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Exploring Young Opioid Users' Motivation to Seek Treatment for Substance Use Disorder

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This is to certify that the doctoral dissertation by

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Abstract

Exploring Young Opioid Users' Motivation to Seek Treatment for Substance Use

Disorder

by

Patricia Gianotti-Avella

MA, University of Phoenix, 2006

BS, Thomas Edison State University, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

In the past 15 years, the nonmedical use of opioids in the United States has reached

epidemic proportions, resulting in a 21% increase in overdose fatalities. This surge in

opioid use and dependence represents a shift in the demographic from inner-city

populations over the age of 40 to young adults between the ages of 20 and 34 who dwell

in primarily white suburban neighborhoods. Research has identified physicians' liberal

prescribing practices as one cause of this epidemic and has documented the

ineffectiveness of current interventions with young addicts. The purpose of this narrative

study was to gain insight into what contributes to young opioid users' motivation to seek

treatment, an area of research that is underrepresented in the literature. Maslow's theory

of human motivation and Deci and Ryan's self-determination theory were the theoretical

bases for understanding drive states related to drug use and the relationship between

motivation and treatment outcomes, respectively. Face-to-face interviews were conducted

with 8 opioid addicts aged 22 to 37 in treatment for opioid use disorder. Participants

shared their experiences of the initiation, progression, and treatment of their disorder.

Their stories revealed a motivation process different from their adult counterparts and is

part of a deeply personal and solitary experience that could not be forced upon them

through coercion. These findings indicate that less coercion, more realistic expectations

regarding treatment readiness based on developmental norms, fostering autonomous

support, and the use of medically assisted treatments may be the key to effective

interventions for Millennials with opioid use disorder.

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Dedication

This is dedicated to my husband Jack, my mother Kathryn, and my son Adam, who supported me throughout the process of completing this study; especially my daughter Jessa, who never lost faith in me. And to my father, Salvatore James DeMarco, who did not live long enough to see my work completed, but whom I know was watching over me as I wrote every word.

Acknowledgments

I would like to offer my sincere thanks to my Chair, Dr. Hedy Red Dexter and my methods expert, Dr. Susan Marcus, two brilliant women whose expertise and encouragement are responsible for me doing my best work. I would also like to thank my academic advisor, Greg Murphy, who helped me find a way to continue my doctoral studies. Finally, I owe a great debt of gratitude to the brave and honest individuals who shared the story of their journey through the hell of addiction into recovery for the sole purpose of helping other suffering addicts.

Table of Contents

List of Figures

Chapter 1: Introduction to the Study

My intent for this study was to explore the lived experiences of Millennials (born between 1981-1996) with opioid use disorder with respect to their motivation to seek treatment and recovery. This current and youngest generation of opioid users are unique in ways that set them apart from previous generations such as those of the 1960s-1980s, which has created a need for relevant data to inform treatment interventions (Jones, 2013). Two of the most prominent distinctions between these opioid users and their predecessors are their demographic-specific characteristics and the way in which they were introduced to their drug of choice. These young adults were raised in predominately white, suburban neighborhoods. They have access to financial support from their families who enjoy a higher socioeconomic status than the inner-city addicts of the 1960s-1980s. Their dependence upon their parents for financial support and healthcare extends well into young adulthood, which relieves much of the burden of maintaining their drug habit and often helps them to forestall involvement in criminal activity and incarceration (Cicero, Ellis, Surratt, & Kurtz, 2014).

Regarding their introduction to opioids, 80% of today's opiate users were initiated into drug use through the use of prescribed pain medications (Jones, 2013). This trend has been linked to an increase in the prescriptions for opioid medications for pain management over the past 20 years, with nearly 15% written for people under the age of 29 (Substance Abuse and Mental Health Services Administration [SAMHSA], 2012). The unique cultural and etiological features of addictive disorder as manifested in this generation sets them apart from others. Thus, it is not surprising that current interventions

designed to motivate and engage young addicts in treatment have been largely ineffective (Adams, Knopf, & Park, 2014). This study contributed to current scientific knowledge of substance use disorder (SUD) by providing an understanding of how this cohort experiences addiction and what motivates them to seek help. The insights gained from this study can be applied to the development of relevant and effective treatment options. The loss of young lives and the burdens on the U.S. healthcare system brought about by this surge in opioid addiction underscore the importance of studying this issue at the current time.

This chapter begins with a description of the problem and its background, including a brief review of the research on the current prevalence of opioid dependence in the United States. The purpose, theoretical framework, and operational definitions of the study follow. Successive sections include a review of the assumptions, limitations, scope, and delimitations of the study. The chapter closes with an explanation of the significance of the study regarding Millennials' perceptions of their disorder.

Background of the Study

The nonmedical use of opioids has become so widespread in the United States in the past 15 years that it has been characterized as an epidemic by the U.S. Department of Health and Human Services (HHS, 2017). Prolific use of opiates resulted in a 21% increase in deaths due to opioid overdose from 2015-2017, with the largest number of deaths occurring in those aged 25-44. This increase in opioid-related fatalities is viewed as the primary cause of a decline in the life expectancy of Americans over the past 2 consecutive years, an event that has not occurred since the onset of the AIDS epidemic in

1993. The current surge in opioid use is not unique in American history except for the fact that it represents a shift to a much younger demographic of opioid abusers. In 2014 alone, admissions to treatment for addicts aged 20 to 34 exceeded all other age groups combined (SAMHSA, 2016). The epidemic has justifiably been blamed on the prolific opioid prescribing practices of American physicians. Indeed, 80% of young opioid addicts report that their initiation into habitual opioid use began with the use of nonprescribed pain medications. In some cases, these medications are purchased from drug dealers, but many young people have easy access to their family members' unused medications stored in the home medicine cabinet. Others are introduced to opioids for the first time when they receive a prescription from their family physician to alleviate pain from an injury or following surgery. Addiction that is precipitated by the legitimate use of a prescribed pain medication is known as iatrogenic addiction (iatrogenic, 2018). While prescribing opioid medication for the relief of pain is an established medical intervention, statistics indicate physicians' rising prescribing rates do not correspond to an increase in the number of Americans seeking pain relief (Chang, Daubresse, Kruszewski, & Alexander, 2014). Due the addictive properties of opioids and a variety of genetic, developmental, and environmental factors, some patients find themselves unable to discontinue the drug while others do so without issue (Volkow, Koob & McLellan, 2016).

Allostasis, a process that occurs within the brain to maintain balance in its internal environment, is involved in the neurochemical basis of opioid use disorder (Volkow, Koob & McLellan, 2016). The brain responds to the initial use of opioids with

adaptations in neural processes that alter the availability of certain neurotransmitters involved in the brain's reward circuits, such as dopamine, which is reduced by 25% to 64% during periods of opioid withdrawal (Baskin-Sommers & Foti, 2015). This downregulation of dopamine and corresponding alterations in the areas of brain involved in arousal and mood regulation is believed to be responsible for increased tolerance, physical dependence, and the painful physical and affective states associated with opiate withdrawal (Koob, 2015).

Once these profound changes in the brain are well-established, an opioid addict will experience acute withdrawal symptoms following every episode of use, occurring within a short period after the euphoric effects of the drug have dissipated. For short-acting substances such as heroin, this begins within 4–12 hours depending on the individual's level of tolerance and drug use. The acute withdrawal stage in heroin addiction typically lasts for 3–4 days. The onset of acute withdrawal from longer-acting opioids such as methadone begins after several days and is resolved by day 10. Symptoms experienced in withdrawal from any opioid during the acute stage include: (a) rapid pulse > 120 bpm; (b) chills and excessive diaphoresis; (c) severe, diffuse aching of joints and/or muscles; (d) stomach cramps, nausea, vomiting and/or diarrhea; (e) gross tremors; and (f) severe anxiety. Protracted withdrawal symptoms, which are experienced by those who maintain abstinence, can persist for weeks or months after the acute withdrawal stage. These symptoms include: (a) fatigue, (b) insomnia, (c) anhedonia, and (d) loss of appetite (Schuckit, 2016). This physical and emotional suffering is believed to be among the primary motivators for habitual drug use (Koob, 2015).

Impulsivity plays an equally important role in the onset and maintenance of addiction (Argyriou, Um, Carron, & Cyders, 2018). Impulsivity is understood as a function of behavior influenced by personality, environment, and cognition and involves executive function (Argyriou et al., 2018). While personality traits tend to be stable attributes, cognitive impulsivity in young adults is an artifact of immaturity, as the areas of the brain involved in cognitive control mature at a later age than those involving affective control (Argyriou et al., 2018). For this reason, an individual who is exposed to a potentially addictive substance at an early age faces a greater risk of developing dependency due to its impact on normal brain maturation in the areas involved in executive function (Brown et al., 2015; Volkow & Morales, 2015).

This underscores the contribution of medical professionals to the opioid epidemic, because 15% of the recipients of opioid prescriptions over the past 2 decades have been patients under the age of 30 (SAMHSA, 2012). Once addicted, young adults with SUDs are the least likely to seek help, and when they do enter treatment, they typically experience a poor response (Adams et al., 2014). Young adult clients are more likely than adolescents or older adults to leave against medical advice, they are less likely to follow-up treatment with continuing care when they do complete treatment, and their posttreatment abstinence rates are the lowest when compared to younger and older clients. These treatment failures are reflected in the soaring death rates from overdose occurring in the 25 to 44-year-old age group (HHS, 2017).

Meeting the needs of this new generation of opioid users calls for making adjustments in treatment approaches based on their unique characteristics (Hilton &

Pilkonis, 2015; Jones, Clark, Weintraub, & Zia, 2016). SUD is characterized as a complex illness caused and exacerbated by a variety of genetic, environmental, and attributional factors (Marlatt, Baer, Donovan, & Kivlahan, 1988). The changing demographic of opioid addiction presents the challenge of identifying the complicating factors of addiction in the context of an entirely new and, in many respects, very different generation from its predecessors. An exhaustive review of the literature revealed that research has not kept pace with these changes. The majority of studies involving addicts consist of cohort studies and surveys of older populations. Many of the populations investigated began using drugs in a different period of history, in different settings, and for different reasons (Cicero et al., 2014).

Additionally, those who have maintained abstinence for several years or more are not representative of this new demographic of substance users who have been shown either to avoid treatment or fail to become engaged when they do submit to treatment (Cicero et al., 2014; Fleury et al., 2016). The few studies conducted with contemporary substance users tend to be highly specific regarding target samples, treatment settings or geographic location, and noting limitations, have called for further exploration. Such studies include Opsal, Kristensen, Vederhus, & Clausen (2016), which calls for additional research into substance users' perceptions of coercion, and Fleury et al. (2016), noting the need for studies of issues related to contemporary substance users. A variety of new technologies, integrative treatments, and therapeutic approaches are now at the disposal of clinicians who treat those with opioid use disorder (Volkow et al., 2016). This study was designed to provide a deeper understanding of the contemporary opioid user,

with the intent that such knowledge may provide some guidance in the appropriate application of these new approaches.

Problem Statement

The intent of this study was to examine young opioid users' motivations for entering treatment for their disorder and for embracing recovery. This study differed from previous research in its focus on the changing demographic of opioid users noted in the literature (Cicero et al., 2014). The need for information regarding this changing demographic is well-documented. Kelly et al. (2015) called for studies aimed at promoting an understanding of the trend towards prescription drug abuse by young people. Majumder et al. (2016) concluded that additional studies were needed to explore the personal factors related to enhanced motivation and commitment to treatment in young addicts. Sinha, Easton, and Kemp (2003) noted the need to include both voluntary and involuntary clients in any study of young adults with SUD as the similarities found among all young adults (e.g., early onset of drug use) are worthy of investigation related to designing treatment interventions.

Purpose of the Study

The purpose of this qualitative study was to explore the experiences and perceptions of the young opioid user. The intent was to learn how young addicts' experiences are involved in their motivation to seek help through treatment. I used Maslow's theory of human motivation (1943) and Deci and Ryan's self-determination theory (1985) as a framework for interpreting these experiences. In the study I explored the cognitive and emotional processes activated (a) at the onset of drug use, (b) during the

progression to habitual drug use, and (c) upon entering treatment, for insight into how the motivational process unfolds.

Research Questions

RQ1: What do narratives of young opioid addicts reveal about their motivation to enter treatment?

RQ2: What do narratives of young opioid addicts reveal about their motivation for recovery?

Theoretical Frameworks

Maslow's theory of human motivation (1943) provided a framework through which SUD may be understood in relationship to drive states. Maslow conceptualized human behavior as an upward journey from the most basic physiological needs to ultimate self-actualization or spiritual evolution. Maslow illustrated his theory of human motivation using a pyramid known as the hierarchy of needs. The base of the pyramid represents physiological needs, including only that which a person needs to survive physically. These include breathing, eating, hydration, and sleep (Maslow, 1973). Higher levels of the pyramid represent the human being's continued development, reaching upward towards self-actualization as each of the lower needs are met in succession.

As the use of mood-altering substances involves the reward systems of the brain, it can be compared to behaviors motivated by the biological imperative of survival. Highly addictive substances such as opioids activate the pleasure centers of the brain and create a cascade of chemical messages designed to ensure that the pleasurable experience can be repeated (Volkow & Morales, 2015). The initial euphoric experiences of the

opioid addict may accurately be compared to those experienced during sexual intercourse, breast-feeding, falling in love, or consuming a palatable meal. Details of these experiences such as environmental cues are stored in the brain to allow for ready replication of the experience (Volkow & Morales, 2015). Unfortunately, repeated exposure to the euphoria of opioid intoxication results in profound changes in the brain's architecture. Shortly after the onset of these changes, the addict will begin to experience agonizing withdrawal and an inability to experience pleasure without chemicals (Volkow & Morales, 2015). Finally, the use of the preferred drug no longer results in pleasure, but only serves to relieve pain. The salience of pleasurable memories of past intoxication in the brain's reward center combined with the constant need to ease the pain of withdrawal eventually creates an obsession to seek out the drug of choice at all costs (Volkow & Morales, 2015). This is the reality of addiction for those afflicted with the disorder.

In the latter stages of addiction, the brain interprets the absence of the substance as a life-threatening circumstance, and the addict's drive to find and use opioids aligns metaphorically and experientially with Maslow's lowest level of needs. When prolonged exposure of the brain to opioids ultimately results in unrelenting emotional, physical, and psychological pain, the addict looks elsewhere for relief. This is the "bottom" often referred to in the literature of *Alcoholics Anonymous* (Wilson, 1976) which brings the addict to a point of surrender and willingness to submit to treatment. From that point, if the treatment is successful, the recovering addict begins to experience quality of life without drugs, and motivation for continued growth reflects the movement toward self-fulfillment represented in the pyramid (Maslow, 1973).

Deci and Ryan's (1985) self-determination theory was useful in understanding the varieties and sources of motivation, the ways in which motivation is experienced, and the relationship between the locus of motivation and outcomes. Where Maslow's theory was useful for understanding the addict's motivation with regard to drive states, Deci and Ryan provided a context for exploring motivation in the presence of intrinsic and extrinsic factors such as legal coercion for treatment.

Self-determination theory has been widely applied in addictions research to ascertain if the once common practice of exerting pressure on the addict to seek treatment in the absence of internal motivation is an effective approach. This intervention has been viewed as acceptable as it was believed that waiting for the individual to become willing might result in a worsening of their condition and possibly death (Inaba & Cohen, 2014; Wilson, 1976). However well-intended this approach may have been, research indicates that factors associated with positive treatment outcomes, such as engagement in therapeutic activities and completion of treatment, are negatively associated with coercion (Urbanoski, 2010; Wild et al., 2006). This is especially true of young adults (Van Petegem, Soenens, Vansteenkiste, & Beyers, 2015). Research has shown that positive treatment outcomes are most likely to occur when the client is internally motivated to seek help (Majumder, 2016). For this reason, the practice of exerting external pressure through family members or employers is being replaced in contemporary treatment by the transtheoretical model, which employs interventions such as motivational interviewing (Prochaska & DiClemente, 1994; Vansteenkiste & Sheldon, 2006). The validity of this approach is supported by research that demonstrates treatment

engagement and retention are enhanced when sources of perceived coercion are identified and eliminated (Opsal et al., 2016).

This study employed self-determination theory as a basis for understanding the context through which young substance users experience motivation to address their addiction. This involved exploring the ways in which the addicts' inner cognitive and emotional processes result in internal readiness to seek treatment. In this way, the research questions generated information that might be used to inform the design of treatment methods that encourage intrinsic motivation rather than surface compliance (Wild, 2006). Chapter 2 describes the theoretical frameworks of this study in greater depth.

Nature of the Study

The intent of this study was to add to the current body of research regarding motivation for treatment and recovery. SUDs have been the focus of research for decades, yet a new generation of substance users presents a new opportunity for exploration. The recent epidemic of opioid addiction and fatalities has occurred primarily in this younger age group, which calls for investigation into the unique experiences of this generation. I chose narrative inquiry as the research method for its focus on the subjective experiences of individuals over time. The general characteristics of young opioid addicts have been revealed through statistical data but their individual lived experiences as addicts have not been explored. My intent for this study was to understand how addiction disorders are experienced by the individual on an emotional and cognitive level rather than to determine the cause of addiction in young adults. In the tradition of

narrative research, each participant was interviewed in-depth, followed by a repeated immersion in the data until themes and patterns of common experience emerged through exhaustive analysis. Ultimately these findings will contribute to positive social change by providing insight into factors that motivate these individuals to seek treatment and commit to recovery, thereby informing future treatment interventions.

