behavior in the partaking in substance use.

In the beginning of his research Dr. Hart (2014) recreated the “hard science” lab tests conducted using rats where they were given the “choice” between pressing a lever for crack or lever for water...who were witnessed as continuing to press a lever in order to receive cocaine, did so even as they were starving to death; Hart, believed he had identified the root cause as a neurological addiction to powerful dopamine stimulation in the brain’s reward center. However, as Hart continued his studies of substance use and addiction, he discovered evidence which led him to believe that drugs were in fact, not so irresistible. He hypothesized, that it may be more often the case of not having “enough” motivation to resist the reward satisfaction of substances, only being successfully resisted through being offset by an ulterior more desirable reward or resource. In his book he gives rise to the notion that addiction may in fact be a continual rationalization and proactive choice in the absence of reward which is enough to satisfy the action of resistance by an actor’s standards.

For his study on human trials concerning his hypothesis, Hart gained participants (current addicts) through advertising, offering to those willing to participate, the chance to make \$950 while smoking crack made from pharmaceutical-grade cocaine. To participate, individuals agreed to live in a controlled medical setting (hospital ward) for a duration of several weeks during the experimental period. At the beginning of each day, researchers observed through one-way mirrors, nursing staff would place a prescribed amount of crack in a pipe, in which grade levels varied day to day, and participants would have their initial “start dose.” While smoking, the participants were blindfolded so that the size of starting dose was unknown. Then, throughout the day, each participant would be offered several opportunities to smoke the same dose of crack. However, each subsequent offer (post start dose), the participants could opt for a different reward, which they could collect at the end of the study. Rewards varied from five to twenty dollars in cash or such equivalents in a voucher for merchandise (Hart, 2014).

In order for a participant to receive full amount of possible incentives from the study—it would be necessary, that a participant needed to select the alternate reward over crack one hundred percent of the time. Hart found, when the dose of crack was a higher grade, and alternate reward low, subjects typically chose to keep smoking crack. However, when doses were smaller, participants were more likely to pass it up, taking instead five dollars in cash or vouchers. He also found, when the alternative reward was equal to twenty dollars, one hundred percent of “addicts,” chose the monetary reward; despite dosage levels—even with the knowledge they would not receive it until the experiments conclusion weeks later (Hart, 2014).

Though this experiment was within a controlled setting, it does reflect the free agency of choice, in that participants demonstrated clear understanding over rewards they perceived as adequate, accepting some, while rejecting others. The exercise of employing “weighted systems”

according to their own rationale, whether reasoned or antilogical, demonstrates a clear *pre-* and *post-*conceptualized understanding of the “value” monetary resource has within our society. Despite the potential *reward* effects of the substance being offered, they still chose an alternative option to that over the drug itself. While the controlled environment may offer unique limitations, Hart’s study, has significant implications, and offers more strengths than weaknesses, as participants could have been interviewed in depth post the experiment. This unique accessibility is a huge distinguishment over traditional lab rat testing, as you could answer the “why” they chose *this* over *that*—gaining potential insight into the *meaning* behind motivations.

### **Limitations of the Present Study**

The present study is not without its limitations. With the quantitative questionnaire, with more time, perhaps a more developed and refined set of, or additional questions could become manifest, which could be better suited at examining the intricacies of *pre-* and *post-* understanding, before and after substance use. Qualitative and quantitative methods both hold their own unique pros and cons, while sharing similar strengths and at times weaknesses.

There are several limiting factors when conducting qualitative research. For this study, location of the interviews may have affected the individual’s ability in being honest and forthright with the information being provided. While the interviews were conducted behind “closed doors,” most took place within the office spaces of the varying homeless shelters the males were temporarily residing, hanging out at or visiting; interviews took place during the day time hours, when many other residents or visitors were about. This in turn, as with many studies, raises concerns to accuracy and truthfulness of responses. With interviews, it might also be

difficult to explore fully underlying causalities, and in explaining the difference in the quality and quantity of information obtained from participants (Barbour 2000).

With quantitative methods, there is always the concern as to accuracy and truthfulness of responses returned. Many influencing factors can occur—an individual’s self-perceptions or desired self may incline them to “lie” or “exaggerate the truth,” in efforts to meet underlying social desirability characteristics. Another aspect that may have impacted such a study is that of population size. While many surveys were sent out to varying areas, not many were returned, creating a smaller in stature sample group. Controlling the environment is another potential limitation of this study as it was anonymous (Baxter, 2008). Due to the anonymous nature, demographics were not collected, this was done in the hopes that respondents would be more willing to tell the truth, by the creating of a perceived non-identifying environment. As such, this study was limited in its ability to collect on demographic information for later analysis of potential intersections.

### **Recommendations on Future Research**

Aspects of social learning and other theoretical frameworks may ultimately help us to better understand the subjective perspective of the individual, through decision-making models, to witness the varying rationale present. Dr. Hart’s experiments demonstrate that those who chose drugs rather than monetary compensation, viewed money as insufficient. It is in exploring ideas as the “appearance of rationale,” perhaps may aid in identifying *irrational* decision-making models, and how their formation manifests. In Dr. Hart’s study, the concept of “money” was not always sufficient to keep certain individuals from choosing drugs. This suggests a problem of sufficiency, and in turn demonstrates, while flawed, a rational process of reasoning and justification occurred. Perhaps it is not a “drug” problem, but rather, a problem of “sufficiency in

relation,” in conjunction with illegitimate decision-making models that merely appear rational or logical. I would suggest these types of actions, which have tendency to deviate from legitimate thought patterns, are the potential result from several possible variants—<sup>(1)</sup>a disordered cultural or sub-culturally held idea; <sup>(2)</sup>thought patterns following equations of an illogical nature; <sup>(3)</sup>purely *mis*-calculative decisions; <sup>(4)</sup> direct or indirect unreasoned choice behavior; <sup>(5)</sup>an ill-informed or ill-advised worldview.

Other subjects of inquiry certainly might be, exploring or investigating pregnant women who quit drugs or alcohol “cold turkey,” (meaning, to give them up entirely and in whole, without assistance) upon finding out they’re pregnant, while other women continue to use substances harmful to themselves and the baby. Why, in one case, pregnancy is “*sufficient*” in relation to the substance use-choice relationship for the woman who chose to cease using; while in another case, pregnancy is an “*insufficient*” motivating factor for a woman who chooses to continue using? The ideas of *sufficiency* v. *insufficiency*, in relation to what “appears or seems rational” and the choice outcome, seems to be the intersection for which needs further exploring of the individual actor’s decision-making processes. Perhaps further investigation among these ideas, can aid in a better understanding of rationality within different perceptual settings. With these ideas at hand, maybe in examining the motivated state of mind, which is carrying out processes of rationalization within fixed irrational behaviors, might reveal what will motivate people to “choose drug abstinence.”