Definition of Terms

Continuing care: Outpatient counseling that provides ongoing therapeutic support for those with SUDs following higher levels of treatment (Hazelden, 2018).

Diagnostic and Statistical Manual of Mental Disorders (DSM-V): The 5th revision of a manual regarded by healthcare professionals as an authoritative guide to the diagnosis of mental disorders (Inaba & Cohen, 2014).

Drug of choice: The preferred substance of the addict, which they use habitually and to which they become addicted (Inaba & Cohen, 2014).

Iatrogenic addiction: Addiction caused by medical treatment (e.g., administration of opiates in a hospital setting following surgery, or prescribed by a physician for an injury, which leads to addiction; iatrogenic, 2018).

Millennial: An individual born between 1981 and 1996 (Gallup, 2016).

Addict: An individual who meets the DSM-V criteria for SUD (Inaba & Cohen, 2014).

Opioid (or opiates): Natural or synthetic controlled substances chemically similar to morphine that are prescribed for pain management (Inaba & Cohen, 2014).

Opioid use disorder: A DSM-V substance use disorder diagnosis specific to opioid use (American Psychiatric Association, 2013).

Recovery: A period of self-imposed abstinence often accompanied by positive changes in thinking and behavior intended to support abstinence (Marlatt et al. 1988)

Relapse (with regard to drug addiction): The resumption of drug or alcohol use after a period of self-imposed abstinence (Marlatt et al. 1988)

Using: A term used by addicts to describe active periods of substance use (Inaba & Cohen, 2014).

Substance use disorder (SUD): Also known as addictive disorder, a disorder that meets the criteria set forth in the DSM-V, which includes but is not limited to loss of control over substance use, preoccupation with using, and failed attempts to abstain (American Psychiatric Association, 2013).

Treatment: Any one or combination of several levels of clinical interventions (e.g., detoxification, inpatient, partial-hospitalization, intensive outpatient) designed to arrest and stabilize SUD (Inaba & Cohen, 2014).

Assumptions

In considering the design of this study, I assumed that my topic of interest was relevant and would contribute in some meaningful way to the existing literature. A narrative approach was assumed to yield the richest data. I assumed that the interview questions would stimulate detailed, honest accounts from the participants of their lived experiences as opioid addicts. As all participants were in treatment at the time of the interview, I assumed they would have undergone detoxification and were not

experiencing acute withdrawal or were not under the influence of a mood-altering chemical, which would have compromised the veracity of their self-report. I assumed that my sampling strategy would result in a sufficient number of participants and that the participation criteria would be adequate to attract appropriate participants with personal experience in the topic of study. Regarding my role as a researcher, I assumed that I would be able to sufficiently bracket my beliefs so as to provide an objective interpretation of the data.

Scope and Delimitations

As the participants were drawn from a convenience sample located in my general geographic area, their experiences did not necessarily represent all Millennials. Recruitment of participants took place at three outpatient treatment centers, one located in Philadelphia, Pennsylvania, and two in suburbs of New Jersey. All three treatment centers were state-licensed and staffed by appropriately credentialed personnel. All offered the three levels of care typically found in nonresidential treatment programs: (a) partial hospitalization, (b) intensive outpatient (IOP) and (c) outpatient. All three programs accept adult clients who have successfully completed detoxification treatment and who are not involved in agonist maintenance therapies such as methadone.

This study was limited to a sample of 6-12 adult individuals between the ages of 22 and 37 years at the time of data collection, as this is the age-range of those who are known in contemporary culture as Millennials. This focus was taken to address the gap in the literature specific to this demographic. As the research problem specifically involved motivation to seek treatment and recovery, participants were needed who had

experienced periods of time during which they contemplated the need to seek help.

Therefore, the participant criterion was restricted to those with at least two previous

treatment experiences in order to ensure that they had sufficient experiences to relate

during the interview. Individuals with SUD and a co-occurring psychiatric diagnosis were

not included in the study, as their experiences of addiction may have been complicated by

psychiatric symptoms and medications (Inaba & Cohen, 2014). Participants were limited

to those who were willing and able to participate in the lengthy (60 to 90 minute) face-to-

face interview required for the collection of the kind of rich, thick data used in narrative

inquiry. Transferability is not guaranteed by any qualitative study, but the credibility and

validity of the results may be supported by the research design, rigor of data analysis, and

provision of details sufficient to replicate the study with other populations (Guba, 1981;

Miles, Huberman & Saldaña, 2014). Details of these safeguards are described at length in

Chapter 3.

Limitations

While the primary intent of narrative inquiry is not to produce results that

generalize, rich, thick descriptions were used to describe the data analysis process,

procedural details, and results to allow others to replicate this study in their chosen

setting. A potential for bias existed due to my personal and professional experiences in

the field of addictions treatment and my empathic stance towards those with SUD. I

addressed this through the process of clinical supervision and by bracketing my

assumptions before and throughout the study. I also included measures to enhance the

dependability of my data such as member-checking and triangulation (Miles et al., 2014), which are addressed in greater detail in Chapter 3.

The participants were engaged in treatment at the time of their interview, which imposed limits on my time with them based on the constraints of their treatment programs. Finally, as the sole researcher, I was limited in the number of interviews I could accomplish at the level of total data immersion required by narrative inquiry. I recruited the smallest number of participants that would allow saturation without sacrificing depth and richness of data (see Guba, 1981; Lincoln & Guba, 1985). The results of this study will be disseminated through a presentation at the New Jersey Prevention Network conference in 2020, by incorporation into the Graduate Addictions Studies Program curricula at Monmouth University, and submitted for publication in the *Journal of Substance Abuse Treatment*.

Significance of the Study

This study contributes to the body of knowledge of SUD through an exploration of the experiences of a heretofore unexamined population of substance users, those known in contemporary culture as Millennials. The purpose of this study was to increase understanding of how young opiate addicts perceive their disorder and what motivates them to seek treatment and sustain abstinence. This information will be useful in informing the design of treatment approaches that are relevant to this new generation of drug users and in training addiction professionals in the most effective ways to connect therapeutically with this population.

Although addiction has been the focus of much investigation in the past several decades, there is a paucity of information on Millennials with opioid use disorder. Individuals aged 21-45 compose the majority of Americans with opioid use disorder, yet only 11% will seek-out and receive treatment (Adams et al., 2014). When they do enter treatment, their response is poor compared to their adult counterparts. This is borne out in overdose statistics, with the greatest proportion of fatalities due to opioid overdoses occurring in 25 to 44-year-olds (HHS, 2017). Learning about the experiences and perceptions of this vulnerable population may result in new approaches to stimulate motivation for treatment and enhance treatment outcomes.

Summary

Chapter 1 familiarized the reader with the information supporting the study's value through a preliminary review of the following topics: (a) background, (b) problem, (c) purpose, (d) conceptual framework, (e) significance, and (f) nature of the study. Chapter 2 leads the reader into a deeper understanding of the foundation and objectives of the study through an exhaustive review of the literature. This review includes a summary of the theoretical foundations of the study as well as a critical analysis of current literature regarding the relative issues heretofore addressed, as well as demonstrating the gap in the body of research this study was designed to address.

Chapter 2: Literature Review

In the past decade, the nonmedical use of opioid medications in the United States has reached epidemic proportions **(**HHS, 2017**).** The surge in the number of Americans using nonprescribed pain medications and illegal opiates such as heroin is concerning by virtue of its magnitude, but perhaps even more so in that it represents a shift to a much younger demographic of opioid abusers. One indicator of this shift is a 20% increase in treatment admissions for addicts aged 20 to 34, which exceeded that of all other age groups in 2014 **(**SAMHSA, 2016). As might be expected with a rise in opioid use, overdose rates have also increased dramatically. From 2015 through 2016, there was a statistically significant increase in overdose deaths in 27 states, where the previous year saw such increases in only 18 states **(**CDC, 2016). Deaths from opioid overdose in 2016 alone totaled 42,249, which is a five-fold increase since 1999. Again, the largest number of deaths occurred in younger populations, those aged 25–44. This represents an increase of 90%, from 1.5 to 5.5 per 100,000 people **(**HHS, 2017**).**

The purpose of this study was to explore what motivates young opioid users to seek treatment and consider changing their drug-use behavior. Unlike previous research, this study focused on contemporary addicts from suburban settings who most closely met the description of the new generation of opioid user noted in the literature (Cicero et al., 2014).

Establishing the Relevance of the Problem

Unlike their counterparts in previous decades, the majority of young adults who are currently addicted to opioids were initiated into illicit drug use by way of prescription

medications (HHS, 2015). Moreover, four in five young heroin addicts in the United

States report an initiation into opioid abuse through the misuse of prescription pain

medications (HHS, 2015). Therefore, understanding the present opioid abuse crisis

begins with a retrospective view of prescribing practices by U.S. physicians. Beginning

in 1991, the distribution of opioid medications such as Vicodin and OxyContin began to

rise and had quadrupled by 2010 (SAMHSA, 2012; U.S. Department of Justice, 2011)

even though this trend was not justified by corresponding numbers of Americans seeking

treatment for pain (Chang et al., 2014**).** Of the total number of prescriptions for pain

medications in the past two decades, roughly 15% were for people under 30 years-of-age

(SAMHSA, 2012).

Attempts by the federal government to rein-in prolific prescribing practices of

medical practitioners included the rescheduling of Hydrocodone to a schedule II drug in

2014 **(**U.S. Department of Justice, 2014) and the publication of guidelines for prescribing

(Dowell, Haegerich & Chou, 2016). Despite clear recommendations to reduce the

nonessential use of opioids for pain management and thereby lowering their availability

and, hopefully, the risk of chemical dependency, the prescribing rate in 2016 was triple

that of what it was in 1999, reaching over 200 million in the United States alone (Guy et

al., 2017). This continued supply of opioids into American homes fed the epidemic of

addiction in young people by ensuring a readily available supply. The practice of

"pharming," accessing left-over pain medications from the family medicine cabinets,

became common practice for drug-seeking youth (Solecki & Turchi, 2014**)**, and by 2015,

1 in 20 adolescents had used nonprescribed pain medication (SAMHSA, 2016).

As the demographic of opioid addiction has changed, so has the personality profile and environmental factors that complicate addiction. Yet research has not kept pace with these changes. The preponderance of studies on opioid addicts have been cohort studies or surveys of older populations who have managed to maintain abstinence for several years or more and are therefore not representative of this new demographic of substance users (Cicero et al., 2014). The few contemporary studies of substance users represented in the literature are narrow with respect to geographic locations, target samples, and/or treatment settings, yet not specific to opioid use. Such studies have noted these limitations and called for further exploration of issue (Fleury et al., 2016).

This chapter provides an overview of substance abuse by way of an examination of its origins in ancient history through its present role in American culture. This exploration is divided into several areas key to fully understanding the current epidemic of SUD. Such areas include evolution of the medical criteria for addictive disorders, the neurochemical basis of addiction, policies developed by public health agencies and the criminal justice system to address substance use, and various approaches to treatment, with a specific emphasis on young adults. This approach provides a view from the many perspectives that initiate and perpetuate the problem of substance abuse and addiction. The theoretical foundations upon which this study is based were examined through a review of the current literature. I used Maslow's theory of motivation to understand the opioid users drug-seeking behaviors as a survival mechanism, based on the most primary of human needs (Maslow, 1943). I explored self-determination theory as a means of

understanding the ways in which desired outcomes for the treatment experience may influence the motivational drives of each individual.

Literature Search Strategy

The literature search was confined to peer-reviewed articles published within the past 3 years in professional journals, with the exception of historical documents, in which case no limit was specified. The primary data bases accessed were Science Direct, Medline, PubMed Central, Academic Search Premier and ProQuest. The search for statistics was primarily conducted on various federal HHS websites due to the volume of data collected yearly by these agencies that are made available to the general public. Such websites included (a) The Centers for Disease Control and Prevention, (b) The National Institute on Drug Abuse (NIDA), and (c) SAMHSA. No methodologies were excluded from the search, which began with broad terms related to the main focus of the study as well as information needed to provide a foundation of knowledge for the layperson not versed in the history and terminology of SUD. As such, each topic was researched separately as a subcategory of the study.

A search for information on the theoretical foundation began using the key terms *Maslow's motivation theory* and *self-determination theory* (no date range). I located research that represented addiction studies incorporated each foundational theory by combining the name of the theory and keywords related to substance use treatment. This resulted in the following search terms: (a) *Maslow's theory of human motivation and substance use disorder,* (b) *self-determination theory and readiness for treatment, (c) hierarchy of needs and motivation for substance use treatment,* and (d) *self-determination*

theory and addiction treatment outcomes. This search was then made specific to the target sample by adding the key words *in emerging adults* and *in young adults,* while limiting the date range to literature published after 2014. Information on the Millennial generation was found using the terms *Millennials, Millennial characteristics,* and *the changing face of heroin addiction.* Additional information related to the cognitive and moral development of young adults was obtained using the terms *transition into adulthood, moral development, individuation,* and *emerging adulthood.*

I accessed national databases directly through the search function of their respective websites using the terms *non-medical opioid use –past 20 years, overdose rates in U. S., national mortality rates –past 10 years, physician prescribing rates of opioids –past 20 years,* and *comparison of substance use by demographic data.* I conducted a search for information on the history of substance use globally and in the United States using the terms *history of substance use in ancient cultures* and *history of substance use in the U.S.* with an unlimited date range. Articles related to aspects of drug use other than addictive disease were located using *psychedelics and spirituality, psychedelics and psychiatric treatment,* and *culture of drug use.*

In a final search, I used Google Scholar to locate additional articles germane to the topic by title that were referenced in the research that was collected through the above-mentioned databases. I also used the Google Scholar "Cited By" feature to locate additional research or articles with more recent publication dates in the topics of interest. All of the articles identified in the databases were available through the Walden University library.

Framework

I used Maslow's theory of human motivation and self-determination theory to gain insight into possible motivational processes through which young opioid users come to seek treatment (Deci & Ryan, 1985; Maslow, 1943). Maslow's theory of motivation is useful in understanding motivation as a function by which human beings strive to meet their physiological, emotional, and transcendent needs. This was a suitable framework as SUD is inextricably entrenched in the brain's reward circuits, historically having been characterized as a biological/psychological/social illness (Marlatt et al.,1988).

Self-determination theory is a more contemporary model that explains motivation as a complex system of both internal and external processes, each impacting different aspects of a person's life such as culture, relationships, and self-concepts. Such a model was useful for its explanation of the ways in which autonomy and coercion impact treatment engagement and goal achievement. This is particularly useful with respect to patient retention in the treatment milieu, as many of those who use nonprescribed medications find themselves coerced into treatment by employers, family members, or the legal system (Blanco et al., 2015; Opsal et al., 2016).

Maslow's Theory of Human Motivation

Abraham Maslow (1943) formulated his theory in response to what he perceived to be the lack of a single, satisfactory theory explaining human motivation. His goal was to create a unified-dynamic theory that encompassed existing theories of motivation. The result was his theory of human motivation based on his hierarchy of needs, one of the more prominent and well-known theories of its kind in contemporary psychology

(DeSouza` & Gurin, 2016). Maslow identified five needs, arranged sequentially, in what he postulated to be the natural trajectory of human survival and personal growth. Maslow regarded all drives as interdependent, with the drive to satisfy each successive need activated by the attainment of the one preceding (Maslow, 1943). The needs identified in Maslow's original theory were physiological, safety, love/belonging, self-esteem, and self-actualization and are often visually represented as a pyramid (Maslow, 1943). The fifth need, self-actualization, was later expanded into four: cognitive, aesthetic, self-actualization and transcendence. Thus, Maslow's final hierarchy was divided into two domains, the lower or deficient needs and the higher or being needs (D'Souza, & Gurin, 2016; Maslow, 1973).

The base need is identified as physiological and refers primarily to hunger or thirst. Maslow asserted that when an individual is starving, no other impulse exists but for relief. Furthermore, when the drive state is at such a basic level, the human being's life experience is dominated by that need, and one's perception of the ideal reality is only one where there is always enough to eat and drink (1943). Therefore, the task of envisioning future goals for self-growth or contributions for the greater good is not likely to occur at this level of motivation. Maslow's motivation theory characterized the drives for survival as states that are experienced as deprivation, such as hunger and safety, while the higher needs, are experienced as desires for gratification. The intent of Maslow's theory was to describe the development of healthy individuals and presupposes that human development must follow a logical and predictable pattern, driven by needs that arise in a specific order, from the basest to the most elevated.

Guss, Burger, and Dorner (2017) used Maslow's contrasting concepts of deprivation and gratification to explain motivating factors in complex problem solving. Complex problem solving may trigger either external or internal motivation depending on the individual's perception of needs. Solving problems of an emergent nature is seen as falling within the domain of safety and therefore externally motivated, while the need for self-esteem derived from having the knowledge or skills needed to solve a problem falls within a higher-level domain and is internally motivated (Guss, Burger & Dorner, 2017). This work sheds light on the ways in which different individuals may operate from a different locus of motivation in similar situations as a function of their current level of personal development.

While Maslow's theory was intended to explain the course of healthy human development, the behavior of those addicted to a substance and subsequently seeking treatment can also be understood in the context of the hierarchy of needs (Maslow, 1943). It is well-demonstrated in scientific studies that repeated exposure to an addictive substance results in changes in the architecture of the brain (Volkow, Koob, & McLellan, 2016; Volkow & Morales, 2015). At the onset of drug use, the experience is intensely euphoric and triggers the dopaminergic systems to signal a cascade of chemical messages motivating the drug user to repeat the behavior. The brain perceives the pleasure associated with drug use as equal to pleasures experienced in other life sustaining-activities such as eating and procreation (Volkow, Koob, & McLellan, 2016; Volkow & Morales, 2015). Therefore, the brain's reward system initially interprets the use of the substance use as a life-sustaining activity. As such, the continued drug seeking behavior

is motivated by a perceived physiological need, represented at the lowest level of Maslow's pyramid.

As tolerance to opioids increases along with the occurrence of negative consequences such as withdrawal symptoms, legal issues, and rejection by family, the substance user's motivation changes (Rourke, Howard, & Martire, 2015; Volkow, Koob, & McLellan, 2016). What began as motivation to repeat a pleasurable activity, changes to avoidance of pain perceived as a threat to ongoing survival, which is a motivating drive for safety at the second level of the pyramid (Maslow, 1943; Koob, & McLellan, 2016). This is the point at which most addicts are motivated to seek treatment.

The application of Maslow's theory in the treatment setting has been demonstrated in studies of motivation through incentive programs. In a quantitative study, Jones et al. (2016) demonstrated that incentives are effective motivators for those who present for treatment with the most basic needs unmet, while rewards are more useful for those who present at higher levels. Best et al. (2008) found that attending to the primal need of the addicted client to be medically stable, free from pain, and in a secure environment supportive of abstinence, is essential before the higher needs of resolving relationship issues and exploring long-term life goals can be addressed. Moreover, as proposed in Maslow's theory, first order needs must be addressed before higher order needs when providing treatment. It can be argued that even the 12 Steps of Alcoholics Anonymous reflect a hierarchy of needs, as they begin with surrender to physical addiction and progress through ever higher levels of conversion, culminating in a spiritual awakening (Alcoholics Anonymous, 1953).

Jones, Weintraub and Zia (2016) used Maslow's hierarchy to test the hypothesis that individuals in the healthcare setting will respond differently to incentives versus rewards, based on their level of personal growth. Findings revealed rewards received for the achievement of initial treatment goals assist in the transition to the development of higher-level goals. As this upward movement through treatment continues, there is a point at which incentives become the optimal form of motivation. These findings may be used to design individualized treatment programs based on an ongoing assessment of patient progress.

DeLucia, Bergman, Formoso, & Weinberg (2015) incorporated Maslow's concept of psychosocial development and motivation to demonstrate the role of psychological well-being in ongoing recovery from substance-use disorders (SUD). In a qualitative study, 21 men and women with at least 10 years of recovery from SUD were asked to describe the experience of recovery, in terms of their personal development, their treatment experience and ongoing involvement in recovery. Participants identified the attainment of meaningful goals such as finding a purpose in life and increasing their level of self-understanding and self-acceptance as key contributors to long-term abstinence and continued motivation to remain active in their recovery programs. The findings explored the implications for initiating treatment interventions designed to foster psychological well-being as opposed to the conventional focus of drug education and abstinence (DeLucia et al., 2015).

Exploring human behavior in the presence of conflicting motivations, Rigg and Ibañez (2010) applied Maslow's theory to gain insight into non-medical prescription drug

use. The goal of the research was to inform effective strategies for resolving the drug

users' competing motivations for drug use and abstinence through the design of treatment

and prevention programs that are motivation-specific. Using a mixed methods approach,

researchers analyzed data from the South Florida Health Survey of prescription drugs

(SAMHSA, 2006) and survey responses from prescription drug users. Participants varied

with respect to demographics as well as current level of use, from active users to those

involved in treatment or methadone programs. Thirty in-depth personal interviews were

also conducted to obtain qualitative data.

Quantitative data demonstrated that the majority of drug users are motivated by a

desire to "get high" (76.3%) or to cope with anxiety or stress (63.5%). However,

qualitative analysis revealed that while these users originally seek euphoria, their

motivation devolves into an avoidance of the pain caused by withdrawal, as tolerance

prevents the experience of euphoria once produced by the drug. These findings support

the premise that drug use is driven by needs for survival and physical comfort, which

appear at the lower tiers of Maslow's hierarchy (Maslow, 1943). The implications for

prevention and intervention designs point to the need to target the more salient

motivations for drug abuse, rather than those that are commonly addressed, yet less

important, such as peer pressure.

Gray (2002) conducted a mixed methods study to assess treatment outcomes in

The Brooklyn Program, a pilot program initiated by the US department of Probations and

implemented in the Eastern District of Probations in New York City. Based on Maslow's

(1970) assumption that individuals are motivated by an innate drive towards self-

fulfillment, the program focuses on personal development and skill-building rather than meeting abstinence goals. A variety of techniques encompassed in the discipline of Neuro-Linguistic Programming (NLP) are employed to assist clients in recalling and anchoring resource states. The Brooklyn program reported an 80% program completion rate, with 55% of those who completed treatment maintaining continuous abstinence for the three months following treatment. This does not represent a statistically significant rate; however, it does compete with outcomes of costlier and more time-consuming programs. A more promising outcome was evident in the qualitative data, which revealed marked changes in the participants' attitudes. Graduates of the program report enhanced self-esteem, a sense of direction, and motivation to pursue positive life goals (Gray, 2002).

Ujhelyi et al. (2016) applied the principles of positive psychology to treatment and prevention in the addictions field. The study reflected the views of several pioneers in the field of positive psychology such as Rogers (1951), Seligman (1972), and Maslow (1943). Based on the concept of self-actualization and working from the premise that human beings are driven to satisfy higher as well as lower needs, scales of well-being, hope, and resilience were employed to identify predictors of these qualities in those with SUD and co-occurring psychiatric diagnoses. The aim of the study was to highlight the contribution that positive psychology can make in the treatment of addictions. Data were analyzed using a stepwise logistic regression to assess relative contributions of a number of predictor variables on the reported levels of hope, well-being, and resilience. Findings suggest that high resilience and greater satisfaction of life as predictors of higher levels of

hopefulness which, in turn, were positively correlated with resilience. The odds ratio of 1:19 indicated that respondents who reported higher hopefulness were a great deal more likely to report high levels of resilience. The odds ratio of 1:18 predicted that respondents who reported higher resilience were a great deal more likely to report high levels of well-being compared to the other predictors. These variables were selected due to previous studies citing positive mental states and resilience as protective factors against substance abuse (Ujhelyi et al., 2016).

Maslow's theory provides a basis for understanding the drive states that are present from the onset of chemical dependency, through the motivation to seek treatment, and onto higher levels of recovery. The neuroplastic changes in the brain associated with SUD override the ability of the individual to make rational decisions regarding drug use (Volkow & Morales, 2015). When this occurs, the addict functions from the survival level, as the pain of withdrawal creates a crisis. When continued use of the drug no longer offers relief even from the pain of withdrawal, the motivation to seek help follows. As the addict progresses in recovery and the brain is restored to normal functioning through abstinence, there is a desire to continue on the trajectory of self-fulfillment. This progression from addiction through lasting recovery aligns with the strata of Maslow's hierarchy (Maslow, 1943). The research question will provide a vehicle through which the addicts may describe their inner experience of addiction and drug seeking behavior. It is hoped these narratives will serve to replace commonly held preconceptions of addiction with an understanding of the lived experience of the addict.

Self-Determination theory

Deci and Ryan's self-determination theory (1985) is a self-described "macrotheory of human motivation" (p.1) that grew from their studies of external factors acting on intrinsic motivation. Originating in the 1970s, the complete theory was published 10 years later. Its appearance in the professional literature at that time is said to have sparked numerous studies applying the theory to various fields, mostly in the area of education and sports psychology (Deci & Ryan, 1985). The theory addresses a wide range of issues such as goal attainment, psychological needs, personality development, and cultural factors, and was intended to be applied in a variety of life situations (Deci & Ryan, 2008).

One aspect of self-determination theory that sets it apart from previous motivational theories is the distinctions made between types of motivation rather than identifying general needs that motivate behavior. This theory asserts that motivation is divided into two categories, autonomous and controlled, and the locus and quality of motivation is positively correlated to desired outcomes such as development of well-being. Autonomous motivation is defined as intrinsic and related to the ideals and values of the individual's identity. Controlled motivation is regulated externally and driven by a fear of punishment.

Deci and Ryan asserted that individuals motivated by external factors tend to be approval-seeking and feel pressured to meet others' expectations (Deci & Ryan, 2008). However, while such motivation may produce compliance, compliance based on external coercion is introjected motivation, which does not translate to acceptance of others' goals

as one's own. Conversely, self-regulation and the integration of intended goals with the individual's sense of self, results in acceptance and self-determination (Deci et al., 1994). In later studies, Deci and Ryan further examined the impact of excessive external control on psychological and physiological well-being. Their findings revealed that excessive coercion and pressure to conform may actually have a deleterious effect on well-being and disrupt the inherent human tendency to move toward self-actualization. This interference in personal growth may significantly reduce motivation, contributing to psychopathology and emotional distress (Deci & Ryan, 2000).

As self-determination theory continued to garner the respect of the scientific community, its application in healthcare settings grew. This is due in part to studies of the last decade demonstrating positive outcomes for patients who perceive their caregivers as supportive of their autonomy (Vansteenkiste & Sheldon, 2006). Self-determination theory is borne out in the experiences of many addicts who enter treatment, as they are typically motivated either by intrinsic factors, external pressure, or a combination of both (Wild, Yuan, Rush, & Urbanoski, 2016). Intrinsic factors may include a desire to improve quality of life or live up to one's potential, while external pressures are typically exerted by legal issues or threats from family members (Wild et al., 2016). This distinction is important as research has shown that intrinsic motivation, or a combination of intrinsic and external, is highly correlated with continued engagement in treatment and positive outcomes following discharge, while external pressure alone is not (Wild, Cunningham & Ryan, 2006).

Self-determination theory is especially appropriate when exploring possible motivating factors for today's opioid users seeking treatment. The new demographic of opioid user is most likely to experience only external motivation. This is due to the highly addictive properties of opioids, which are enhanced by the synaptic plasticity of the still-developing adolescent brain (Andersen, 2016). The young person who is drug-involved rapidly becomes chemically dependent. Once fully dependent on the substance, a great deal of time is spent in acquiring and recovering from each episode of drug use, time that is ordinarily spent in completing tasks associated with typical adolescent development (American Psychiatric Association, 2013).

The tasks of adolescence include the development of a concept of personal identity, empathy skills, and an awareness of the value of personal relationships as well as internalizing a sense of morality (Kohlberg & Hersh, 1977). Young opioid users develop dependency before they have the opportunity to develop goals or personal integrity. Such qualities are those that allow an individual to acquire the internal motivation for recovery from addiction that is described in self-determination theory (Deci & Ryan, 2008). Substance use in adolescence interferes with all aspects of normal personality development (Slater, 2003)**.** As addictive use interferes with personal development; it limits the potential of the individual to develop those very characteristics that foster internal motivation for personal growth. During the sensitive periods of learning in adolescence when salience of the environment is heightened, the normal course of development is eclipsed by the intense stimulation provided by mood-altering chemicals, directing the users' energy and attention towards the drug of choice and away

from personal growth (Andersen, 2016). This stunting of development differs from the addiction process associated with less reinforcing drugs and is similarly not the experience of those individuals who begin using drugs when they are older, and the brain is fully developed. Therefore, it is possible that developmental delays due to the impact of drugs on the brain need to be considered in attempts to foster internal motivation in young patients.

Self-determination theory has been used to explain the influence of social interactions on motivation. Deci and Ryan (2008) described motivation as a continuum, ranging from those actions that are solely initiated through self-determination, to those that are the result of external pressure alone. Many combinations of both fall in the range between these two extremes. Intrinsic motivation can evolve from external pressure if such pressure is perceived to support personal autonomy rather than complete control over the individual (Deci & Ryan, 2008). External pressure that is based solely on coercion and attempts to control typically results in introjected motivation, which is compliance based on fear or guilt rather than intrinsic factors (Deci & Ryan, 2008).

Based on Deci and Ryan's (1985) theoretical framework, a quantitative study of the role of social pressure and coercion in client engagement in outpatient settings was conducted by Wild, Cunningham and Ryan (2006). The intent of the study was to investigate the utility of self-determination theory in understanding the relationships between social pressure, treatment motivation, and engagement. Three hundred individuals seeking treatment for SUD consented to participate in the study. Participants were asked to complete a Treatment Entry Questionnaire (TEQ) assessing reasons for

seeking treatment. The two measures of social network pressure were identified as (1) referrals through legal mandates, and (2) referrals from employers or social services. Results of the study revealed a positive correlation between the two measures of social network pressure and both external and introjected motivation. Conversely, identified internal motivation for treatment was positively correlated with problem severity, (2) inversely related to external coercion, and (3) highest in clients who were self-referred for treatment. The research concluded that legal or social pressure to seek treatment did not predict internal motivation for treatment, nor positive treatment outcomes, while self-referral predicted greater interest in treatment, higher retention rates and greater commitment to achieving treatment goals (Wild et al., 2016).

Wild, Yuan, Rush and Urbanski (2016) conducted a similar quantitative study of client-engagement levels in court-mandated treatment. Based on self-determination theory, the study hypothesized levels of client engagement would be moderated by the factors motivating them to seek treatment. Upon admission, a group of 325 males were asked to identify the source and rate the level of perceived coercion for seeking treatment for SUD. A logistic regression model was used to predict the rate of treatment retention with levels of engagement. The results demonstrated that clients who were legally mandated to treatment had significantly lower treatment retention rates than those without legal mandates.

Cornelius, Earnshaw, Menino, Bogart and Levy (2016) used self-determination theory as the framework to explore SUD treatment engagement motivation in adolescents. In a qualitative study, adolescent patients and their caregivers were

interviewed regarding treatment experiences. Thematic analysis was employed to code transcripts, resulting in the identification of three categories of motivation: (1) identified/integrated motivation, (2) introjected motivation, and (3) extrinsic motivation. Intrinsically motivated narratives were characterized as external pressure by loved ones perceived as supportive of patient autonomy. Extrinsically motivated narratives described treatment decisions that were exclusively motivated by external coercion with no support of client autonomy and no evidence of intrinsic motivation. The mixed/transitional narratives demonstrated motivation initiated by external coercion but transitioned into internal motivation. This transition came about when the client was provided non-judgmental support by family members who gradually relinquished involvement in treatment decisions as the client demonstrated honest acceptance of their illness and the need for help. Patients who were initially or eventually able to experience intrinsic motivation reported they were able to do so through sense of relatedness they experienced with their caregivers and family member.

As individuals remain largely dependent on their parents throughout adolescence, the process of individuation at this stage takes place within the family system (Zupančič et al., 2014). This accounts for the successful leverage of external coercion from parents in motivating adolescents to participate in treatment. Young adults continue the process of individuation outside of the family system through the development of independent living skills. During this time, the formation of meaningful connections with peers and romantic partners replaces dependence on parents for emotional support (Zupančič et al., 2014). This may explain why young adults respond differently to treatment coercion. A

quantitative study of the role of social pressure on treatment motivation revealed a negative relationship between treatment motivation and external coercive pressure (Goodman, Peterson-Badali, & Henderson, 2015). The study suggests external pressure from parents may be viewed as an attempt to thwart emotional independence. The concluding discussion called for further investigation into how emerging adults differentiate between the sources and types of external pressures that are coercive, and those that are supportive and motivating (Goodman et al., 2015).

The demonstrated cognitive and behavioral differences between adolescents and young adults underscores the need to investigate their drug-use experiences separately (Goodman et al., 2015; Zupančič et al., 2014). The issue of motivation for treatment and recovery in adolescents has been adequately explored through a variety of methods, but the same issue in young adults has not (Goodman et al., 2015). This study intends to fill a gap in the literature by exploring motivation for treatment and recovery in emerging adults, the developmental period preceded by adolescence. This study further intends to deepen this exploration through its specific focus on opioid use disorders.

Cornelius et al. (2016) concluded that intrinsic motivation in the classic sense may never be present in addicts seeking SUD treatment as the experience is rarely pleasurable. They further cautioned against categorizing all motivation into only intrinsic vs. extrinsic, as addicts perceive certain external pressure, such as family concern, as supportive rather than coercive. Therefore, effective approaches to increasing patient motivation may involve fostering relatedness between clients, clinicians, and caregivers, as clients who felt their personal recovery goals were respected and supported

experienced increased perceptions of self-competence and achieved higher levels of engagement in treatment (Cornelius et al., 2016).

Interestingly, the client may still experience pressure, even in circumstances where there is no evidence of external coercion involved in the client's decision to seek treatment. Opsal, Kristensen, Vederhus and Clausen (2016) conducted a quantitative study of patients who were voluntarily admitted (VA) and involuntarily admitted (IA) to treatment for substance-use disorder. Patients were asked to complete the Perceived Coercion Questionnaire (PCQ), which was developed specifically for patients engaged in treatment for substance-use disorders (SUD). The PCQ contains items that appear as statements, which the client rates for personal applicability on a 5- point scale. The statements are divided into six sets of subscales, five of which measure external pressure. The sixth, Self, measures internal pressure that is perceived by the patient as coercion. This subscale describes internally motivating factors such as perceived personal powerlessness over addiction or shame over drug use and related behaviors (Klag, Creed, & O'Callaghan, 2006).

Analysis of patients' scores on the PCQ revealed no significant differences in the scores between the IA and VA patients. This indicates that even though clinicians may regard external sources such as legal, financial, or family issues to be the primary sources of coercion, the patient may feel equally coerced by their internal sense of desperation and shame. These data point to the possibility that many patients seeking admission to SUD programs experience equally high levels of perceived coercion to seek treatment regardless of circumstance. The study concluded that in order to enhance motivation and

treatment outcomes by increasing intrinsic motivation as predicted by self-determination theory, attention must be paid to identifying and ameliorating the source of perceived of coercion (Opsal et al., 2016).