Results as have been reflected by this study should prompt questions for future inquirers as, if substance use becomes inherently disordered and eventually spilling over into the chronic ailment of disease, even from a single use or dosage, why are we utilizing such substances within medical fields for treatment. Of which medical opioids and substances, are significantly higher in

concentrated purity and grade than what can typically be found on the “street” with drugs that have been cut and diluted by other chemicals. Why then, do so many “patients,” on a regular, and daily basis within a medical or hospital setting, fail to emerge as “*disease ridden*” addicts? Instances as this and many others should prove alone, addiction is not a disease, and effectually implicate, that the answer to such queries lies somewhere other than where the blame is presently being placed. If the top agencies concerned with defining addiction as “disease” and “disorder” claim the need for medical intervention, otherwise excess substance use may result in permanence of disability or even death—why then, are there an overwhelming number of cases, where individuals demonstrated the ability to become “clean” (meaning to desist in the use of drugs altogether) of their own free-will and exercise, in the absence of medical treatment or interventions?

### **Conclusion**

Though rational choice theory has its limits, it is too important to be overlooked within the field of the social sciences. It is in no sense an obscure or esoteric perspective in criminology. Nonetheless, the literature on rational choice in crime has overlooked it. Even though some earlier deterrence researchers had taken note of learning concepts, deterrence researchers today tend to skip over it when integrating deterrence and rational choice theories.” (Akers, R. 1990, pp. 657)

It seems decision -making models and rational choice-based theories are at a point in time, in which to be further expounded. Developing and integrating decision -based approaches with the empirical observations that have been made over the past nine decades, since its contemporary inception in 1920. Almost a century later, and with the refinement of epistemological and methodological approaches; it would only serve to strengthen the theory, if

definitions were to be broadened to become integrated and to include the near century's worth of empirical data which has manifested since. Researchers should look at the possibilities of expanding its borders, in ways that will serve to ground it in a contemporary society as well as global viewpoint and further seek to identify its potential for becoming a more integrative theoretical framework.

There is still much to be learned about human behavior. Rational choice theory and decision-making models have just as much stake in contributing to the future works of the social sciences. This is especially so, when we can capitalize upon its strengths from within an integrated approach. The frameworks of RCT are poised to become a requisite 21<sup>st</sup> century integrated theory, and must continue forward in asking questions, seeking to answer such queries which surround the human mind and issues of addiction.

APPENDIX A  
Drug Enforcement Administration Seizures – 1995 to 2005

<b>DEA Domestic Drug Seizures ('95-'05)</b>					
<b>Calendar Year</b>	<b>Cocaine (kgs)</b>	<b>Heroin (kgs)</b>	<b>Marijuana (kgs)</b>	<b>Methamphetamine (kgs)</b>	<b>Hallucinogens (dosage units)</b>
<b>2005</b>	118,128	622	283,382	2,161	8,868,465
<b>2004</b>	117,844	669	266,088	1,656	2,196,988
<b>2003</b>	73,720	788	254,242	1,680	3,038,916
<b>2002</b>	63,513	709	238,646	1,347	11,824,798
<b>2001</b>	59,415	747	272,120	1,634	13,863,756
<b>2000*</b>	58,674	546	331,964	1,771	29,293,957
<b>1999</b>	36,163	351	338,247	1,489	1,717,305
<b>1998</b>	34,447	370	262,180	1,203	1,139,524
<b>1997</b>	28,674	399	215,348	1,147	1,099,825
<b>1996</b>	44,735	320	192,059	751	1,719,239
<b>1995</b>	45,309	876	219,830	876	2,768,046
Source: DEA (STRIDE)					
*CY 2000 had several large LSD Seizures					
CY 2014 statistics are preliminary and subject to updating					

Source: Drug Enforcement Administration of the United States (DEA). Resource Center for Statistics, Facts, National Statistics, National Studies & Publications.

Retrieved from: <https://www.dea.gov/resource-center/statistics.shtml>. Feb. 26, 2018. Web.

APPENDIX B  
Example Quantitative Questionnaire

Q: 17 - \_\_\_\_\_

**Informed Consent**

This is an anonymous survey, no personally identifying information will be collected. The purpose of this questionnaire is to collect data, to better understand intrinsic thought patterns, in its potential relation to interactions with extrinsic social atmospheres. Secondly, attempting to measure pre- and post- conceptual understandings concerning drug/alcohol usage. This study has been reviewed to determine that participants' rights are safeguarded and there appears to be minimal risk or discomfort associated with completion of the questionnaire. You may choose to discontinue your participation at any time and may refuse to answer any of the questions. Completing the questionnaire is (up to you) and you can withdraw from the study at any time without repercussion. If you agree to participate, you will be asked a series of questions, some of which may be considered personal.

**Conceptions on First Time Drug/Alcohol Usage Questionnaire**

If you consent to participating, then we kindly ask that you please complete the following 30 question survey—it only takes roughly 5 minutes to fill out. Your participation is greatly appreciated.

1. Do you currently struggle with addiction?  
 Yes     No
  
2. Have you previously struggled with addiction?  
 Yes     No
  
3. The first time you used drugs or alcohol, were you reasonably in control of making the decision to use?  
 Yes     No
  
4. The first time you used drugs or alcohol, is it reasonable that you could have chosen to reject this act or to say no... for example, was the power to say no in your hands?  
 Yes     No
  
5. Do you now think marijuana should be illegal?  
 Yes     No

6. Did you at the time of first trying marijuana feel it should be illegal?  
 Yes    No
7. Do you now think that “harder” drugs, i.e. heroin, crack cocaine etc., should be illegal?  
 Yes    No
8. Did you at the time of first trying a drug feel “harder” drugs should be illegal?  
 Yes    No
9. At what age did you first try a drug or drugs? \_\_\_\_\_
10. What did you try?  
 Marijuana    Cocaine / Crack    Heroin    Pills / Prescription Drugs  
 Meth / Methamphetamines    Other (please specify) \_\_\_\_\_
11. Did you seek in obtaining the drug for yourself?  
 Yes    No
12. Did you ask someone you knew to obtain it?  
 Yes    No
13. At the time did you reasonably know doing this act was illegal?  
 Yes    No
14. At the time did you feel you shouldn't be doing it?  
 Yes    No
15. At the time did you reasonably feel you might be doing something wrong?  
 Yes    No
16. Did you reasonably feel at the time drugs were not good for your body?  
 Yes    No

17. At the time did you know that drugs alter a person's state of mind?

- Yes    No

18. What were the circumstances of your first experience with drugs?

- I wanted to try it       A friend asked me to try it       I thought I'd like it  
 At a party; alcohol or drugs were present  
 Other (please specify)

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19. At what age did you first try alcohol? \_\_\_\_\_

20. Do you now think alcohol should be restricted, i.e. age requirement to purchase and consume?

- Yes    No

21. Did you at the time of first trying alcohol think it should be restricted?

- Yes    No

22. Did you seek in obtaining the alcohol for yourself?

- Yes    No

23. Did you ask someone you knew to obtain the alcohol?

- Yes    No

24. If underage, at the time did you reasonably know doing this act was illegal?

- Yes    No

25. If underage, at the time did you feel you shouldn't be doing it?

- Yes    No

26. If underage, at the time did you reasonably feel you might be doing something wrong?

- Yes    No

27. Did you reasonably feel at the time, alcohol consumption was not good for your body?

- Yes     No

28. At the time did you know that alcohol consumption alters a person's state of mind?

- Yes     No

29. What were the circumstances of your first experience with alcohol?

- I wanted to try it       A friend asked me to try it       I thought I'd like it  
 At a party; alcohol or drugs were present  
 Other (please specify)

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30. What would you say factored into your personal justifications, for the first time you used drugs or consumed alcohol? i.e. I just really wanted to, peer pressure, I wanted to be cool, I had no choice if I wanted to be accepted etc. or any other factors you feel are reasonably applicable?