Self-determination theory was an appropriate foundation for this study as it provided information relevant to the ways in which impetus to change is impacted by the pressure from internal and external sources. Of particular importance in the field of addictions treatment is the understanding gained from this theory that even internal pressure does not always translate into intrinsic motivation (Wild et al., 2016). Those with SUD often internalize the disapproving messages of their family and general social support system and are driven to satisfy the needs of others over their own. Such motivation typically results in surface compliance, rather than the internal growth that is associated with positive treatment outcomes (Wolfe, Kay-Lambkin, Bowman, & Childs, 2013). This study relates to existing theory on self-determination with its examination of the context wherein young substance users view their disorder and their personal process of becoming motivated to seek treatment. In this way, the research questions were designed to generate discourse that provided enlightenment with regard to the addicts' inner cognitive and emotional processes as they moved through the stages of their illness. This understanding of how those with SUD perceive their disorder and personal treatment needs may be used to inform the design of treatment methods that encourage internal motivation rather than surface compliance (Wild, 2015).

In summary, a variety of both quantitative and qualitative studies have been employed to demonstrate the usefulness of these theories in understanding possible

motivation for seeking treatment, prolonged retention, and positive treatment outcomes. In a broad sense, Maslow explains basic human needs, which initially are met entirely by the drug of choice, only to reverse course and leave the addict suffering in a constant state of deprivation. Self-determination theory provides a rationale for moving away from the past approach of coercing addicts into treatment, settling merely for compliance with program rules, instead fostering a sense of self-competence and an internal motivation for recovery. Both theories are examined further in the remaining chapters as they were used to analyze and interpret the data.

Literature Review Related to Key Concepts

Demographics and Personality Traits of Millennials

The demographic that was the focus of this study, young opioid addicts between the ages of 20 and 25, are a subset of their generation, the Millennials. A review of the attributes that set this generation apart from its predecessors has been provided to facilitate an understanding of that subset. Millennials currently comprise the largest group of Americans, approximately 75 million, or one quarter of the population (McDonald, 2015). The world in which they have come of age is significantly different from that of past generations (McLeigh & Melton, 2015). Millennials grew up in a period of American history characterized by unprecedented acts of domestic and foreign terrorism on American soil, carried out in cities, schools, places of worship and public social gatherings. They have had far greater access to media and information technology than previous generations, allowing them to witness repeated broadcasts of violence and economic upheaval.

The majority of millennials were raised in households earning a middle-class income or higher and were heavily influenced by cultural trends such as single parent homes, increased access to technology and women in the workplace (Ng & Johnson, 2015). More millennials attended college and earned degrees than past generations. This includes young women, who received their degrees and entered the job market in greater numbers than those before them. Their levels of education, and the parenting styles of those who raised them has contributed to their tendency to be more assertive, have high levels of self-expectation, and to question the status quo.

Using large sample sizes (175,000 per year), Gallup polls provide one of the largest data bases of lifestyle choices for Millennials and previous generations (Gallup, 2016). Analysis of these data reveals that Millennials prefer a lifestyle that differs greatly from previous generations. With regard to relationships, Millennials have the lowest rate of marriage in same-age comparisons with GenX and Boomers (41%, 84%, and 90% respectively). More millennials live in multiple adult settings as opposed to two adult households when compared to their predecessors. Seventy-seven percent of millennials who have never been married live in communal settings shared with two or more adults. Sixty-eight percent of millennials disclose marriage is not prerequisite for raising children. Indeed, more than 50% of millennials over the age of 34 who have never married have children as opposed to 30% or less from previous generations. Finally, millennials are the most ethnically diverse generation in American history and are twice as likely as GenX or Boomers to identify as LBGT (Gallup, 2016).

Much of the information on the personality attributes of Millennials has been gleaned from workplace studies, as Millennials represent the future of the American workforce. Observations and studies of Millennials at work have resulted in unflattering characterizations of them including, lazy, defensive, disrespectful, easily distracted, needy, indifferent, arrogant, abrasive, self-absorbed and entitled (Lancaster & Stillman, 2010). More scientific approaches to measuring personality traits indicate higher levels of neuroticism, narcissism, self-confidence and self-assuredness in Millennials when compared to older workers (Lyons & Kuron, 2014). Perhaps their upbringing by a generation of parents who provided reward based on effort rather than merit contributed to what was described by Ronald Paul Hill (2002) as the "ability-performance nexus" (p. 64). Millennials demonstrate an inability to relate performance to their abilities and tend to have high levels of self-esteem that is not based on actual levels of self-competence. Forty-one percent of Millennials expect to be shown appreciation for their contributions in the workplace on a monthly basis which exceeds the expectations for recognition of past generations at the same age (Stewart et al., 2017). Finally, they have high expectations of success that are unmatched by their ability level and unrealistic expectations of advancement, expecting promotions within 15 months of obtaining their first position, and yearly salary increases of up to 3% (Ng & Johnson, 2015).

The information above, when applied to those millennials with SUDs , offers some insight into the challenges of motivating them to seek treatment. Their high expectations of success are rarely met in the treatment setting as relapse is the hallmark of opioid use (Hilton & Pilkonis, 2015). Furthermore, comparing themselves to the

typical Millennial without a SUD is an unfair comparison that only reinforces their sense of shame and social isolation from their peers. Young addicts entering treatment typically present with a variety of legal problems and social, educational, and financial deficits, which often seem insurmountable (D'Agostino et al., 2017). Comparing themselves to their non-addicted peers who have successfully graduated from college and secured well-paid positions can create an overwhelming feeling of failure, which is stressful and undermines recovery (Lusk & Veale, 2018).

Substance Abuse History, Spirituality, and Connectedness

Individuals who have a history of substance abuse often experience their addiction as a form of relationship (Larkin et al., 2006). This fundamental perception in addicts of the drug as more than a medication is an important distinction in the way they regard abstinence-based treatment. The consideration of drug use from the perspective of the addict is a useful context from which to understand motivation for treatment. Unlike clinicians, individuals with SUD regard mood-altering substances within the context of their reinforcing properties, rather than solely agents of harm. The individual personality of the individual and the needs that any given substance fills for that individual, provides important clues as to what is needed to increase treatment engagement (Blonigen, Timko, Jacob, & Moos, 2015; Hilton & Pilkonis, 2015). A look at the needs met in ancient cultures through drug can provide insight into humankind's earliest positive experiences with mood-altering chemicals which in turn may be extrapolated to explain the function of drug use in today's addict.

The relationship between human beings and substances has an enduring and well-documented history. The oldest evidence of the use of the opium poppy in ancient cultures was discovered in the ruins of a Stone Age settlement submerged by rising water in La Marmotta, Italy. Archeologists believe the site was habited by a Neolithic farming community approximately 7,700 years ago. Preserved under the lime of the lake which now covers the region were many well-preserved specimens of poppy in a religious cult room, linking this oldest specimen to ritual use of the poppy by humans (Merlin, 2003). Botanical evidence of opium poppy has also been unearthed in various sites throughout Europe and Asia as far back as the Neolithic age (Merlin, 2003). It is believed that Neanderthal civilizations used mood-altering substances for medicinal effects and use in cult rituals. Such use is believed to have been instrumental in the development of one of civilization's earliest forms of spirituality, shamanism (Inaba & Cohen, 2014).

The psychoactive properties of various plants known as entheogens, served to stimulate visionary experiences in shamans (Jünior et al., 2015). Shamans believed these ecstatic states allowed them direct intercession with the spirit world on the behalf of the community with regard to illness and climate factors affecting food supply and safety (Winkleman, 2105). Therefore, the earliest role of substance use in civilization was to provide healing, energy, pain relief, and a connection to the divine – all positive and life-sustaining functions. These positive functions of substance use are still experienced today, not just with respect to medical treatment, but in a spiritual sense as well. This has been supported by recent research prompted by a resurgence of interest in the role of

psychedelics for the treatment of addiction and certain psychiatric illnesses (MAPS, 2018; Thomas et al., 2013).

Studies of the use of ayahuasca, an entheogenic preparation used by indigenous tribes of the Amazon basin (Inaba & Cohen, 2014) have demonstrated a relationship between the use of this drug and positive changes in attitudes that support abstinence. These changes include increased spirituality and optimism, with no evidence of psychopathology or neurotoxicity related to the use of this drug (Buoso et al., 2015). A study was conducted on the experiences of six tourists from various locations who traveled to Iquitos to participate in the ayahuasca ritual. During the month-long retreat, micro-ethnographic field study methods were used to collect qualitative data on the participants' experiences and responses to the ritual. All six participants reported psychological, social and physical benefits, such as serenity, increased self-awareness, and intended improvement in behavior towards others due to a sense of relatedness to society as a whole (Prayag, Mura, Hall, & Fontaine, 2015).

In their investigation of the psychedelic drug experiences of the global dance-drug culture, Joe-Laider, Hunt and Moloney (2014) collected narratives of contemporary youth to capture the meaning they ascribe to the hallucinations experienced in various settings. Their intent was to investigate the role of such drugs in fostering a sense of community and shared spiritual experience as a motivation for use. Two groups of participants were interviewed from distinctly different demographics. Yet, they all shared an interest in frequent attendance at local dance clubs, where they routinely consumed hallucinogens such as LSD, Ketamine, or Ecstasy to enhance their experience. Common themes arising

from the accounts given by both groups of participants of their intoxication included

heightening of the senses, increased self-esteem, confidence and happiness, a sense of

community or connection to those sharing the experience, and a feeling of safety and

trust which allowed them to lower their defenses (Joe-Laider et al., 2014). Many reported

that such experiences had a life-changing impact which persisted long after the effects of

the drug had dissipated, allowing them to be more open, social and spiritual than they had

been in the past. The researchers concluded that the experience transcended mere

intoxication and resulted in an enhanced sense of expansion, spirituality, and connection

to others (Joe-Laider et al., 2014).

Legislation as Remedy

The failure to consider these positive effects of substance use may be at the root

of the many failed attempts to address drug addiction through legislation. As America

transitioned from the 19th to the 20th century, a growing awareness of the many societal

problems inherent in habitual drug and alcohol use developed (Sacco, 2014). The

industrialization of America and England saw a rise in the consumption of alcohol along

with increased awareness of its negative impact on the family system. Alcohol

consumption had risen to its highest level in nearly 50 years accompanied by a

corresponding rise in admissions for treatment of alcoholic psychosis and death rates due

to cirrhosis (Blocker, 2006; Duke & Gross, 2014). During the same general time period

the use of opiates and cocaine, available through the unregulated manufacture and sale of

patent medications, had also become problematic (Kolodny et al., 2015; Sacco, 2014).

The response to these problems was as series of legislative actions designed to restrict the supply of alcohol and drugs available to Americans while imposing penalties for their use. This initiative began in 1901 during Theodore Roosevelt's term and continued into the 21st century. Three of the most well-known and impactful pieces of legislation were the Harrison Act (1914), the 18th Amendment or prohibition (1920) and the Comprehensive Substance Abuse Act of 1970 (Duke & Gross, 2014). All of these laws instituted sweeping changes in federal regulations regarding the manufacture, distribution, and use of alcohol and other drugs, yet none of them can be attributed with eradicating or even significantly reducing the problem they were intended to address (Duke & Gross, 2014). History has shown us that such approaches typically result in the same outcomes, (a) an increase in illegal sources of trade and the development of new substances that are outside the scope of the law and (b) the incarceration of those already addicted (Herzberg et al., 2016).

These clearly observable outcomes from over a century of such interventions have been supported by research. Studies show that cocaine addicts will continue to use despite punishment, which is believed to be due to impairments in goal-directed control (Ersche et al., 2016; Stern, 2016). Addicts who enter treatment due to legal pressure do not experience positive treatment outcomes. Mandatory addiction treatment, considered by many to be a violation of human rights, had been a common practice in many Asian countries for decades, accounting for the forced treatment of more than 400,000 individuals. This approach has had so little effect on reducing drug use that there has

been a recent move towards voluntary treatment and harm-reduction models in those locations (Lunze et al., 2016).

Moreover, studies of the impact of legal coercion for treatment have shown that legal pressure to enter treatment is negatively correlated with treatment readiness, and legally mandated treatment is not a significant predictor of engagement in treatment (Rourke et al., 2015; Urbanoski, 2010). An equally distressing outcome of these failed attempts to reduce substance abuse through legislation was its reinforcing effect on the stigma already associated with drug use. One of the outcomes of the first wave of drug enforcement laws in the early 20th century was to focus public attention on opiate addiction in a way that engendered fear and repulsion regarding the use of such substances. The unfortunate individuals who were unable to overcome their drug dependency and continued to access opiates and cocaine through illegal channels became criminals and outcasts of society. The term "junkies" was coined in this era to describe these people who were considered hopelessly incapable of rehabilitation (Herzberg et al., 2016). Unfortunately, these negative perceptions persist in contemporary society, adding to the self-condemnation typically experienced by those with SUDs (Webb, & Toussaint, 2018).

The Medicalization of Substance Use Disorders

The stigma of alcoholism was finally challenged in the mid twentieth century through the efforts of Bill Wilson. Wilson was an unemployed stockbroker who had been unsuccessful in maintaining abstinence despite repeated hospitalizations. After having a life changing spiritual experience while under the influence of belladonna, a hallucinogen

sometimes administered to alcoholics at that time, he was inspired to establish Alcoholics Anonymous (AA, 2018). The support group was based on the principles of the Oxford Group, an organization of Christian men seeking to improve their spiritual condition. Wilson was among the first to use the term "disease" in reference to alcoholism, although the principles or "steps" suggested as a path to recovery were mostly spiritual in nature (Hartmann & Millea, 1996).

As membership in AA grew considerably, the group experienced a significant boost to their credibility through the work of E.M. Jellinek, a biostatistician from Stanford. Jellinek conducted a study into alcoholism using a handful of personally selected AA members who submitted self-completed questionnaires regarding their experiences as both active alcoholics and while in recovery. This research, which is now considered unscientific and flawed, garnered so much attention for its detailed account of the progression of alcoholism that it was used by a branch of lobbyists from AA to convince members of American Medical Association (AMA) to officially endorse the disease concept of alcoholism (Falcone, 2003). This group of lobbyists organized under the name of the Committee for Education on Alcoholism (CEA), then joined forces with the AMA and other legislators to compel the federal government to accept the AMA's position and officially recognize alcoholism as a primary disease rather than a form of mental illness. When this had been accomplished, the field of alcoholism treatment earned the right to establish its own national institute, the National Council on Alcoholism (NCA).

The considerable influence of the NCA combined with the support of the AMA led to the acceptance of the AA model of abstinence and powerlessness. Pressure from the NCA benefitted alcoholics by making treatment available on a nationwide scale. Such treatment however was rigidly modeled after the principles of AA and disallowed any approaches other than strict adherence to the 12-Steps of AA and complete abstinence from all mood-altering substances. This persisted despite research that was being conducted during that period demonstrating the feasibility of controlled use as an option in the treatment of alcoholism (Bien, Miller, & Tonigan, 1993). This was primarily due to the influence of the NCA and AMA on the federal government (Bien, Miller, & Tonigan, 1993; Falcone, 2003; Sacco, 2014).

Fortunately, the advent of managed care compelled treatment providers to institute the development of training and credentialing for addiction professionals as well as the institution of research-based treatment approaches, allowing the introduction of contemporary modalities and integrative therapies (Kunz & Wiegand, 2016). These approaches included medically assisted treatments such as opioid agonist and antagonist therapies, which have proven successful in reducing overdose deaths and relapse rates (Weiss & Roa, 2017).

Addiction Etiology and the Diagnostic and Statistical Manual of Mental Disorders

As the long-running debate over the etiology of addiction took place over the past century, the discourse was joined by social scientists and those involved in neuroscience research. The former opposed a purely genetic/biological model of addiction, as this disallows what is believed to be the credible biocultural and ecological contributors to

SUDs . The latter brought to the discussion several decades of research devoted to identifying the neuro-circuitry involved in SUD through the use of advanced neuroimaging technology. The biological model has been publicly endorsed by NIDA, and thus, government funding of research has been primarily directed towards this model (Courtwright, 2010).

The struggle to develop a consensus on the cause and manifestation of addiction was reflected in the many editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM). The first edition of the DSM was published through a cooperative effort between the Veterans' Administration and the American Psychiatric Association following the end of World War II to address the psychiatric causalities of the war (Nathan, Conrad & Skinstad, 2016). The panel of 28 physicians developed the system of naming and establishing diagnostic criteria for each disorder by drawing on their clinical experience rather than research findings. The manual was titled the Diagnostic and Statistical Manual of Mental Disorders (DSM), and was the first of what has been a series of five, to-date. In the first edition alcohol and drug intoxication were included under acute and chronic brain syndromes. Five personality disorders were identified in the original addition of the DSM. The fourth in this category was sociopathic personality disorder (SPD). SPD included four subcategories, sexual deviation, antisocial reaction, dyssocial reaction, and addiction. The first three of these four diagnoses were characterized as conditions that were not responsive to punishment or treatment and/or conflicted with the mores of society held (APA 1952). This categorization of alcoholism and addiction, which also appeared in the DSM-II, was a reflection of the psychodynamic

theories that were widely accepted at the time. It was not until the DSM-III was published 28 years later that addiction and alcoholism were removed from this category (APA, 1980; Nathan et al., 2016). This was due to a growing body of research into the biological and genetic contributions to addictive disease that began in the latter part of the 20th century (Garriott & Raikhel, 2015).

Treatment Effectiveness

The various political, financial, and public agendas described in the preceding sections that have historically driven investigation into the nature of SUD, have influenced clinical practice (Livingston, Fei & Fanelli, 2017; Marinelli-Casey, Domier & Rawson, 2002; Stein et al., 2015). Reimbursement by most health insurance companies calls for accountability through documented use of research-based practices (Livingston, Fei & Fanelli, 2017). Therefore, a great deal of study has been devoted to treatment modalities and their effectiveness in order to ensure these approaches find their way into practice (Marinelli-Casey, Domier & Rawson, 2002). In addition to research funded by universities and corporate interests, the federal government is responsible for a large body of research and publication of statistical data regarding substance use through agencies falling under the auspices of the DHS, such as the NIDA.

The ongoing debate between fields of psychotherapy and neuroscience over the credibility of the disease concept of addiction has generated research into the effect of the addict's perception of the nature of their illness with regard to treatment outcomes. In a quantitative study, Wiens and Walker (2015) explored the impact of certain beliefs on their recovery held by alcoholics/addicts regarding the origin of their substance disorder.

The primary purpose of the study was to measure the effect of the alcoholic/addict's belief regarding the root cause of SUDs on their sense of personal control and feelings of shame and stigma regarding their addiction.

Ninety-one participants were separated into three groups and provided reading material which supported acceptance of (a) the disease model, (b) the psychosocial model, or (c) neutral reading material. This manipulation was intended to simulate the manner in which clients are indoctrinated into such beliefs while in the treatment setting. Following this first phase of the experiment, the participants were asked to complete ten separate scales designed to measure levels of agency, stigma, belief in the disease model, belief in the psychosocial model, shame/guilt, approach/avoidance, locus of control, and controlled drinking self-efficacy. The participants' responses were analyzed to determine the effects of the individual's beliefs on personal management of their addiction (Wiens & Walker, 2015). No significant differences were found between the treatment groups with regard to stigma, shame, and coping styles. Those in the psychosocial condition however, had a significantly stronger internal locus of control and stronger perceptions of self-efficacy than those who accepted the disease model. Weins and Walker (2015) suggested accepting the biogenetic model of addiction may erode clients' motivation to recover due to feelings of learned helplessness.

Kvaale, Haslam, and Gottdiener (2013) conducted a meta-analysis to explore the effect of holding a biomedical view of psychological problems on the stigmatizing impact of a psychiatric diagnosis. The researchers concluded that while biogenetic models reduce blame directed towards the affected individual by others, they also increase

stereotypical perceptions of such persons as dangerous or uncontrollable. Pessimism often develops among the client and family members, due to the mistaken belief that self-will and personal recovery efforts cannot significantly impact an illness of biogenetic origin (Kvaale, Haslam, & Gottdiener, 2013).

Weinberg (2013) argued for adopting a post-humanist approach with regard to the issue of addiction and self-governed behavior. This position is based on the failure of the neuroscientific community to provide explanations for the many "holes" in their brain disease paradigm. This includes an operational definition for loss-of-control regarding drug use, or an explanation for why addicts will relapse to active use long after recovery from the acute withdrawal phase. Furthermore, there appears to be no explanation for identical patterns of craving and compulsive procurement behaviors with substances that are not physiologically addictive even in the case of behaviors that are self-destructive but do not involve substances, such a gambling or sexual addiction (Weinberg, 2013).

Despite the adoption of the atheoretical classification system used in the DSM, the mental health field continues to advance initiatives for developing cross-diagnostic models of substance use and other psychiatric disorders. The Research Domain Criteria Initiative (RDoC) was developed by the National Institute of Mental Health (NIMH) for such a purpose (Kozak & Cuthbert, 2016). This strategy has not stimulated much research specific to SUD as yet (Robinson & Adinoff, 2016), however, clinicians have adopted the practice of integrating psychodynamic therapies with the biogenetic model in the field of addiction treatment (Lilienfeld, 2014).

The debate between proponents of medically assisted treatment (MAT) and conventional psychotherapists over the advisability of using therapy as an adjunct to agonist treatment has generated research as well. Proponents of the psychodynamic approach to substance use treatment assert that agonist medications alone are not sufficient to support long-term, quality recovery. Research demonstrates the response to treatment approaches that include cognitive behavioral therapy (CBT) as an adjunct to physician management (PM) in treatment for opioid use disorder have been mixed. Moore et al. (2016) demonstrated improved abstinence rates for patients who receive combined CBT and PM treatment. The benefit of incorporating behavioral therapies with opioid agonist therapy was measured in prescription opioid (PO) and heroin (H) users. Following 40 weeks of treatment, the PO group showed a significant difference in negative urine screenings over the H group, which may be explained by baseline differences between groups. PO users tend to present with chronic pain and mental health issues and shorter histories of opioid use, which may result in favorable responses to the pain-relieving and anxiolytic properties of opioid agonists (Nielsen et al., 2015).

However, a randomized controlled trial which was conducted to explore the effectiveness of four behavioral treatment interventions when combined with medical management (MM) of their opioid addiction yielded no significant results. This indicated a lack of evidence to support the benefit of incorporating behavioral interventions with MM (Ling et al., 2012). However, an admitted limitation of the study was that the treatment length did not reflect the longer treatment periods associated with positive outcomes in similar studies, which may account for the results. Similar results were

demonstrated by Fiellin et al. (2013) in a 24-week randomized trial involving 141 patients with opioid use disorder in an outpatient program. There was no significant difference in self-reported reduction in frequency of use. Results indicate no significant benefit from the addition of CBT therapy to PM.

Overall, despite the large body of research prompted by the opioid epidemic, data demonstrating the long-term effectiveness of any specific therapeutic modalities in the treatment of young adults with SUDs have been limited (Matson et al., 2014). There is, however, a significant body of evidence demonstrating the general failure of treatment programs to engage young adults in treatment. In a meta-analysis of 122 studies of treatment drop-out risk factors, Bronson et al. (2013) identified younger age as the only consistently demonstrated risk factor. The Treatment Episode Data Set of 2015 (SAMHSA, 2015) reported a 45% outpatient drop-out rate in clients aged 21-34, as opposed to less than 5% and 11% in adolescents and older adults, respectively. Vo et al. (2016) cited numerous explanations for less than optimum treatment outcomes, including developmental susceptibility, psychiatric co-morbidity, and lack of engagement Griffin and Botvin (2010) suggested that disengagement from the family system, which is common in young adults, eliminates much of the interpersonal motivation experienced by both younger and older populations of substance users.

Isolated reports of improved outcomes in the treatment of young opioid addicts through medically assisted treatments, such as agonist and antagonist therapies, are represented in the literature. An outcome study of community-based relapse prevention programs for young adults reported 3- and 6-month retention rates of approximately 60%

and 40% respectively, almost equal to those of older adult clients (Vo et al., 2016).

However, the preponderance of data indicates positive treatment outcomes in emerging

adults are rare. Schuman-Olivier et al. (2014); found statistically significant differences

in treatment retention (17% versus 45% at 12 months), duration of abstinence, and

relapse rates in such programs when comparing emerging adults to older patients. Finally,

a number of studies have reported positive correlations between increased age and

treatment retention in agonist treatment programs, which is a predictor of long-term

abstinence and reductions in overdose fatalities (Clausen, Anchersen, & Waal, 2008;

McHugh et al., 2013).

Harm Reduction Models

While the debate over the nature of addiction and the most efficacious treatment

approaches goes on, the emergent nature of the epidemic of opioid abuse has led some to

abandon academic discussion in favor of taking action to save lives. Kolodony et al.

(2015) presented evidence of the effectiveness of contemporary programs established by

public health authorities in ameliorating the devastating impact of the current opioid

crisis. The public health response to soaring rates of opioid relapse and deaths due to

overdose has resulted in the adoption of heretofore unpopular approaches to reducing

drug use. These include harm-reduction programs and medically assisted treatments.

Harm reduction approaches include needle exchange programs, which have been

shown to reduce the incidence of infections such as Hepatitis C and HIV resulting from

shared needles (Page et al., 2013). Furthermore, IV drug users are five times more likely

to seek treatment for addiction when they access the auxiliary services available to them

through a community-based syringe service program (CDC, 2017). Access to Naloxone has been instrumental in reducing overdose fatalities by providing a means of reversing life-threatening respiratory depression (Doe-Simkins et al., 2015; Wheeler, Jones, Gilbert & Davidson, 2015). Medically assisted treatments such as buprenorphine, a partial opiate agonist, have been successful in reducing relapse and overdose rates (Bentzley et al., 2015).

Conclusion

A large body of research has been directed towards the etiology and treatment of SUD, yet to-date there is little consensus among professionals regarding the causes of addiction and which treatment approaches are the most effective. The federal government's attempts to address the issue with legislation has been ineffective. The addiction treatment community has been entrenched in archaic modalities instituted in the mid-19th century that reflect the efforts of those with political influence more than best-practices driven by research (Falcone, 2003; Sacco, 2014). The enormity of the current epidemic of opioid use tends to eclipse historical accounts of American's problematic relationship with drugs, when in fact it is one of three such surges that took place in the last two centuries.

The ineffectiveness of past legislative and therapeutic measures to reduce the severity of the current tide of opioid use disorder has led to the acceptance of strategies that were once considered unacceptable. This is due to a sense of desperation as mortality rates from opioid overdoses continue to climb, lowering the life expectancy of Americans for the past 2 years, an occurrence unheard of since the flu pandemic of 1918. These

measures are largely directed towards harm reduction, which has proven to be more effective in reducing death rates from overdose as well as the spread of life-threatening infectious diseases such as HIV and Hepatitis C. Harm reduction programs such as syringe exchange programs (SEP), overdose prevention, and opioid agonist therapies have already been initiated by public health authorities in most of the United States. Still others, such as law enforcement assisted diversion (LEAD), supervised consumption, and the legalization of cannabis are either in place in some states or poised for introduction to state legislative systems in others. Due to the demonstrated effectiveness of these innovative programs, the federal government has shown support through funding as well as legislative measures designed to reduce resistance to their implementation on the state level. The impediments to successfully addressing the current epidemic present a formidable task for policymakers. Substantial progress in this area is unlikely without the resolution of long-standing dissension within and among those in public health, treatment, research and criminal justice systems on the fundamental issues of best-practices in treatment and the operational definition of SUD.

Finally, the demographic of the new face of opioid addict presents many challenges with regard to motivating them to seek treatment and commit to a program of recovery. Their sense of entitlement, unrealistic expectations of success, unwillingness to submit to the judgment of others leaves them unprepared for the reality of treatment and the trials of early recovery. Their failure to meet the goals of their non-using peers further isolates them from possible support systems. And the early onset and rapid development

of dependency on opioids prevents the development of positive relationships and interests that can fill the void left by the cessation of drug use.

Human motivation theory tells us that human beings are motivated toward experiences that sustain life and support spiritual evolution in a predictable and meaningful order. Self-determination theory demonstrates the need for intrinsic motivation as a necessary ingredient in personal growth and development. Both theories have been applied in studies of the causes and treatment of SUD. Yet the body of literature lacks an investigation into how these concepts may be applied in the study of a new generation of opioid addicts. This study addressed the gap in the literature and extended knowledge of this subset of the Millennial generation, the largest group of individuals alive today, who differ greatly from past generations with regard to their personal attributes and lifestyle choices. Their well-documented departure from the norm of previous generations warrants a fresh perspective on the issue of SUDs, which this study explored through an investigation of their lived experiences as a new generation of opioid addicts.

Chapter 3: Research Method

Introduction

My intent for this study was to explore the lived experiences of motivation to seek treatment and recovery in young adults with opioid use disorder. The study was designed to address the gap that exists in qualitative literature regarding a new generation of opioid users and what motivates them to seek treatment and recovery. Research indicates that only 11% of young adults with SUD seek and receive treatment. (Adams et al., 2014). When compared to adult populations, young people typically respond poorly to treatment (Adams et al., 2014). In 2015 alone, death rates from opioid overdoses reached 35,000 with the largest number of deaths occurring in the 25 to 44-year-old age group (HHS, 2017). These statistics indicate a possible failure to motivate and engage this vulnerable population in much needed treatment. Insights into the lived experiences of these young addicts might inform new approaches that stimulate motivation and treatment engagement in young addicts.

Most studies of individuals with opioid use disorder consist of cohort studies and surveys of older populations who are not representative of the young adult population. Recent research into motivation for treatment and recovery has offered some insight into motivational processes in alcoholics and older adults but not in young adults with opioid use disorder. In a quantitative study of motivation in adults with alcohol use disorder, 549 individuals were assessed to ascertain the relationship between severity of alcohol problems and motivation for treatment and behavior change. Results revealed higher rates of help-seeking were positively associated with higher alcohol problem severity, but

readiness to change was not. While the study did not include data on the specific age range of the participants, the discussion section noted that higher motivation for change was reported by older adults and those with partners, but data supporting this conclusion were not included (Freyer et al., 2005).

Kelly and Green (2014) conducted a quantitative longitudinal study of young adult men (aged 21-34) who had successfully completed residential treatment for SUD. The study revealed that high internal motivation for abstinence was a better predictor of long-term abstinence than high levels of self-efficacy. The research concluded that confidence in one's ability to maintain abstinence is not a protective measure against relapse if internal motivation for recovery from SUD is not in evidence. However, this study did not contribute to an understanding of what leads to high levels of internal motivation for abstinence in young adults as this construct was not explored.

Sinha et al. (2003) investigated readiness to change and treatment outcomes in young adults referred by probation for outpatient SUD treatment. Quantitative analysis of scores from the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES) revealed significant differences between younger and older adults with regard to levels of motivation and readiness to change. The study suggested that young age is a predictor of poor treatment outcomes and postulated that young adults fail to perceive their substance use as problematic. However, the study further noted significant histories of incarceration during adolescence in the young adult participants, suggesting a higher likelihood of co-occurring psychopathology, which does not represent the target group of my study.

Thus, while some research has been directed towards understanding factors involved in treatment-seeking behaviors and commitment to recovery, qualitative studies that specifically explore these issues in young adult opioid addicts are not represented in the literature.

This chapter describes the procedures for data collection and analysis. The rationale for using narrative inquiry is discussed. The recruitment procedures and development of the interview questions are also described. Ethical issues associated with this type of study are addressed as well as how I established the trustworthiness of the findings.

Research Design and Rationale

Research Questions

The following research questions guided this qualitative inquiry:

RQ1: What do narratives of young opioid addicts reveal about their motivation to enter treatment?

RQ2: What do narratives of young opioid addicts reveal about their motivation for recovery?

Central Phenomenon of Interest

The phenomenon of interest was motivation to seek treatment for opioid use disorder. I examined motivation from within the framework of two theories of human motivation: Maslow's theory of human motivation (1943) and Deci and Ryan's self-determination theory (2008). Maslow stated that all human motivation is driven by needs that build from the most basic, such as survival, to higher needs of belonging and self-

actualization (1943). Self-determination theory asserts that the locus of motivation may be external or internal, which determines to a large extent the individual's commitment to goal achievement (2008). Both theories offer a frame of reference for understanding the drives that motivate addicts' decision-making and behavior patterns within the context of their disorder. These include initial drug-seeking behavior (gratification), continued drug use and withdrawal sickness (deprivation), and intrinsic as well as external motivations for seeking treatment (Deci & Ryan, 2008; Maslow, 1943).

Rationale for Use of Narrative Inquiry Design

Narrative research uses the stories told by individuals about their experiences as a source of knowledge. According to Reissman (2008), a narrative approach generates dialogue and clarification. It invites the audience to share in the lived experience of the participant from their emotional perspective. This richness offers a depth of analysis and a chronological vantage point unique to narrative method (Reissman, 2008).

In this respect, a narrative approach was appropriate for the exploration of SUD, which is not an event, but a process that can begin at any point in time and unfold over the course of months and years. Other approaches were considered, but they were not well-suited to the focus of the study. A grounded theory approach was not chosen, as, according to Patton (2015), it is meant to "build theory rather than test theory" (p.110), and the purpose of this study was not to test or build upon theories regarding motivation. I did not select ethnography, as the focus of this study was not limited to the experiences of a particular race, religion, or ethnic group nor was it intended to generalize across populations. Interpretative phenomenological analysis can be used to explore the lived

experience of individuals, but phenomenologists explore the present moment, rather than what occurs over time. What was crucial to this study was to learn about the individual's experience of the entire process of the disorder from onset and progression through motivation, treatment, and recovery, rather than at any single point in time.

Role of the Researcher

Riessman (2008) described the narrative researcher as a facilitator who uses the interview process to elicit detailed, personal accounts of the participant's experiences. In this role, the interviewer moves from the position of listener to that of "active participant" (Riessman, 2008, p. 58). Mishler (1986) envisioned narrative interviewing as a collaborative event in which both the researcher and the interviewee impart meaning to the experiences of the participant.

Regarding my role in the design and development of the study, I conducted face-to-face interviews unassisted, using open-ended questions designed to generate the participants' narratives. I had the interview questions reviewed by content and methodology experts for validity and consistency with the study's intended focus. Feedback from these experts served to validate the sufficiency of the interview questions to answer the research questions. I also specified the criteria for participant selection as well as the strategies I employed to recruit participants. Finally, having secured authorization to proceed from the Walden University Institutional Review Board (IRB), I carried-out the collection and analysis of data and took the necessary steps to safely store data and disseminate the study's findings.