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APPENDIX C  
Survey Dissemination & Collection Methods

	Distributed	Collected (criteria met)	Collected 25%(>) = I	Total Returned
Social Media (Facebook; Twitter)	27	23	4	27
Email Invitations	11	8	3	11
Face-to-Face	3	3	N/A	3
Targeted Audience w/incentives	88	52	36	88
NA/AA Social Networking Outlets	19	19	N/A	19

APPENDIX D  
Questionnaire Coding Reference Matrix

<i>Question</i>	<i>Values</i>	<i>Coding</i>
1. Do you currently struggle with addiction?	Yes = 1 --- No = 2	Discrete
2. Have you previously struggled with addiction?	Yes = 1 --- No = 2	Discrete
3. The first time you used drugs or alcohol, were you reasonably in control of making the decision to use?	Yes = 1 --- No = 2	Discrete
4. The first time you used drugs or alcohol, is it reasonable that you could have chosen to reject this act or to say no... for example, was the power to say no in your hands?	Yes = 1 --- No = 2	Discrete
5. Do you now think marijuana should be illegal?	Yes = 1 --- No = 2	Discrete
6. Did you at the time of first trying marijuana feel it should be illegal?	Yes = 1 --- No = 2	Discrete
7. Do you now think that “harder” drugs, i.e. heroin, crack cocaine etc., should be illegal?	Yes = 1 --- No = 2	Discrete
8. Did you at the time of first trying a drug feel “harder” drugs should be illegal?	Yes = 1 --- No = 2	Discrete
9. At what age did you first try a drug or drugs?	00-17 = 1 --- 18-99 = 2	Ordinal
10. What did you try?	-----	Nominal
Marijuana = A1   Cocaine / Crack = A2   Heroin = A3   Pills / Prescription Drugs = A4 Meth / Methamphetamines = A5   Other = A6		
11. Did you seek in obtaining the drug for yourself?	Yes = 1 --- No = 2	Discrete
12. Did you ask someone you knew to obtain it?	Yes = 1 --- No = 2	Discrete
13. At the time did you reasonably know doing this act was illegal?	Yes = 1 --- No = 2	Discrete
14. At the time did you feel you shouldn’t be doing it?	Yes = 1 --- No = 2	Discrete
15. At the time did you reasonably feel you might be doing something wrong?	Yes = 1 --- No = 2	Discrete
16. Did you reasonably feel at the time drugs were not good for your body?	Yes = 1 --- No = 2	Discrete

17. At the time did you know that drugs alter a person's state of mind? Yes = 1 --- No = 2 --- Discrete
18. What were the circumstances of your first experience with drugs? ----- Nominal  
 I wanted to try it = B1 A friend asked me to try it = B2 I thought I'd like it = B3  
 At a party; alcohol or drugs were present = B4 Other - B5
19. At what age did you first try alcohol?\_\_\_\_\_ 00-20 = 1 --- 21-99 = 2 --- Ordinal
20. Do you now think alcohol should be restricted, i.e. age requirement to purchase and consume? Yes = 1 --- No = 2 --- Discrete
21. Did you at the time of first trying alcohol think it should be restricted? Yes = 1 --- No = 2 --- Discrete
22. Did you seek in obtaining the alcohol for yourself? Yes = 1 --- No = 2 --- Discrete
23. Did you ask someone you knew to obtain the alcohol? Yes = 1 --- No = 2 --- Discrete
24. If underage, at the time did you reasonably know doing this act was illegal? Yes = 1 --- No = 2 --- Discrete
25. If underage, at the time did you feel you shouldn't be doing it? Yes = 1 --- No = 2 --- Discrete
26. If underage, at the time did you reasonably feel you might be doing something wrong? Yes = 1 --- No = 2 --- Discrete
27. Did you reasonably feel at the time, alcohol consumption was not good for your body? Yes = 1 --- No = 2 --- Discrete
28. At the time did you know that alcohol consumption alters a person's state of mind? Yes = 1 --- No = 2 --- Discrete
29. What were the circumstances of your first experience with alcohol? ----- Nominal  
 I wanted to try it = C1 A friend asked me to try it = C2 I thought I'd like it = C3  
 At a party; alcohol or drugs were present = C4 Other = C5
30. What would you say factored into your personal justifications, for the first time you used drugs or consumed alcohol? i.e. I just really wanted to, peer pressure, I wanted to be cool, I had no choice if I wanted to be accepted etc. or any other factors you feel are reasonably applicable?  
 A = D01-D50 ----- Nominal

APPENDIX E  
Quantitative Questionnaire Data Set

Q #	YES	NO	NAG	%-Y	%-N
-----	-----	----	-----	-----	-----

Q01	10	94	1	9.62	90.38
Q02	21	83	1	20.19	79.81
Q03	100	4	1	96.15	3.85
Q04	101	3	1	97.12	2.88
Q05	37	68	0	35.25	64.76
Q06	29	76	0	27.62	72.38
Q07	86	19	0	81.9	18.1
Q08	80	25	0	76.19	23.81
Q09	SEE RESULTS SECTION				
Q10	SEE RESULTS SECTION				
Q11	18	87	0	17.14	82.86
Q12	24	81	0	22.86	77.14
Q13	91	14	0	86.67	13.33
Q14	67	38	0	63.81	36.19
Q15	72	33	0	68.57	31.43

Q #	YES	NO	NAG	%-Y	%-N
-----	-----	----	-----	-----	-----

Q16	75	30	0	74.43	28.57
Q17	96	9	0	91.43	8.57
Q18	SEE RESULTS SECTION				
Q19	SEE RESULTS SECTION				
Q20	99	6	0	94.29	5.71
Q21	73	32	0	69.52	30.48
Q22	37	68	0	35.24	64.76
Q23	35	70	0	33.33	66.67
Q24	93	12	0	88.57	11.43
Q25	63	42	0	60.0	40.0
Q26	69	36	0	65.71	34.29
Q27	53	52	0	50.48	49.52
Q28	93	12	0	88.57	11.43
Q29	SEE RESULTS SECTION				
Q30	SEE RESULTS SECTION				

APPENDIX F  
Qualitative Interview, Extracted Questions

These portions were drawn from a larger, separate study to be utilized within this work. Below are the extracted questions from the qualitative interviews.

*Extracted Questions:*

4. State of Birth?
5. City of Birth?
15. What is the highest grade you completed in school?
18. How long have you been homeless or in the life?
29. How old were you when you first left your family home, if you left?
32. What is the highest level of schooling any of your parents completed?
128. Do you use any of the following drugs?  
Alcohol, Cocaine/crack, Heroin, Marijuana, Methamphetamines, N/A, Other:
129. How old were you when you first started using drugs or alcohol?
170. Where do you see yourself in ten years?

APPENDIX G

Example Informed Consent (Qualitative Interviews)

Participant number: \_\_\_\_\_

**Informed Consent to Participate in a Research Study**

Exploring young adult males' vulnerability to the sex trafficking industry in a rural state

Dear Participant:

My name is \_\_\_\_\_ and I am a research assistant for \_\_\_\_\_ at Morehead State University. I am requesting your assistance with a research project we are conducting on homeless young males in Kentucky. We are especially interested in experiences of human trafficking, including survival sex. The hope is that this research will give us a better understanding of male's vulnerability to the sex trafficking industry here in Kentucky. We are also interested in learning how common it is, how young adults can be lured into sex trafficking, and the difficulties victims have in getting away from traffickers. With more knowledge about the problem we hope to be able to protect victims and potential victims in the future. Let me emphasize that you do not have to take part in anything that makes you uncomfortable. If you do not wish to take part in this project you do not have to participate. **There are no repercussions for not participating in this research project.** In addition, if you agree to participate, you are free to refuse to answer any and all of the questions. Completing the interview is voluntary (up to you) and you can withdraw from the study at any time **without repercussion.** If you agree to participate, you will be asked a series of questions, some of which are very personal.

This study has been reviewed to determine that participants' rights are safeguarded and there appears to be minimal risk or discomfort associated with completion of the interview. You may choose to discontinue your participation at any time and may refuse to answer any of the questions. If you feel any distress after participating, we have the contact information for someone who is available to speak with you about your feelings. In addition, it is important that you understand that if you disclose to me a new crime with the suspects full legal name I am obligated by law to report it to authorities. Should this occur then I cannot provide anonymity regarding the newly reported crime. Therefore, during the interview I will not ask you for specific legal names (as opposed to street names).

The answers you provide will be kept strictly confidential and all your responses will be stored in a locked file cabinet accessible only to the researcher, director and the research team. This means that no one will be able to find out your answers or responses to any of the questions. These records will be kept in Rader Hall at Morehead State University, Morehead, Kentucky. Please feel free to ask for help if something does not make sense to you or if you have any questions. If you experience any discomfort, you may contact the study director at (XXX) XXX - XXXX.

Signature of Interviewer Indicating you have read the above form to the interview participant:

\_\_\_\_\_

Date Signed: \_\_\_\_\_

APPENDIX H  
Qualitative Interviews Data Set 1

Respondent ID #	Q/4-5 Locations of Origin	Q/15 Participant's ED Level	Q/18 Length/Time Homeless	Q/22 Age 1st Time Left Home
17.0214-A	LOU, KY	HS	7Y	19
17.0214-B	Lehigh, PA	< HS	5Y	18
17.0214-C	Puerto Rico	< HS	2Y	16
17.0214-D	Jacksonville, NC	HS	NAG	19
17.0214-E	Nashville, TN	< HS	2Y	23
17.0214-F	LOU, KY	< HS	NAG	16
17.0214-G	Seattle, WA	< HS	3Y	17
17.0214-H	Memphis, TN	HS	1Y	14
17.0214-I	LOU, KY	< HS	9M	19
17.0214-J	Miami, FL	HS	NAG	16
17.0404-A	Daytona, FL	< HS	3Y	18
17.0404-B	Seattle, WA	< HS	1.5Y	17
17.0404-C	Miami, FL	< HS	1Y	18
17.0404-D	LOU, KY	NAG	9M	18
17.0404-E	LOU, KY	< HS	6Y	10
17.0411-A	LOU, KY	NAG	6M	17
17.0411-B	LOU, KY	< HS	1Y	19
17.0411-C	LOU, KY	HS	2Y	19
17.0411-D	Tacoma, WA	HS	1Y	14
17.0921-A	LOU, KY	< HS	6M	17
17.0921-B	LOU, KY	HS	1Y	8
17.0921-C	Cincinnati, OH	HS	1Y	18
17.0921-D	Los Angeles, CA	HS	1Y	18
17.0921-E	LOU, KY	SC	1.5Y	17
17.0928-A	Albany, GA	HS	5M	10
17.0928-B	LOU, KY	HS	2Y	17
17.0928-C	LOU, KY	HS	2Y	15
17.0928-D	Brooklyn, NY	HS	1Y	19
17.0928-E	LOU, KY	HS	1Y	18
17.0928-F	LOU, KY	HS	3.5Y	19
17.0928-G	LOU, KY	HS	3M	15
17.1003-A	Miami, FL	HS	1Y	18
17.1003-B	Ftn. Valley, CA	HS	1Y	17
17.1003-C	Jacksonville, NC	HS	1Y	19
17.1003-D	LaGrange, KY	SC	5Y	18
17.1025-A	Huntsville, AL	< HS	1Y	18
17.1025-B	Jeffersonville IN	HS	5Y	16
17.1025-C	LOU, KY	NAG	3Y	18
17.1026-A	Kansas City, MO	< HS	2Y	19
17.1026-B	LOU, KY	HS	6M	17
17.1026-C	Rolesville, NC	HS	2Y	16
17.1026-D	Richmond, VA	HS	4M	20