Ethical Issues and Biases

There were no professional issues that might have influenced the study with regard to conflict of interest or power differentials, as I did not know the sample of participants prior to beginning the study, and I did not have a referral relationship with local treatment providers that would have created a business incentive for their cooperation in recruiting participants. The participants were of the age of consent and therefore did not meet the IRB criteria for protected populations (HHS, 2016). However, I worked at an addiction treatment facility where young adults with opioid use disorder received treatment, and I developed some opinions and beliefs about the disorder. Therefore, I bracketed my beliefs and reactions by recording them before and immediately following the data collection process in a reflexive journal (see Josselson, 2013). Finally, those who have a history of treatment in the facility where I was previously employed were excluded from participation.

Methodology

Participation Selection

Target group. The target group consisted of individuals between the ages of 22 and 37 (Millennials) who, at the time of the study, were participating in treatment for opioid use disorder.

Sampling strategy. A sample consistent with the theoretical orientation of narrative inquiry is described as consisting of individuals for whom the study would have personal meaning (Riessman, 2008). The sample is selected purposively and can be a convenience sample in that recruitment may begin with personal contacts. Therefore, I

used a convenience sample comprising SUD clients participating in local treatment programs (Miles et al., 2013; Tindall, Smith, Flower & Larkin, 2009). As the sample size required by narrative inquiry is typically small, I expected to have access to an acceptable number of participants through this method alone. If necessary, I planned to employ snowball sampling, which is referral by participants (Smith & Osborn, 2004).

Participant Criteria

Narrative inquiry focuses on individuals' experiences of the topic of study over time, and therefore the participants should have direct personal experience of the topic of study (Larkin & Thompson, 2011). For this reason, only individuals who were engaged in treatment for opioid use disorder and who met the following criteria were considered for participation in the study. These were individuals who (a) are between the ages of 22 and 37, (b) meet the DSM-V for opioid use disorder (severe), and (c) have had at least two prior treatment experiences in the course of their illness (not including the current admission). Prior treatments may have included detox, but detox alone will not qualify as a treatment experience. Additionally, while it is not uncommon for SUD to co-occur with a psychiatric illness, those with co-occurring disorders were not considered because the complex nature of their illness sets them apart in experience from those with a primary diagnosis of SUD alone (Inaba & Cohen, 2014).

Sample Size and Rationale

Guest, Bunce, and Johnson (2006) established that data saturation with a homogeneous sample occurs at around 6 participants, and thematic saturation occurs at around 12 participants. Small sample sizes are often typical in narrative inquiry due the

detailed analysis inherent in this approach (Smith, 2004). Therefore, I planned to recruit 6 to 12 individuals for this study.

Procedures for Recruitment

As I was employed as a clinical supervisor in an outpatient SUD program at the time the study was conducted, I had developed a roster of contacts with clinicians who worked in local treatment centers. I contacted the directors of these programs and requested permission to address their clinical staff regarding my study and my need for participants. This was followed by a brief presentation describing the nature of the study and the criteria for participation when the cooperating programs requested one. Initial recruitment occurred through a flyer containing the selection criteria and my contact information. These were posted in the community area of the sober housing facility associated with each treatment program. Clinicians were asked to make their client population aware of the flyers. I planned to recruit additional participants, if needed, through snowball sampling, as this strategy is known to support inductive analysis (Miles et al., 2013). I screened all potential participants in person to confirm their eligibility for the study. At the time of the screening, individuals who met the criteria and wished to participate were provided a consent form and an overview of the purpose and procedures of the study (Smith & Osborne, 2004). The overview included information regarding the nature of the questions they would be asked and an explanation of their rights to confidentiality. In the event someone overlooked the exclusionary criteria and presented for screening, an explanation of the ethical and medical reasons for excluding those who

had a co-occurring diagnosis or who were pregnant would have been provided to avoid stigmatizing such individuals.

Instrumentation

The use of interview guides is not common practice in narrative inquiry (NI) as the intent of this approach is to allow the participant to share without the controlling influence of the researcher. Jovchelovitch and Bauer (2000) suggest this process of storytelling arises from a self-generating schema, which follows a tacitly understood format consisting of three distinct characteristics. The story, then, will (a) include enough detail to render the narrative plausible for the listener, (b) be recounted from the fixed viewpoint of the speaker, and finally, (c) follow a temporal sequence that includes a beginning, middle, and conclusion. This is not to say that narrative inquiry (NI) is devoid of structure, but instead the structure is imposed on the researcher rather than the participant. Ultimately, the goal of the interview is to allow the participant to relate their story naturally and spontaneously without attempts to lead or guide them towards desired topics or material (Jovchelovitch & Bauer, 2000).

Once the participant was effectively prompted to share his/her story, I engaged in the process of observation and active listening. I communicated my attention and interest in the narrative non-verbally by nodding and maintaining open body language (Joselson, 2013). I allowed the participant to continue without interruption and only inserted occasional questions for the purpose of clarification. While listening, I sustained awareness of the tone and cadence of their delivery. Facial expression, eye movements and posture, were be noted, as these non-verbal cues can communicate a great deal

regarding the affective content of the narrative and the participant's internal process of recounting their story (Patton, 2015).

Interview Guide

As narrative interviewing is more about listening than talking, I prepared open-ended interview questions with probes rather than a lengthy interview guide. The probes were used to encourage the participant to elaborate on a given topic and therefore changed with each narrative as needed. The interview questions that follow include examples of such probes:

1. I'd like you to share with me what is was like for you when you first started to use mood-altering substances. What got you started?

   a. Can you tell me about what it was like early on? What was a typical day like?

   b. Tell me about the people you spent time with. What would you typically do with your friends?

   c. Tell me about how you took care of yourself (i.e. regular meals; place to stay; something to do)

   d. How did your substance use change after your early experience –

      i. How did you spend your time? What was a typical day like?

      ii. How did your relationships with family and friends change?

      iii. What activities that you used to enjoy were replaced by your drug use?

        iv. Tell me about what you noticed about yourself as your substance use increased- what was different?

        v. How do you take care of yourself as you were using more? How did you support yourself? Your drug use?

2. Let's move on to the time of your first admission.

    a. What were your reasons for entering treatment the first time?

        i. What was the biggest consequence of your drug that influenced your decision to seek treatment?

        ii. Was there another important consequence or event that influenced your decision to seek treatment?

        iii. What did that mean to you?

        iv. What had the least impact on this decision? the greatest?

    b. How did you find your first treatment program?

        i. What kind of help did you receive? From whom? Did you need to ask for help?

    c. Tell me about your first admission experience. What was that like?

        i. What was the physical pain of withdrawal like? What emotions were you feeling?

    d. Tell me about your reaction to treatment recommendations/rules in your first program.

        i. What made sense to you?

        ii. What did you refuse to follow? Why?

3. Now that I've learned about what you experienced before treatment, can you share something about what it's been like for you during treatment and those times in-between treatments?

    a. What most attracts you to treatment? What holds you back?

        i. What aspect(s) of treatment feel helpful?

        ii. What stands out the most? Why?

        iii. What is another helpful part?

        iv. What feels useless? Why?

    b. Tell me about your relationships with your primary therapists.

        i. What was most memorable/affected you most?

    c. Tell me about your relationships with your peers.

        i. What was most memorable/affected you the most?

    d. What were your feelings about staying clean before your first treatment? This treatment?

        i. How did you define recovery then? Now?

        ii. How does abstinence fit into your recovery goals?

    e. Tell me about your relapse episodes. How have your relapses changed?

        i. in severity? in duration? in consequence? how soon after discharge?

    f. Why do you keep returning to treatment after relapsing?

    g. What most attracts you to treatment after a relapse? What holds you back?

    h. What do you have at stake this time is you don't complete treatment?

        i. If you don't stay clean?

ii.   What do you know you will lose?

iii.   How has that changed over time?

Procedures for Data Collection and Debriefing

I conducted the interview sessions in a setting that promoted a sense of participant comfort and ease. The participant were engaged in outpatient treatment and housed in sober-living residences. With permission, I conducted the interviews in one of the administrative offices of these houses. Open-ended interviews typically require a long segment of uninterrupted time; therefore, I allotted 60 to 90 minutes time for each participant (Smith & Osborn, 2007). All interviews were recorded for later transcription and analysis. Participants were advised that the interviews were designed to be completed in one session; and that a summary of their transcript would be provided so they could review and provide feedback on accuracy and make additions and deletions within 2 weeks of the interview (Colaizzi, 1978; Schwandt, Lincoln, & Guba, 2007). Immediately following the interview, I continued the process of noting my perceptions, emotional responses, impressions and interpretations in my reflexive journal, which was taken into account during data analysis.

At the end of the interview, I thanked each participant for their honesty and the personal time they devoted in the interest of completing this study. Their contribution was acknowledged as key to this work as well as to future interventions that may build on findings from this study. Participants were given the opportunity to ask any remaining questions and provide additional comments that may have arisen but were not voiced during the interview. During the interview, I was alert to any signs that the participant

was experiencing any physical or psychological discomfort, such as excessive remorse, re-activated cravings for the drug of choice, or the resurfacing of suppressed memories of trauma, in which case I planned to notify the participant's primary therapist for follow-up in the treatment setting.

Additional treatment costs that may have been incurred by the client for this service, or acute emotional reactions that may have arisen that represented an immediate threat to the participant's physical and emotional well-being, such as suicidal ideation or dissociation, would have been referred immediately to the local psychiatric mobile emergency unit (PMEU) for no cost assessment and treatment. A list of such resources was compiled and provided prior to the interview. As a licensed professional, I was qualified to assess the need for emergency services and provide crisis intervention counseling until the PMEU arrives if needed.

Data Analysis Plan

The data was analyzed using the four-step categorical-content process described by Lieblich, Tuval-Mashiach, and Zilber (1998). The four steps I used to analyze the data included:

1. Selection of the Subtext: Here all relevant sections of the text that address the RQs were marked to form a new file. This is the area that will be studied.

2. Definition of the Content Categories: Categories provided the means for classifying pertinent information. They were comprised of words, sentences, and groups of sentences. Most often they were principal sentences. The names of the categories originated with theory and at times emerged directly from the

data or a combination of the two. The categories were identified by name and defined. A circular procedure of comparing the categories with the data while re-reading the subtext occurred until the final categories and their definitions emerged. This back and forth process allowed me to determine which categories were initially used for the next step.

3. Sorting the Material into Categories: At this stage, the words (including utterances), sentences, and groups of sentences were sorted into the categories from step 2.

4. Drawing Conclusions from the Results: Here the contents from each category were used to separately and then together create a picture of the overall findings – the onset and progression of opioid use disorder through motivation for treatment and/or recovery. The information from each category was grouped and ordered by frequency to illustrate a sequence of how formative experiences shaped future decisions.

The ATLAS.ti program was used to assist in the process of analysis and graphic representation of data software program (ATLAS.ti, 1999; Beck, 1993). ATLAS.ti is a software program designed for use in qualitative and mixed-methods analysis, which has the capability of identifying and calculating percentages of agreement among multiple coders. An audit trail diagram, which is a recommended method of demonstrating trustworthiness through a detailed representation of the data analysis procedures, was created using this platform (Patton, 2002). Additionally, the software's

visualization function was used to organize the data and create visual representations for data presentation (ATLAS.ti, 1999).

Issues of Trustworthiness

Credibility

Member checking. Credibility, i.e., confidence in the truth of the findings, corresponds to internal validity in quantitative research. Lincoln and Guba (1986) have identified member checking as one of the most critical techniques in establishing credibility for qualitative studies. Member checking, or respondent validation, can occur during or after the data have been collected (Kornbluh, 2015). After data was collected, participants were given a 1- to 2-page summary of key findings to review for accuracy. In the case of direct quotes that were included in the body of the text, the participant was asked to screen statements that would compromise their right to confidentiality under federal law (Confidentiality of Substance Use Disorder Patient Records, 2017).

Triangulation. Triangulation involves corroboration from three different sources to support the trustworthiness of the analysis (Miles et al., 2014). One value in triangulation is that it exposes inconsistencies in the data, which offers the opportunity for deeper analysis of abstract concepts or a reconsideration of the phenomenon of interest (Patton, 2015). To accomplish this in my study, I used site triangulation by interviewing participants from three different treatment programs that were located in different geographical locations. This enabled me to compare collateral details (i.e., regarding treatment program components and local drug culture) from the narratives of the individuals in each group against those of the others. I also incorporated data

triangulation into the study by comparing the documentation from previous treatments with that of the current treatment providers (when it was available) and the participants' narratives. This allowed me to compare specific details shared in the narratives against clinical documents for accuracy and consistency (Shenton, 2004).

Validity. Validity in quantitative research is achieved by minimizing bias through rigorous controls and maintaining professional distance from the subject (Patton. 2015). The reverse is true in qualitative analysis, where the validity of findings is increased through prolonged contact with participants (Lincoln & Guba, 1985). Therefore, in NI, neutrality is expected to be reflected in the data rather than researcher. Credibility in qualitative data is subject-oriented and not derived through a priori interpretation by the researcher (Guba, 1981). I achieved prolonged contact with my participants through face-to-face, unstructured interviews. The interview schedule was designed to minimize time constraints that may have put pressure on the participants to respond quickly.

Transferability. Transferability is not always guaranteed in qualitative research due to the uniqueness of the data, which is often collected in naturalistic settings and consists of accounts of subjective experience. Thus, Guba (1981) asserted that transferability is the concern of the researcher who wishes to apply qualitative findings to their choice of population or setting, and the only responsibility of the original researcher is to provide enough detail to allow for comparison. Therefore, I provided this level of detail in my study at a depth and breadth sufficient for the reader to determine if the findings would apply in their choice of setting. Detailed descriptions of the study's design and analysis of data will facilitate replication of the study in other settings. It is not

necessarily the intent of qualitative research to produce data that generalize; however, repeated replication of the study with alternative groups may produce results applicable to other populations (Pietkiewicz & Smith, 2014).

Dependability and Confirmability

Audit trails. Lincoln and Guba (1986) identified audit trails as a means of establishing both dependability and confirmability. The audit trail provides the information necessary for objective parties to ascertain, through an audit inquiry, that the findings of the study are indeed grounded in the data (Bowen, 2008). Drawing from Halpern's (1986) six categories suggested for a thorough audit trail, I provided detailed information about the design and implementation of the study and interview protocol, as well as raw and processed data. Additionally, an audit trail diagram provides a useful representation of the data analysis procedures, which I created using the ATLAS.ti software program (ATLAS.ti, 1999; Beck, 1993).

Reflexivity. Shenton (2004) has raised the issue of objectivity with regard to confirmability in qualitative research. Objectivity is often established by qualitative researchers through a process known as bracketing, whereby preexisting experience, knowledge, or assumptions are noted and set aside at the onset of the interview process. Chan, Fung and Chien (2013) questioned the ability of any individual to be completely objective and aware of the personal factors that might impact objectivity. To that end, they recommend the process of bracketing should occur in advance of the actual data collection and through the analysis with the practice of reflexivity. Finlay (2002) asserts that reflection should begin with the conception of the research project when identifying

a topic of interest and the personal connection that topic holds for the researcher. This continues through the effort to maintain awareness of the assumptions and expectations brought into the interpretive process of data analysis, as validity is often judged by the researcher's ability to explain how these interpretations were reached (Mauthner & Doucet, 2003). I began this process by documenting my expectations, beliefs, and personal experiences with SUD in a reflexive journal (Josselson, 2013). In this way, I entered into the process of data collection prepared with a higher level of awareness of my reactions to participants' stories (Josselson, 2013). These personal reactions and impressions were noted in my journal directly following the interview, and this information was considered during data analysis.

In addition to my engagement in the process of reflexive journaling, I entered into this study having had the benefit of clinical supervision, which was a requirement of my position. This allowed me to continually examine my feelings, reactions, and beliefs about SUD and/or any specific client. I believe this practice deepened my self-awareness as well as strengthened my powers of reflexivity and thereby enhanced my objectivity with regard to this study.

Ethical Procedures

Upon approval of the IRB (approval number: 02-28-19-0159633), I conducted the study. All participants were invited to participate via an invitation from clinicians at local, state-licensed treatment facilities. Initial contact with me was completely voluntary, and no direct solicitation by me or intrusion of privacy occurred. I provided each potential participant two forms prior to the interview, allowing time for completion and

clarifying questions. The consent form included information about any possible risks associated with participation, as well as the procedures I planned to take to ensure participants' confidentiality. The form clearly explained that all participants were entitled to withdraw from the study at any time during the interview and prior to dissemination of findings. As their emotional well-being was also paramount, I informed participants that while the interview process was not intended to be upsetting in any way, any issues that might arise would be addressed immediately. If the issue did not present an immediate risk to the participant's psychological or physical well-being, it would be referred to their primary therapist to be addressed as a treatment issue. The release of information form (Appendix B) allowed access to their treatment records. This form clearly defined the participant's rights to confidentiality under federal law (Confidentiality of Substance Use Disorder Patient Records, 42 C.F.R., pt. 2, 2017) and outlined limits to my access of their records as well as the date upon which the release would automatically expire.

I kept the participants' identities confidential using alphanumeric identification codes. Any other identifiers, such as treatment program names or locations were replaced with generic labels. Those who participated in the study were asked to provide written permission to have their interview recorded. As the confidentiality of those in treatment for SUD is protected under federal law, I took extra measures to ensure that any details of the participants' experiences in active addiction and treatment that might reveal their identity would not be included in the transcripts

Hard copies of data were kept in a locked file, and digital data was stored on an external hard-drive, which I removed after each session and placed in the same locked

file. During the transcription process all processing took place on one laptop that was password protected and not physically accessible to any individual other than me. Following the completion of the study and dissemination of the findings, I returned the data to locked in the file, where it will continue to be stored for a period of five years, after which it will be destroyed.