APPENDIX I  
Qualitative Interviews Data Set 2

Respondent ID #	Q/32 Parents ED Level Attained	Q/128a Drug Use	Q/128b Alcohol	Q/129 Age 1st Time Use
17.0214-A	< HS	MAR/MET	ALC	06
17.0214-B	NAG	COR/ HEO/ MAR/ MET/ PIP/ MUS/ OTH-(LSD)	ALC	10
17.0214-C	HS	NAG	NAG	NAG
17.0214-D	NAG	MAR	ALC	19
17.0214-E	< HS	MAR/MET/PIP	ALC	18
17.0214-F	< HS	NAG	NAG	NAG
17.0214-G	< HS	MAR	NAG	16
17.0214-H	HS	MAR	ALC	14
17.0214-I	< HS	MAR	ALC	15
17.0214-J	NAG	MAR	ALC	16
17.0404-A	G +	MAR	ALC	14
17.0404-B	SC < D	MAR	NAG	16
17.0404-C	G +	MAR	ALC	14
17.0404-D	UG	MAR	NAG	16
17.0404-E	HS	NAG	ALC	NAG
17.0411-A	< HS	MAR/PIP	ALC	11
17.0411-B	SC < D	MAR	ALC	11
17.0411-C	HS	MAR	ALC	15
17.0411-D	UG	MAR	ALC	14
17.0921-A	HS	MAR	ALC	16
17.0921-B	NAG	MAR/MET	ALC	16
17.0921-C	HS	NAG	ALC	21
17.0921-D	HS	MAR/COR	ALC	13
17.0921-E	SC < D	MAR	ALC	13
17.0928-A	UG	MAR	ALC	15
17.0928-B	UG	MAR	ALC	14
17.0928-C	NAG	MAR/HEO/COR/MET	ALC	12
17.0928-D	NAG	NAG	ALC	17
17.0928-E	HS	MAR	ALC	15
17.0928-F	< HS	MAR/MET	ALC	12
17.0928-G	HS	MAR	ALC	16
17.1003-A	G +	MAR	ALC	19
17.1003-B	HS	MAR	ALC	16
17.1003-C	NAG	NAG	ALC	17
17.1003-D	UG	MAR	ALC	13
17.1025-A	< HS	MAR/COR	ALC	14
17.1025-B	< HS	MAR	ALC	11
17.1025-C	SC < D	MAR	ALC	NAG
17.1026-A	HS	MAR/MET	ALC	15
17.1026-B	SC < D	MAR	ALC	16
17.1026-C	HS	NAG	NAG	NAG
17.1026-D	HS	NAG	NAG	NAG

## ENDNOTES

1. With the potential for future growth among RCT and DMM based concepts and models in mind, the idea introduced here is the “*apparency of rationale*,” an idea that views the rational actor as capable of rationalizing according to what they perceive subjectively as logical, accordingly to them, what “seems rational.” It seeks to explore the irrational calculations made by the actor upon the world stage as they interact with the environmental stimuli in their given setting. It is a perspective with roots being drawn from Thomistic thoughts, ideas and concepts; a key idea drawn from Aquinas being, “...on every occasion given to choice, between good and evil, we [humans] will always choose good, even if it is an apparent good.” (Aquinas, T. [St.], *summa theologae*, 1221-1274).

Tertiary to the focus of this work, the peripheral intent was to discuss the potential for such new ideas—such as that of the appearance of rationale, which attempts to understand the subjective experience of the individual interacting and reacting to perceived choice rationalizations in relation to what “seems rational.” These concepts are aimed at attempting to aid our understanding of deviance and human rationale. We must first account for and understand the subjective experience in its relation to that which “appears rational,” in order that it may be contrasted against legitimate values of logic and reason, that it may be measured or tested for validity. Supplemental to this view, we must consider thinking patterns according to what may be <sup>(1)</sup>available, <sup>(2)</sup>accessible, and <sup>(3)</sup>sufficient to account for both the reasoned and antilogical outcomes—while examining “the problem of sufficiency” concerning the state of irrationality, of an actor’s decisions, and their relation to that of alternate choice paths. A “*poor*” decision is still a decision. Choices made “poorly,” do not conclude thinking and perceived reason did not occur, even if it is flawed logic or antilogic. Antilogic should be accounted for, as well as attempts to be measured for in its influences among the thinking, and behavior-choice outcome relationships. As Hart (2014) discusses and sums up in his own way, it is a problem of offering people an “attractive alternative,” from which they can choose over substances. As Hart eludes to, we must consider varying perspectives on thought, despite flawed or illegitimate manifestation.

Saint Thomas Aquinas (*summa theologae*, 1221-1274), in his theodicies poses that, cases, instances and scenarios which *evil* is perceived as present, is not that evil *per se* is being committed or necessarily existing, but rather it is the position and natured state of the absence of *good*. It is important to the understanding of this approach, that St. Thomas makes clear his distinction between good and evil. One must remember that when we read through St. Thomas Aquinas’ works, when he speaks of “evil” he is actually using the Latin word *malus*, which has a much broader meaning than the modern westernized English definitions and usages of the word (Gregory, 2011). For Thomas Aquinas, *malus* and thereby *evil*, is used in manner which denotes the absence of a good within “something,” whereby it can or should be present within its very nature, holding the capacity for a good; among such an absence of *good* it gives possibility for the capacity of evil or *malus* to perceivably manifest in its place. When concerning human nature and the capacity of mankind as free agency determinists, St. Thomas says this, “...on every occasion given to choice, between good and evil, we will always choose good, even if it is an apparent good.” (Aquinas [St.], *summa theologae*, 1221-1274).

Stated another way, because *good* is what the understood notion and concept from which one acts, *evil* is merely the object occupying void space upon where *good* is not found; every space must be filled, and this is reliant on the rational actor and free agent to choose with what it

will be filled with. Aquinas' argument of good and evil is very similar to that of our understanding in physics to the opposition between light (a form of energy) and dark; the perceived characteristics are not distinct and separate and should not be understood as two opposing agents. "...our notion of darkness arises from an understanding of light and corresponds to an absence, a *privation*, of light..." (Gregory, 2011, p. 2). The concept of "dark," is merely an adjective descriptor, meant to convey the phenomenon relative to the absence of "light (energy)." Light in this case is the form of energy, dark is merely the (filler of space) descriptor in absence of the energy, but has no separate reality, for its reality begins and ends with light. However, dark can perceptibly have an effect upon one's own subjective experience with it, and the free agent can react to it freely according to their own choice and understanding. Good therefore, becomes the energy, from which the reality of *malus* begins and ends, and the actor is free to act or react accordingly to their own understanding and choice in relation to it; ultimately within a reasonable and normative state being responsible for what occupies the space.

St. Thomas Aquinas' works, among the other philosophical works cited, were intended to be utilized to assist in introducing the idea or concept of "*rationabile videtur*" or "it appears rational or seems reasonable" and in purposes of short form, the *appearance* or *apparency* of *rationale*. It was intended to be applied in the same or similar way Saint Thomas has utilized his framework for discussing good and evil. The "apparency of rationale" would therefore posit, that in cases of the individual actor, they will always choose "rationally" even if their choice is only appearing or seeming to be logically ordered or formed as "rationale." In terms of one's own subjective experience, they are always choosing good according to their own intrinsic system of values. In cases where it is argued that a bad choice or no choice occurred, in this neither exists—but rather in such instances it is only "*irrationality*," occupying the space where otherwise valid forms of logic or rational thinking would exist. Only, in such cases on the part of the subjective actor, it appeared or was perceived as valid and true. Put another way, "rationale or logic" (energy), is the valid state of reality from which the perceived realities of *irrationality* and "poor logic" or "bad choices" etc. begin and end. Irrationality, in and of itself in such cases, does not exist, but rather is simply acting as an adjective descriptor, meant to convey the phenomenon relative to the absence of the truth in rationality or valid forms of logic.

2. The two biggest contemporary opponents to human's ability to rationalize are rooted in the paradigms of nihilism and relativism. In short, both similarly conclude that the human being cannot be a rational or "reasoning" being, capable to understand truth, and truth is therefore a created fallacy subjected to the localized experience and understandings. To demonstrate this both nihilism and relativism lean heavily upon Plato's "*allegory of the cave*." (see Plato's, book VII, *The Republic*). In sum, Plato's allegory of the cave begins with several prisoners who have been chained up since birth facing a wall, and not being capable of seeing anything but the shadows which are reflected upon this wall of the cave. Over time they develop a system of naming, a system of perceived reality—then one day, one gets free. The freed prisoner goes outside the cave and experiences things beyond what he previously knew and understood. He goes back to tell the others, but they violently reject what he says, refusing to believe his statements are true. This allegory is often used to demonstrate that humans don't possess any real abilities of rationalization; as the logic of the freed prisoner was only changed to model that of the new localized understanding he experienced. However, even the ground itself, according to Aristotelian lines of thought, would be considered a free objective.

While some posit that this allegory only serves to support nihilisms or relativisms position of an unknown reality or the impossibility of truth; the allegory itself also offers a fatal flaw to such positions. The local experienced reality of abstraction in relation to the shadows created a reasoned and rational conclusion in the minds of the prisoners. However, there was an objective truth which laid both inside and just outside the cave, regardless of the prisoners *perceived* reality. The prisoner who goes free experiences a contrasted outside reality, and while we must control for the abstract information he receives from the local villagers; he does come to reevaluate...and ultimately *chooses* to accept a “new” reasoned and rational conclusion. This scenario demonstrates that certain worldviews or realities can be wrong, and that there does exist the potential for an objectively true reality; and as rational actors we hold the capacity to reevaluate our earlier forms of reason and logic.

3. Perspectives on Thought: while it is agreeable that not all forms of logic and reason are equal, some holding more reliability and validity than others, many leading to similar conclusive outcomes—there does exist objective observable facts when concerning the social realm, which remain true regardless of the changing or shifting social interior and exterior. Contrary to the misconceptions of laypersons of the culturally held ideals of relativism, logic and reason must follow a set of strict rules and definitions lest they make themselves void and null or incapable of application among the reality of conscience.

As rational thinkers, we can draw and surmise the logic behind the need for *rules* and established parameters behind legitimate thought patterns or worldviews. Plato’s allegory displays our very capable intrinsic system, in being able and capable to re-rationalize information, to reject previous “potentially” flawed thinking or antilogic, and come to reach separate and distinct conclusions, which deviate, in some cases largely, from the previously held perceptions. No part of the body exists without serving a function, so too does the mind! As G. K. Chesterton once stated “...An open mind is really a mark of foolishness, like an open [unbridled] mouth...Merely having an open mind is nothing. The object of opening the mind, as of opening the mouth, is to shut it again on something solid” (Alquist, 2016, p. 96)...no one eats with their mouth wide open. In Plato’s allegory of the cave, we have a prisoner who simply had his mind (mouth) reopened, and once it was understood that, that which was known before of a closed (mouth) perception was bad (food) conceptualized understanding...the mind was shut again upon something more solid. The mind is meant to rationalize and re-rationalize, reason and re-reason, opening and closing as it intakes more information, spitting out the bad whilst attempting to retain what is good.

When we approach issues, it should be done so, by the valid and time-tested principled rules of reason and logic; as these transcend cultural and individual perceptions. It is for this very reason we must consider, when approaching social issues, being included within the equations of understanding, the antilogic and irrational thought patterns which may be present by the individual actor(s). In doing so, this will give us greater insight into the subjective experience of the individual and their justifications for action. In understanding how the individual approaches the culture or environment around them, despite it being an ant-reasoned approach, we can have a clearer picture of the social issue or problem we are seeking to explain (see Alexander & Hadaway, 1982) having done so with validly defined principles, in the use of logic and reason.

4. Current western culture appears to strongly embrace the antithesis defined approaches of rational-based models, reason and logic, i.e. this “antithesis” being differing and varying perspectives and though upon “contemporary relativism.” Relativism often allows for “any” form of logic to be held as definitively “true” and equal. Such paradigms and forms call into question legitimate principles, as well as reasonable systems of logic, value judgments or philosophies (Schnapper, 2009). Frameworks as this allow for the formation of cultural relativism, in relation to attitude formation and perceptions of morality, that become rudimentary exchanges of, or borrowed concepts and ideas, with which no account can be found. Morality, or any concept for that matter, under contemporary relativism, becomes reality at the behest of the individual actor who gives permission to a value, and chooses adherence to it. It must be noted that modern contemporary works in philosophical relativism, are not always in agreement or aligned with classical relativism; but none the less the classical thought and thinking upon the subject is where contemporary thinkers often draw their foundations from.

It is important to understand the subjective experience; it too, is important to recognize what lay at the foundation of theoretical frameworks and methodological approaches to the social sciences, as assumptions, such as the above stated are fraught and dispersed as substructure to many modern theory’s seen among current trends—for example “labeling theory,” is a prime example of a philosophical relativist approach. The current culture of the United States tends to cling to ideologies which reject true forms of logical or reasoned thinking approaches, we must still seek to understand the individual subjective experience by drawing upon the strength from the varying sociological perspectives, but recognizing not all approaches hold equal in terms of validity. Being multifaceted in approaching the social sphere, may give such insight upon behaviors, and the decision-making processes occurring, even if those choices are haphazardly entered into amid antilogical processes—this, to understand the intricacies of a social issue, we must endeavor to explore.

There is a problem in the underlying assumptions and logic of contemporary relativism; its prime assumptions (Gunnell, 1993), from which everything follows, is that what “is” true is *relative* to the truth “of” the subjective local experience. The concept itself maintains a high degree of abstraction, with *simpliciter* characteristics, whilst implying absolutist values in terms of weighted conceptualizations. This creates several rational contradictions, whilst also committing several fallacies. Primarily, committing the fallacy of *petitio principii* or the circularity of assuming within the content of its premises what is to be proved (Hansen, 2017); and the fallacy of composition, within the contingencies of parts upon local constructs resulting in the ordered formation of reality, or wholeness; among others.