Summary

In Chapter 3, I explained the rationale for my choice of narrative inquiry to explore the experiences of young people diagnosed with SUD. Issues such as ethical concerns were addressed, and the specific methodology was outlined. Plans for recruitment were discussed as well as the ways in which I would develop my instrumentation and account for its validity. Finally, the data collection and analysis procedures were provided, along with the processes I used to inform and debrief participants at the opening and closing of the interviews. Chapter 4 describes the results of the study based on the data collected and the themes that emerged from participant interviews.

Chapter 4 - Results

Introduction

The purpose of this study was to explore the experiences of young opioid users and their perceptions regarding addiction, treatment, and recovery. The intent was to understand the role of the young addicts' experience in their readiness to seek help through treatment. Maslow's theory of human motivation (1943) and Deci and Ryan's self-determination theory (1985) guided the interpretation of these experiences. This study focused on the participants' emotional and cognitive processes activated during two key stages: (a) their process of becoming internally motivated for treatment, and (b) the onset of internal motivation to recover.

This chapter describes the procedures used in conducting this study, beginning with a description of the setting, the general demographic profile of the participant pool, and a brief description of each participant. The data collection and analysis process is presented in detail, along with graphic displays of data and supporting excerpts from the transcripts. Any necessary deviations from the recruitment strategy are explained and any unexpected circumstances are described. Finally, issues related to trustworthiness are reestablished and the findings discussed in response to each research question. A summary and introduction to Chapter 5 will close Chapter 4.

Setting

The study was conducted in the counties of Monmouth and Ocean in New Jersey and in Philadelphia, Pennsylvania. The interviews took place in sober living quarters where clients live while they are participating in treatment. The sober living facilities

featured common areas and offices that allowed me to conduct the interviews privately without intruding on the participants' personal living quarters. White noise machines were placed at the door of each interview room as a cautionary measure to guard against violation of the participants' legal rights to confidentiality. There were no conditions in evidence at the time of data collection such as changes in personnel or funding that would have impacted data collection or interpretation.

Demographics

The population of interest for this study comprised men and women between the ages of 21 and 37 who had a primary diagnosis of opioid use disorder, severe (see American Psychiatric Association, 2013). Six of the eight participants were recruited using a flyer indicating the selection criteria and my contact information. These were posted in the community area of the sober housing facilities that had agreed to serve as community partners. The last two participants were obtained through snowball sampling, which occurred when one participant provided information regarding the study and my contact information to friends who were residing in sober residences in Florida.

Changes to the Initial Recruitment Strategy.

The initial recruitment strategy involved a face-to-face presentation of the study to clinicians following initial contact by e-mail or telephone with the clinical directors. This did not occur due to lack of availability of the clinicians during program hours. Therefore, flyers were provided to the directors who forwarded them to the sober living supervisors. When the response to the flyers alone was insufficient to meet the required sample size, I requested permission to address the communities in person, and this was

permitted in one location. I visited that location and met with the clients who were

provided a brief overview and allowed time to voice their questions and concerns. This

approach was well-received, resulting in the acquisition of four participants.

Additionally, due to distance, the two participants located in Florida were screened and

interviewed by telephone.

It should also be mentioned that one of the community partners was experiencing

a low census at the time I requested they post the recruitment flyer and closed shortly

thereafter. This reduced my number of available recruitment locations by one. At this

point, I explained the process of snowball sampling to the existing participants, resulting

in the referral of the last two participants. An alphanumeric code based on interview

sequence and location was assigned to each participant to protect their confidentiality.

Brief Summaries of Participants

P1N is a single, Caucasian, self-identified heterosexual male, age 21+. At the time

of data collection, he was living in a men's sober house in the area described with a

primary diagnosis of opioid use disorder, severe, and a history of eight previous treatment

experiences. At the time of the interview, he was involved in a medically assisted

treatment program and had maintained program compliance for approximately 9 months

at the time of data collection.

P2P is a single, Caucasian, self-identified heterosexual male, age 21+. At the time

of data collection, he was living in a men's sober house in the area described with a

primary diagnosis of opioid use disorder, severe, and a history of two previous treatment

experiences. At the time of data collection, he was involved in an outpatient program and had maintained abstinence for 90 days.

P3P is a single, Caucasian, self-identified heterosexual female, age 21+. At the time of data collection, she was living in a women's sober house in the area described with a primary diagnosis of opioid use disorder, severe, and a history of three previous treatment experiences. At the time of data collection, she was attending an outpatient program and had maintained abstinence for approximately 45 days.

P4P is a single, African American, self-identified heterosexual male, age 21+. At the time of data collection, he was living in a men's sober house in the area described with a primary diagnosis of opioid use disorder, severe, and a history of five previous treatment experiences. At the time of data collection, he was involved in an outpatient SUD disorder program and had maintained abstinence for approximately 90 days.

P5N is a divorced, Caucasian, self-identified lesbian female, age 21+. At the time of data collection, she was living in a coed sober house in the area described with a primary diagnosis of opioid use disorder, severe, and a history of two previous treatment experiences. At the time of data collection, she was attending an outpatient SUD program and had maintained abstinence for 30 days.

P6P is a single, Caucasian, self-identified heterosexual female, age 21+. At the time of data collection, she was living in a women's sober house in the area described with a primary diagnosis of opioid use disorder, severe, and a history of two previous treatment experiences. At the time of data collection, she was attending an outpatient SUD program and had maintained abstinence for 6 months.

P7F is a single, Caucasian, self-identified heterosexual male, age 21+. At the time of data collection, he was living in coed sober housing in the area described with a primary diagnosis of opioid use disorder, severe, and a history of six previous treatment experiences. At the time of data collection, he was involved in outpatient counseling and had maintained abstinence for 1 year.

P8F is a single, Caucasian, self-identified heterosexual female, age 21+. At the time of data collection, she was living in coed sober housing in the area described with a primary diagnosis of opioid use disorder, severe, and a history of five previous treatment experiences. At the time of data collection, she was attending an outpatient SUD program and had maintained abstinence for approximately 9 months.

Data Collection

Data were collected in face-to-face interviews conducted solely by me, using an interview guide that I created for the study. Each interview took place at the participant's sober living residence. The interviews took place in a private office with a white noise generator placed outside the door to provide an additional measure of privacy. The interviews were recorded on a digital recorder in a single session on separate visits to the residences, which took place over the course of 3 weeks. The interview times ranged from 45 to 90 minutes. Two of the interviews took place in a coed sober residence in Monmouth County, New Jersey. One was conducted in a woman's sober residence in Philadelphia, Pennsylvania, and three in a male residence in that same geographic location. The two interviews of Florida residents were conducted by telephone. I transcribed the digital recordings verbatim into individual Word documents and

proofread against the original recording for accuracy. All identifying data were redacted to protect the participants' legal rights to confidentiality (Confidentiality of Substance Use Disorder Patient Records, 42 C.F.R., 2017) and saved under the participants' ID code. The resulting documents were uploaded into ATLAS.ti (1999) for coding and the creation of graphic representations of the findings.

I converted the interviews to rough text drafts through dictation of the digital recordings into Google Docs using the voice typing tool. I exported the rough drafts into MS Word and saved them on my laptop, which is password protected. When I had converted all the interviews to text in this manner, I downloaded the digital files in Google Docs into an external drive and deleted the originals. I proofread each Word document while listening to the original audio files. I corrected errors caused by distortion in the dictation process, resulting in a verbatim transcript of each interview. Before proceeding further with the data analysis, I transferred the digital recorder to a locked file cabinet for safe-keeping, and I converted the Word documents into pdf files.

I reviewed the pdf files for the purpose of identifying and redacting any names of individuals, treatment centers, and/or locations that might in some way compromise the anonymity of the participant. I saved the redacted document and printed two copies of each transcript, one for the purpose of member checking, the other for the first round of coding. I stored the participants' copies in a locked file until they were distributed. During the period of data analysis, I also all notes and hard copies of transcripts in the locked file when I was not actively engaged in that process.

Variations in Data Collection

Due to the distance between my location and the State of Florida, the screening

session and interviews for the last two participants were conducted by telephone using

Google Voice. This software allows recording of telephone conversations only through

incoming calls and with advance vocal permission of the caller. Therefore, after the

initial screening was completed, the participants were provided confirmation of their

appointment and the telephone number for the Google Voice account by email and given

instructions on how to place the call. With regard to the interviews conducted by

telephone, no important or striking differences in the quality of interviews was noted.

Data Analysis

Coding Process

Data analysis was accomplished using manual coding and ATLAS.ti software, a

computer aided qualitative data analysis system (CAQDAS). As I read the transcribed

interviews, my interpretations and intuitive reaction with respect to the relationship of the

narratives to the phenomenon of interest were noted in the margin of the documents.

First-cycle codes were created that were derived from these initial impressions, using a

descriptive coding process, and entered into the software code manager (Saldaña, 2014).

The data were condensed through the extraction of relevant phrases, which were saved as

quotations and linked to the codes. Pattern coding was used in second-cycle coding to

identify more refined constructs within the data and were linked to the first-cycle process

codes (Miles et al., 2014). This continued until I reached a point of saturation, whereby

no additional concepts could be identified. The result was 13 codes and 71 sub-codes. I

created networks linking sub-codes to the first-cycle codes, which now served as code group names. ATLAS.ti allows the user to view code networks as concept maps and manipulate the display elements as a tool in conceptualizing relationships among codes. In doing so, I became aware of redundant codes, which I merged with others or eliminated. Codes that appeared to have been assigned in error were reassigned to more appropriate code groups. An example of a code network visual display appears as Appendix C: Perceived Benefits Network Tree.

For example, the category of progression was changed to symptoms of SUD. Its 13 sub-codes were condensed into 10 by combining illegal activity to support use and overdose into one code, which was renamed dangerous use. Emotional numbing and drug-seeking behavior were deleted because codes representing the same concepts already existed in other categories.

Categories

The final code list consisted of 10 code categories: external treatment motivators, family issues related to SUD, internal treatment motivators, perceived benefits of substance use, perceptions/misconceptions re: SUD, recovery support, relapse, symptoms of SUD, substance use history and treatment history. The sub-codes were reduced to 57 and linked to the main code categories to create 10 code networks. Definitions of the codes and sub-codes, which were derived from the content of the narratives and current knowledge regarding SUD and illicit substances, were entered in the comments section of each code and sub-code. The final code list was output as an Excel spreadsheet and converted into an MS Word table (Appendix A).

When relationships between the code networks and the data were displayed

visually in the network manager, patterns became evident, which were used to interpret

the data with regard to the research questions and theoretical foundations of the study.

For example, several of the codes appearing under the headings *internal motivators* and

perceived benefits of drug use represent survival needs and deprivation states identified in

Maslow's theory of human motivation (1943). The *symptoms of substance use disorder*

category includes conditions that lead to intrinsic motivation as described by Deci and

Ryan (1985). A graphic representation of a simple code network and a code network with

linked quotations from this study appear as Appendix C: Perceived Benefits Code Tree,

and Appendix D: Internal Motivation Code Tree with Linked Quotations.

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Evidence of Trustworthiness

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Credibility

Member checking. According to Guba (1981) neutrality in narrative interviewing

should be reflected in the data, which is subject-oriented and not derived from the

researcher's interpretation. Credibility was established through respondent validation. At

the conclusion of each interview, I debriefed the process with the participant by asking if

they were comfortable that the questions they were asked and the amount of time they

were given to relate their story was sufficient to accurately describe their experiences as a

substance user. I also reflected on my understanding of their stories as they related to

their process of motivation for recovery and treatment and asked for confirmation that

they had been heard and understood. I explained that they would be provided a brief

written summary of my findings along with a copy of a verbatim transcription of their

interview and that they were welcome to provide feedback on the accuracy of the documents with regard to content and interpretation.

The transcriptions and summaries were provided to each participant within two weeks of each interview by encrypted email or delivered in-person. Three of the six participants who received emails responded with positive feedback and no revisions while the remaining three failed to respond. The two individuals who were provided their documents in-person reviewed them in my presence; they confirmed that the findings accurately reflected the intent of their narrative.

Triangulation. Triangulation was used to support trustworthiness of data (Miles et al., 2014) and provide for a deeper analysis of the phenomenon of motivation (Patton, 2015). This was accomplished in two ways, by interviewing participants from three or more sites in varying geographical locations and by reviewing documentation from previous treatment events to ensure accuracy and consistency with details recounted in the participants' narratives. Comparing narratives from diverse geographical locations allowed me to compare details in the individual narratives against those of the same group regarding treatment program approaches and regional drug culture norms. Clinical records from current and previous treatments were made available with the respondents' signed permission for the purpose of confirming the accuracy of the participants' self-report with regard to treatment duration, locations, and primary diagnoses.

Validity. Lincoln and Guba (1985) advise that validity in qualitative research is achieved through prolonged contact with participants. My contact with the participants took place over several days and in various ways. I visited the treatment centers

following the initial recruitment outreach to meet potential participants, explain the

nature of my study, answer any questions and allow them a chance to meet me in a non-

threatening and informal setting. I then spent time with interested parties in face-to-face

screening sessions, during which I provided and explained the consent form and release

of information. Those who resided in Florida were emailed these documents and

interviewed by telephone. Each participant had the opportunity to discuss the forms and

the format and general content of the interview until they confirmed that they were

comfortable enough to proceed. The interview sessions were lengthy, lasting up to 2

hours depending on the participant's history. Each respondent was allowed as much time

as they needed to share their story and were then debriefed to ensure that they were not in

distress. The debriefing session also served to confirm that the interview questions were

understandable and had allowed them to provide the information they felt was essential to

their story.

Transferability

Transferability is enhanced when researcher clearly identifies the boundaries of

the study (Shenton, 2004). This study explored the lived experiences of a group of

individuals with substance use disorder (SUD) who fell within a narrow age range and

who were participating in specific treatment settings. The study took place in one urban

and two suburban locations in the Northeast within a 50-mile radius of each other and in

a suburban setting in northern Florida. The Northeast differs from other regions of the

U.S. in that it has a much higher incidence of heroin use. According to data from the

National Survey on Drug Use and Health, the rate of heroin use by those over 12 years of

age in New Jersey and Pennsylvania exceeds the national average by 35% and 22%, respectively. States in the Southwest, such as New Mexico and Texas, fall below the average by over 50% (SAMHSA, 2017). Recent research also demonstrates there are significant differences in opioid-related mortality rates based on demographics such as geographic location and socioeconomic status (Monnat, 2019). Ultimately, the transferability of results should be appreciated in the context of a study's scope and delimitations, with the encouragement for subsequent studies to explore similar questions in different contexts.

Dependability and Confirmability

An audit trail was recorded in ATLAS.ti software program (ATLAS.ti, 1999; Beck, 1993) consisting of transcripts, codes, memos, code networks and network groups. The audit trail is available for visual display in the menu on the user interface screen of the research project, where each step in the process of data collection, coding, and analysis can be easily accessed and reviewed in detail.

Digital audio recordings of each interview were included in the audit trail. The same interview instrument was used in all interviews, and all participants were debriefed following the interview session using the same protocol. Verbatim quotations were collected using the software interface and incorporated into the data analysis. A reflexive journal was maintained, which contained notes regarding my reactions throughout the interview and analysis process to guard against bias. My impressions and reactions were recorded and linked to data and codes using the software memo feature. My clinical supervisor was available to confidentially discuss and resolve issues arising from

counter-transference, which may have compromised my objectivity during the process of data collection and analysis.

Results

Research Questions

RQ1: What do narratives of young opioid addicts reveal about their motivation to enter treatment?

RQ2: What do narratives of young opioid addicts reveal about their motivation for recovery?

While studying the relationships between the code networks and quotations, themes emerged with regard to the motivation processes of the respondents. Motivation for treatment is the beginning and recovery is the destination that is reached at the end of a long and arduous journey. Each substance user's story was unique yet shared threads of common experience with the other respondents. These common experiences formed the themes upon which my interpretations were based. A graphic of the motivational processes as represented by themes appears below as Figure 1.

DEVELOPMENT OF SUBSTANCE USE DISORDER

INITIAL DRUG USE EUPHORIA RELIEF OF PAIN	CONTINUED USE TOLERANCE	PROGRESSION NEGATIVE CONSEQUENCES

EXTERNAL TREATMENT MOTIVATION

TREATMENT COERCION	TREATMENT RESISTANCE POOR OUTCOME	RELAPSE

CHASING THE HIGH

DIMINISHING POSITIVE DRUG EFFECTS

INCREASING PAIN

"HITTING THE BOTTOM"

INTERNAL TREATMENT MOTIVATION

TREATMENT WILLINGNESS	TREATMENT COMPLIANCE	POSITIVE ROLE MODELS SOCIAL SUPPORT

HOPE

INTERNAL MOTIVATION FOR RECOVERY

Figure 1. Diagram of motivational processes.

Research Question 1

    Theme 1: Substances as remedies. The first question was intended to elicit the

circumstances of participants' initial experience with a mood-altering substance and their

emotional response. They all shared that they were in early adolescence, in the presence

of friends or family, and found the experience to be positive. A common theme among

the respondents was that the drug provided an immediate solution to their problems. They

described the effect in the same way one might describe a romantic encounter, "I loved

that stuff, I definitely fell in love" (P2P). They also related a sense of relief from painful

emotions. One respondent explained "…it made me feel good to take away pain, and it

was like, it's all right you know" (P1N). When asked for more detail, they described

painful experiences or perceived flaws in themselves that were ameliorated by the

substance. Some experienced relief from low self-esteem:

        P3P: Inside my head was always just very torturous to myself. I never liked what I

        looked like. I never liked what I sounded like. I didn't like anything about me.