The *summa* premise of relativistic thought states, the “only” thing that can therefore be objectively true for everybody, is that nothing is objectively true for everybody (Baghranian & Carter. 2017). Yet it offers no explanation to account for principles which do remain true among cross-cultural perspectives independent of one another, holding a natural ordered form, which do transcend the spatiality of the known human existence. This in turn causes the argument to collapse upon itself as a self-contradicting proposition, in turn fashioning it to be no more than merely a pattern of circular-tautological reasoning. If the only thing that can be true, is that nothing is true, then with nothing being true one would naturally seek to query...how do we objectively know the premise to therefore be “of” true in its relation to what “is,” if it is both and not in a perpetual undefinable state of is-is not relationship? This premise can never be truly vetted by any reasonable set of logic or measures for accountability, in testing its reliability or validity—it goes against many of the rules of logic and reason in many cases, and thus, the very

reason it must be presented in a manner, upon which rules can never be truly or accurately applied to it. Its existence therefor solely rests and remains within its reciprocating state of spurious convolution. In sum, contemporary relativism simply put, states, the only good truth, is no truth (see Stefanik, 2011). This is equal in weight as saying things such as, the only good dinner, is no dinner.

5. Discussions concerning the subjective nature of the human experience are nothing new. To give us fresh insight upon the intersection of *attitudes held* and *justifications*, and their convergence with choice, free-will and agency of one's self, we can draw from several Philosophical arguments to help explain and fill in the intrinsic nature where extrinsic behaviors may be perceived as divergent from one another. Several behavioral and choice patterns can be assisted in explanation, from such other sources as: the theodicy perspective posed by Saint Thomas Aquinas; ontological arguments presented by Saint Anselm of Canterbury, and the Aristotelian & Neoplatonic arguments given by Saint Bonaventure.

The current trends among western thinking surrounding equations of logic, significantly negate the ability of the human factor for decision making, instead settling for more "blaming" or "excusatory" approaches (see Lewis 2015; Heather 2017 & Fenton 2017). Excusing the problem, is not synonymous to or equal with possessing a true or accurate understanding of the problem (see Lewis, 2017). These models should be rejected—if we are to truly understand these issues, rationale, conscious, cognitive thinking, choice and free-will must be made to account, as these are distinct attributes of humanity—not only must they be included, but we have a duty to always bear these unique phenomena as part of any equation or approach to models or theory. Each of us may be prisoners of our conceptions, but this does not negate the capacity of agency in our lives to also be freed from the same conceptual understanding. To remove in part or in full free-will as a functioning entity eternally affixed to choice within the individual, does not only do disservice to understanding the issue from the microlevel, but it does damage to the dignity of the person(s), lessens the uniqueness of *humanae vitae*, and diminishes the distinctive nature of the human experience—by blaming extrinsic systems or watering down behaviors, or blaming what manifests as simple trait responses, serves only to obstruct the capacity of human potential. The studies and research conducted which are reflected here, were to approach several law-breaking behaviors, in an attempt to be understood from the subjective experience on the part of the individual actor. To discover, understand and seek from the micro-perspective, what relative rationale, antilogic, choice justification or subjective reasoning is occurring—even though it may often be flawed rationale or logic, and unreasonable justifications, we must consider those thinking patterns which follow irregular rules, patterns or definitions.

6. "*satis motus*" or "sufficient or adequate motivation," is the main idea behind the problem of sufficiency for the rational actor in choosing between the potential choices given. It is the idea being introduced for future discussion among growth penitential for RCT-based models, that "situational particularism" or the extrinsic may give rise to what intrinsically the rational actor perceives as available, accessible and sufficient in their choice determination. Based on this the actor may enter into rational or irrational calculations, producing either logical or antilogical outcomes among the behavior-choice relationships.

7. Many theorists and concepts built within the sociological framework have come to share the common value of that—often it is choice which plays a large role in human behavior (see

Kubrin, Stucky, & Krohn, 2009). That is, people are often motivated by money, reward of interest, tangible or intangibles, entering into a process resulting in, calculating the likely costs and benefits of any action before deciding upon what to do. Max Weber (1920) built an influential study based on types or typology of action around choices made by actors which were viewed as “sensible” or “predictable.” His ideas were taken even farther by Talcott Parsons (1937) who assisted in its rise to becoming solidified as a part of the sociological mainstream of thought.

8. Goode (1997) during his observations of the social science contradiction of mainstream sociologists’ avid usage of Rational Choice based theories, whilst also explicitly rejecting and over critiquing it—Goode states:

“In our own field, whatever our philosophical distaste for rational choice theory, it is a fact that most of our analyses assume that the people in our sample do act ‘rationally,’ both at the macro and the micro levels. The poor are more likely than the rich to vote Democratic because it is in their interest; corporate heads try to expand sales and profit, and also take steps to increase their prestige; organizations make alliances in order to gain added resources of money, or power, or prestige; nations do the same—as industrialization spreads in a nation, family elders lose some authority, because they can no longer control the life opportunities of their members as much as they once did, and thus these members find better, nontraditional choices. And so on...” (Goode, 1997, pp. 23).

9. Here, rational choice theory effectively accounts for both the belief and the attitudes and behavior inspired by that belief...Rational choice theory [as it is currently defined] is powerless before a third category of phenomena, that involving behavior by individuals whom we cannot in any sensible way assume to be dictated by self-interest.

“Regardless of whether Sophocles’ *Antigone* is being acted in Paris, Beijing, or Algiers, the viewer of the tragedy unhesitatingly condemns Creon and supports *Antigone*.” (Boudon, 2003, p. 9). RCT opponents would argue here, the reason rational choice-based theories cannot explain this universal reaction is simple—the spectators’ interests are in no way affected by the matter before them. Therefore, it cannot explain that reaction by any possible consequences to them personally; nor by any consequences at all because there are no such consequences. The spectator is not directly involved in the fate of outcome; that fate belongs in the past, and no one has any control over it anymore (Boudon, 2003).

10. Varying Theoretical Perspectives on human or societal actions have been developed over time; in recent history several paradigms have been used in attempts to explain addiction behaviors. Many of the addiction models, presently used, are based in measuring extrinsic values, maintaining external variables as being the prime influence on behavior, often diminishing free-agency of choice for the rational actor—in some cases, even postulating the possibility for choice being absent altogether. Contemporary Marxists and other theorists take the approach of blaming systems, exclaiming the social structures put in place are the inevitable causality of strain between the human cognitive processes and concurrency of a social disordered state. Though many of these modern perspectives are an adaptational view from Marx’s’ (1845) *The German Ideology* and (1848) *Communist Manifesto*. None the less the premises asserted by contemporary subscribers, find their foundations for strain within the pages of early conflict

theorists work, for explaining causal to the innate forced decisions of the individual, who they view, as resting beneath an alleged crushing systemic oppression.

Anomie, as formulated by Durkheim (1897) is a resulted effect from other structurally unsound foundations occurring within a society. This idea was critiqued and expounded upon by later sociologists, such as Orru's (1983) conceptualizations, in his work, "*Ethics of Anomie*." In short, asserting that, according to the Durkheimian view point, the culmination of disintegrated pillars of morality, and the eroded fabric of collectively held ideologies which had previously offered stability among a populace, group or society of people living in mass—when suffering degradation, both generates systemic functions and mechanisms of a society that contribute to the creation of anomie. Regardless of social strains, however, many of the paradigms and perspectives as these, over time, consistently fail to demonstrate rationale as committing absenteeism in response to varying sociocultural factors.

While concepts as these are necessary, they are often insufficient, and over time, have failed to make a full account for those given the same choice scenarios within social settings, and choose alternative paths—refraining instead, from law-breaking behavior under similar circumstance. These theorists enjoy the position of blaming an external outward force or system as "sole perpetrator," which ultimately is viewed as removing, diminishing or nullifying the individual actor's ability to choose—while failing to make full account of the alternative behavioral patterns. Many theories have something to contribute, but we must approach matters of the human species will with a delicacy, as the act of choosing is a distinctive phenomenon exclusive to humankind—we must restrain ourselves from so easily dismissing such uniqueness.

Theory itself about the social realm is nothing new and elementary forms of social contract theory can be witnessed as early as 360 B.C (see Woods & Pack, 2012; *Plato's Apology, Crito and Phaedo of Socrates*, Cary & Plato, 1929). While these theories have much to offer in the way of understanding influences upon a rational actor, and what they may choose *to* or *not* to give "permission" concerning external values during the thought processes; they lack in making conclusive accounts of the individual subjective experience. Largely being insufficient to claim cognitive reasoning is void or absent in the presence of an outward system. It is a matter of the interior structural thinking of the individual, which encompasses a part of a greater whole, conceptualizing and interacting with the extrinsic constructs being created by the social exterior.

11. Saint Bonaventure building on the previous philosophy works of Thomistic and Anselmian thought, brings together perspectives on the understanding of life and living, and introducing the sense of cognition. He presents arguments in various ways, from the Neoplatonic, Aristotelian to ontological and aitiological. Bonaventure's doctrines in terms of life and living things, are mainly driven and inspired in large by Aristotle's concepts and ideas which offer Aristotelian perspective on biology. Saint Bonaventure like Saint Teresa of Avila, who would later expound on these works, introduces the rational mind and its relation to the cognition experiences. Bonaventure explained that, the world as it is revealed to us through the senses provides the means for our re-entering ourselves and ascending to higher things. Furthermore, the senses themselves are equally signs of higher things (see Bonaventure, *Itinerarium cap. v. I*, n. 11 [ed. Quaracchi V 298b]). Physical things considered in their own right, evidence, weight, number, and measure (Psalm 83:8), thereby causing us to contemplate their own measure, beauty, and order. These features are grounded in the activities and natural powers of sensible substances. "The nature of sensible substances accordingly expresses in their actions and interactions the measure, beauty, and order of their origin and thereby attest to the power,

wisdom, and goodness of the Source from which they spring.” (Bonaventure, *Itinerarium cap. I*, n. 14 [ed. Quaracchi V 299a-b]).

“The pointing of physical things towards their Source finds its parallel in sense cognition itself, which also points towards that same Source. Drawing his point of departure from the Neoplatonic theme of macrocosm and microcosm, Bonaventure discovers an analogy between Aristotelian cosmology and the process of sensation. Each sensible object generates a likeness of itself in the medium through which it is perceived, and that likeness in turn generates another likeness successively in the sense organ, causing the sense power to apprehend the sensible object. The process so described reflects the process of the emanation...A similar pattern emerges within the different acts exercised by each sense power: the sense apprehends (*apprehensio*) the object, delights (*delectatio*) in its object, provided that the object does not exceed the natural limits of the organ... Such a sense judgement, through comparative awareness, detaches the object from a given place and time, thereby preparing the way within the realm of sense cognition for intellectual cognition.” (Noone *et al.*, 2013, pp. 21b-22a).

Epistemologically, such a resolution means that behind all, even the most determinate and specific conceptions of things lies a transcendental awareness of being that informs all of our knowledge (see Bonaventure, *Itinerarium cap. II*, n. 6 [ed. Quaracchi V 301a]).

12. Looking to Saint Anselm of Canterbury, and portions of his ontological arguments for establishing and defining freedom. Freedom is a problem for us as a human species, primarily due to some of the commonly accepted conceptions of freedom are unquestionably linked to some of the more serious psychological and spiritual problems of our day (Rethy, 2007). “We are, many of us, prisoners of our conceptions of freedom. Freedom, thus, is a multifaceted and deep problem for us. It is a problem because there are those who would deny that we have it. It is a problem because we do not quite understand (and cannot agree upon a single definition of) what it is. It is a problem because we have come to realize that inadequate conceptions of freedom can quite frankly be dangerous.” (Nash-Marshall, 2008, p. 1-2).

13. This idea is an adaptational understanding of doctrinal teachings of the Catholic Church. This adapted view has been used for sociological purposes in this work, to assist in explaining *pre-* and *post-* conceptual understandings aimed at identifying where three concepts converge: <sup>(1)</sup>full knowledge, <sup>(2)</sup>clear understanding, and <sup>(3)</sup>consent of the will. The core premise for this adaptational perspective can be found within the Catechism of the Catholic Church, Part 3, Section 1, Article 8, Title IV, ¶ 1857. “For a sin to be mortal, three conditions must together be met: Mortal sin is sin whose object is grave matter and which is also committed with full knowledge and deliberate consent.”

14. Saint Anselm had a rather unique view of freedom, especially for the medieval era in which he applied his approaches to the realm of metaphysics. Freedom, Anselm described was being akin to truth, so near in its characteristics in that of its innate nature—that as like the truth, it too consists primarily in *rectitudo* (or containing an inherent directness) as Anselm would go on to describe it (Anselm, *Treatises: De Veritate*, IV, p. 169). In his definition of its content, freedom possesses a “directness” or straightforwardness not bound, but rather, aligned within a natural ordered form of proper conformity in a sense, and this ordered intangible self-governed follows naturally according to a freely existing right standard. The essence of freedom’s

“directness” to Anselm would have been understood more like an Aristotelian transcendental; following the concepts of *transcendens*: that which surpasses [something], and its concept of complement, *transcensus*: what is surpassed. As a result, freedom existing in a sense, within an objective reality [capable of surpassing], separate from the subjectively perceived reality of the individual actor [surpassing all other forms of realities which are not conformed to its self-governed state].

Freedom, Anselm claimed is: “the ability to keep uprightness-of-will for the sake of this uprightness itself” (Anselm, *Treatises: De Libertate Arbitrii*, XIII, p. 210). Anselm’s definition of freedom takes up a unique perspective unlike many other philosophical approaches and leaves much to be said upon the subject. In claiming that freedom is like truth, and to follow that “...conformity to a right standard is one of the necessary requisites of something’s being free, just as it is a necessary requisite of something’s being true...” (Nash-Marshall, 2008, p. 5)—establishes appropriately, that regardless of any subjective experienced relationship to that of the concept of freedom; it [*freedom*] remains in a suspended state of objective realism separate from the bending perceptions of the rational actors, or manifested behaviors of unconformity to it, not being bound by a person, persons, culture, time or space.

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