        P2P: I was, kind of like a fat kid, I didn't mature fast. So, like, my self-esteem was

        damaged from a young age. The way I see it is, it was, like, a miracle drug. It took

        me outside of myself. I was able to laugh, and not care what anyone thought of my

        laugh.

They also reported feeling less fear and insecurity, and relief of pain from childhood

trauma or grief and loss issues:

P6P: I had this crippling fear and insecurity just knowing that [all the students in the school were wealthy, but not her]. So, the alcohol helped take away some of that fear, or at least hide it.

P8F: It made me feel good. It made me feel excited, it made me feel, I don't know if powerful is the right word? But it made me feel like, not this scared little girl that I was. And it made me wanna keep doing it.

P5N: Yeah, well my grandfather had sexually abused me when I was a kid. But the alcohol, like made all that pain just go away.

Some experienced an overall sense of well-being from the euphoric sensations of the substance, surpassing other activities they once enjoyed with the added benefit of blocking all unpleasant emotions:

P1N: I liked it better than sex. I liked it better than you know you know, scoring a touchdown. Better than watching a movie, or whatever. It just made me feel, just unbeatable, impeccable, impregnable, I was flawless. I was the best, you know? Top of the world. It took away emotional pain. That's what I liked about it. Yeah, I didn't like to, I never liked to feel, you know? I didn't like any emotions. I didn't like to feel humiliation. I didn't like to feel anxious or depressed. You know I felt like if I could feel like this all the time it would be awesome, you know?

P6P: I didn't know I was missing something until I did it. And then I was like, this is what has been missing my whole life. This is the thing that is going to make me whole. Cause I just never felt whole. And by doing that, I was like a whole person. And then I was "I need to do this every day to feel like a normal person". I guess

it just made me feel normal, or what my sense of what other people felt like who I saw as normal, you know?

Theme 2: Tolerance—"Chasing the high." I next asked about their ongoing experiences with substance use and the theme of tolerance emerged. Tolerance occurs as the brain adapts to the use of mood-altering chemicals, raising the effective dose of the drug. Addicts need to compensate for this by increasing the quantity and frequency of their substance intake. In the culture of substance abuse, this is known as chasing-the-high. Two of the participants described it in the following manner:

P1N: I never felt that same high like I did the first time. I'd say I was just using, just to maintain, you know? It's not like the first time I used it. I would always try to get to that, but I never could…it didn't take that much, much, longer until I was to the point where I was just doing it to feel normal you know?

P5N: I was just so addicted, yes. I just wanted more… it was just like it was really a good feeling at first, and then like I chased that feeling, and I wanted that feeling again, and I never found that feeling again, even like relapsing. I never found that feeling again (sigh).

When I asked them to share about the impact of tolerance on their drug use, the language of their narrative shifted from pleasure-seeking and relief to pain and survival:

P2P: But yeah, it was like definitely heroin was like survival. And that was how I was going to work, that was how I was going to wake up, eat, sleep. No at that time I felt like it was survival. It was almost like a survival instinct.

> P7F: I knew that like I loved getting high and I loved doing dope, I still felt pain. Like it didn't, it wasn't making everything okay anymore. I was having to do more, and like I never had enough.

They described becoming involved in dangerous use such as supporting their habit through illegal activity and overdosing from inconsistent schedules and dosages of drug use:

> P7F: I started to take his checkbook, and he never knew about the checks, and that went on for like six or seven months where I was able to forge a couple of checks and I was able to make it, you know? I would look at people that were going to the ATM and think about robbing them.

> P4P: Got drunk, met up with old friends. And they were doing a bag, and I did a quarter of a bag. Next thing I wake up, shirtless, in the ER, he carried me up 3 flights of stairs, limp, and drove me to the hospital. He said if he didn't drive me and waited for the ambulance, I'd be dead.

I asked them about the physical toll of tolerance, and they talked about withdrawal, or as they refer to it "dope-sickness:"

> P7F: And then I have, I need to get $30 every single day or I'll start withdrawing. So, I needed three pills a day, so I didn't withdraw. But it doesn't work out that way. I'm normally dope sick for 2 days, and then I'd figure out a way how to make the hundred dollars, and then I'd do all the pills in one day. And then I'm sick for two days, and then keep doing that cycle.

P6P: I remember vividly the first time I withdrew; I went away with my mom to XYZ* Beach, and I brought some stuff with me, but not enough. I had no idea what I was in for. And I left the beach house, at like 4:00 a.m., because I was in such bad shape.

P4P: I'm dope sick more than I'm high. It's like, you gotta buy, I had to buy so much a week, cuz once you do it, you gotta keep doing... and I didn't realize what I was getting myself into until after I was like, there.

Theme 3: External motivation and resistance. Dangerous use typically results in external motivation to enter treatment due to legal problems or family pressure. Resistance is often the reaction of the substance users when pressured to seek treatment before they are ready. Resistance may be expressed overtly by refusing treatment. However, in situations such as coercion from the legal system, treatment refusal is inadvisable, and resistance may not be overt. In these cases, the individual may engage in passive aggressive behavior once they are admitted, or exhibit compliance, while harboring the intention to return to drug use immediately upon discharge. Resistance reveals a lack of readiness for recovery and denial of the seriousness of the addict's condition (Hachtel, Vogel, T& Huber, 2019). It is a vain attempt to exert control, when in fact, the substance user is rapidly losing control of his or her substance use and behavior in general (Gorski, 2009).

When asked about the circumstances that brought about their first admission, several of the participants recalled agreeing to treatment because of legal issues or following an overdose:

P7F: No this was court-ordered. So, in order for me to go back to school, I had to complete a diversionary program. So that was my first introduction into a program. I did two programs, um, one was like an intensive outpatient program that I had to go to, and one was a one-on-one therapy program.

P1N: Okay, I got arrested…the first time. And my mom's like "You should go into rehab before court date comes up, you know? It'll look good if you get into an IOP."

P5N: I had my first overdose and I woke up in the hospital and my mom was standing over my hospital bed crying and that was when I guess they realized that enough had to be enough and they tried to get me to go into treatment and I refused to go into treatment and I told them I would do an outpatient program and I did the outpatient program.

All of the respondents agreed that they were not committed to recovery or willing to comply with most treatment recommendations when they were coerced into treatment. For example, when asked if she complied with any of the requirements of her first treatment, one participant replied [long pause] "I don't think so. I have to be honest" (P6P). The responses of the other participants were similar:

P6P: I took that as an opportunity [to detox], but without really knowing what I was signing up for. I was strongly motivated to withdraw from heroin, but not to do recovery. I was like "all right, I'll get off the drugs" but I had no real reason to be abstinent, I remember the big thing was my 21st birthday was that September, and I was like, there's nothing you people can tell me that will get me to sign up for not drinking on my 21st birthday.

P1N: All right, yeah, my mind still was on, when the justice system is off my back, I will go back to using, you know? I did my 30 days there and just pretty much said whatever they wanted to hear, you know, and I completed. The first day I was out, I was taking pills…

P8F: I think it was partially me not wanting to get better, and so I would just fuck around and it was like a place to be. And then eventually, in one of them I realized that I could leave. Once I knew that I could AMA [leave against medical advice] from a place it was impossible to keep me.

One participant who entered treatment following an overdose admitted she understood the value of treatment, but she still rejected it because she was not personally ready,

P5N: Like I knew there was a better way. I knew that I had to want the better way. And I just, I just knew that I didn't want the better way yet.

Theme 4: The cycle of relapse. I next asked about what happened after completing a treatment without being fulling committed. Without exception, they shared that they would achieve a limited period of abstinence followed by relapse. The cycle of detox/abstinence/relapse was repeated many times, adding to their sense of powerlessness and hopelessness. One participant described his relapse process:

P7F: I had tried to quit 10 – 20 times, wholeheartedly. And I would tell myself, like, "After tonight I'm going to stop buying this." And I would quit for 3 weeks, and I would do it again. And I would try all these different ways, and a month would go by and I'd be doin' it again, and I just couldn't believe it. here's no way you're gonna quit pills. I couldn't, I couldn't go three days without 'em, two days without

'em. I felt so hopelessly addicted…there was no way I was getting off of pills, because I'd physically need 'em. So, I started to realize that I had fucked, I had totally fucked my life up.

Subtheme: Behavioral relapse and toxic relationships. I asked participants if they were consciously aware prior to using again that they were at risk to relapse. Two of the respondents were able to identify behavioral changes that, in hindsight, were predictive of relapse,

> P5N: And I completely lost my mind and I started acting-out on character defects. I got mad, I got resentful. I was like running my mouth all the time not doing what I was supposed to be doing and I was just on that relapse road.

> P8F: Yes! Yes! And also, shortly before I relapsed, I'd started stealing from like CVS and Walgreens again, which was a behavior from the past that was a sign that I was headed in the wrong direction.

Several participants identified "toxic relationships" as the first stage of their relapse process. Some reflected on the way they had allowed relationships to continue, knowing they were unhealthy and contributed to their drug use:

> P3P: I just drank cuz I just want him to think I was perfect so I just I didn't do anything else. He was drinking too, just drinking. I was miserable. I hated him, but I couldn't leave him because I just didn't want him to be with anybody else, and I knew he would.

> P8F: And I was dating this guy who had just gotten out of jail and I had known him and been in love with him since I was 16. He was like one of the first people I ever

slept with and he got out of jail, and we started dating. And he was relapsing and

was getting high, and I decided that I was going to get high too.

P2P: I mean there's a big thing for like me, the struggle is female affection… every

time I get out of treatment, when I have access to my phone the first thing I'm off

to a female and chances are one of you is going to relapse and if not both of you.

P6P: I met a guy in I.O.P., and I started using with him. I remember my 21st

birthday. I was already using by then. I was drinking, and that led to drugs again. I

was already full-blown at that point.

Theme 5: Internal motivation—"Hitting a bottom." "Hitting a bottom" (W.,

Bill, 1953, p.24) is a term used by recovering alcoholics and addicts to describe that stage

in their illness where they are living in a state of deprivation and suffering that can no

longer be relieved by alcohol or drugs, a state so low that there is nowhere left to go but

up. When asked to relate what had finally transpired to end their cycle of relapse and

motivate them to willingly seek treatment, the participants described their hitting their

bottom:

P2P: I didn't, I didn't care at the time, I was just like so, so beat up on myself. I was

starving, I was hungry, I was thirsty. I didn't think I was going to make it out of

this. I was like all right this has got to be my bottom. I was like, I don't see me going

any further down.

P1N: It finally got to the point; you know. I remember I told my mom I was so tired

of sleeping on the ground. I just wanted to sleep in a bed. And she asked someone

she knew from AA to come and talk to me. He walked in and he saw the pills on

the table and he's like 'How about you just do what you got to do, and then I'll drive you over to over to the hospital.' I was like, 'You know what? That sounds like a good idea. I don't even know why I just wasted my whole twenties doing this. I can't take this anymore.'

P7F: And I remember the lady who was the drug counselor who was there said um, "Are you withdrawing" and I started crying as soon as she said withdrawing. I broke down crying.

P8F: And they did all of these things to help me, and I kept using, and that got me to a place spiritually where I was just like really broken and willing. And I just woke up four months later still using, sick, and decided to get help. I came back completely beaten, and that was it. I got a sponsor that day.

Subtheme: Hopelessness. Their descriptions of the cognitive and affective content of their experiences revealed several sub themes, such as feeling that despite being ready for help, they were beyond help:

P7F: To me staying clean long term was like wearing all white and saying you're not going to get a crumb of dirt on it. I knew it might last a little bit, but I had tried so many times that I just knew it was impossible**...** there were times when we were using drugs in the beginning and he would say things like 'I'm going to be a drug addict for the rest of my life,' and I would look at him and be like 'Well you're crazy, I'm gonna to get clean one day.' Then I'd try to get clean and realize that it was impossible. And then I'd have to accept that it was impossible.

P8P: I felt defeated. Some of the times I was forced to, but you know a lot of the times I would just decide to go to treatment, but it just never helped. It never helped.

P2P: And um, I was like there's no way I can get sober, I was like I don't know what sober is.

Sub*theme: Cognitive dissonance.* When asked to share about their self-concept at this point in their story, they related sensing a contrast between their perceived potential and who they had become as a result of their addiction, which they believed contributed to their internal motivation as well:

P7F: I believe deep down every addict, if you're a real drug addict with the disease of addiction, you do not want to use drugs. I don't think that you can want to do drugs and be an addict. I think that's what makes you an addict? It's that you don't want to do the things that you're doing, and that there's one side of you that wants to do it, and one side of you that knows that this is not something you want to do, and we battle those two things.

P4P: It was glimpses of who I knew I could be, but I was afraid to be that person. I was not supposed to fail in any way. Like it was expected for me to always succeed on a high trajectory at all times, and it kind of got to me later on in life. I had like that moment like, bro, you're 30 years old. That 30-year-old moment. If anyone's 30 they know what I mean. You know what I mean? And in my sick mind, you're 30 and you're doin' the wrong thing…

P6P: Yes, and at that point I was probably watching some of my friends starting to graduate from college, like here I was, completely flunked out of college at this

point. Cause like I went to Rutgers when I flunked out of West Virginia, and I completely screwed that up. You know, like I had nothing to my name, I had no car, no cell phone, nowhere to live, like I had nothing.

P8F: Yeah, yeah, exactly! Like part of me knew that this wasn't the life that I was supposed to be living, but then the other part of me couldn't see myself living any other way.

Subtheme: Remorse. I asked them if the impact of their drug use on their relationships with family and close friends contributed in any way to their bottom. They answered by sharing the deep remorse they felt for the pain their addiction brought to their loved ones:

P2P: [L]ike my family was with me and they were crying. My mom has gray hair, like I never noticed it, like she has gray hair now and everything. My Dad's getting old and I'm gonna be dead before they are the way I'm going. My brother was like 'I don't want to lose my only brother.' And that sparked the fire in my head to like to want to get clean.

P1N: I got to the point where I was thinking like I can't go on like this, you know? It started really bothering me. I was hurting the people around me…I can't be selfish and just think like I'm hurting myself because I'm really hurting a lot of my loved ones, you know? It really tore me apart.

Research Question 2

To learn more about their motivation for recovery, I first asked the participants to share their personal understanding of recovery.

Theme 1: Misconceptions regarding recovery. The participants' responses revealed how little they had previously known about recovery leading up to and even beyond their initial treatment. They shared that prior to their first admission, they had no concept of recovery. They believed abstinence was the only alternative to drug use and that was intolerable"

> P7F: For my whole life I always thought that it was drugs or abstinence, and abstinence made me feel suicidal.

> P3P: Sobriety is hard for me. Like that irritable, discontented, uncomfortable [feeling], like that is like paralyzing.

Several of them had been unaware that abstinence was even a necessary requirement for recovery,

> P6P: I really thought at that point that the drugs were out of my system and I was like good. I don't need to listen now, like my problem is not deeper than just needing to take care of the physical side of things, you know what I mean?

> R: Are you saying you believed you could just detox from heroin, and then resume the recreational use of other drugs, including alcohol, without any problem?

> P6P: Yeah, yeah, my life would be fine. Everything would go back to the way it was.

When asked what they learned about recovery from treatment professionals, or in school-based prevention programs, they responded:

> P6P: I don't remember anyone even talking to me about drugs…period, nobody had discussed the disease of addiction.

P7F: Not a single doctor said, 'You're going to be okay.' Nobody came up to me and said 'Oh, it's okay, you're just an addict.' I had not even heard the word addict out loud. In the whole 7 days of detox nobody said, 'you're an addict.'

They recalled friends that used drugs and never developed an addiction, "My friend did heroin and dropped it the next day, just never was a problem for him, he was able to do any type of drug drink whatever and then be fine and I'd be blown out of the water" (P2P), but they had had no prolonged, meaningful encounters with recovering addicts. When asked if, in their previous treatments, they had ever achieved the therapeutic goal of building a support network of recovering role models in their supervised attendance of AA or NA they responded:

P3P: I just had no interest in it.

P2P: I'd get a phone list and I'd toss it in the trash or toss it on my shelf.

P8F: I wasn't like doing anything for my recovery. I wasn't, I would only go to meetings to get my meeting sheet signed, and I was like talking to lots of boys... I wasn't really in recovery, so I didn't really pick a fellowship. I didn't have a sponsor or anything like that. I would just go to whatever meeting was closest, and like I might leave early.

Theme 2: Treatment and recovery readiness. I next explored the ways in which their treatment experiences may have informed their understanding of recovery and recovery goals. When I asked if they could identify a relationship between treatment and their motivation to recover a common theme emerged. All participants asserted that they were not motivated to recover as a result of any specific modality or intervention, but

rather because they had reached a state of readiness that had little to do with treatment. One participant shared that even though he had completed what he felt was an ideal program, his motivation to recover was largely due to his attitude at that point in time:

> P4P: I was introduced to a program called the XYZ* Program which changed my life and [it] changed my life because they gave me structure. They gave me a true understanding of the 12 steps.
>
> R: If you had been offered a program like the XYZ* Program years ago, would you have gone?
>
> P4P: Absolutely not.

According to the respondents, they sought treatment largely because of option reduction, as they no longer experienced any benefit from substance use and had no other coping skills, "I just like didn't want to do it anymore. I was like I hate it; I hate every time I get high now. I cry every time I get high now" (P3P). But once they were admitted, they had no idea of how to move on from addiction or what they could hope to expect. They simply wanted to feel better and they were willing to work towards that goal:

> P6P: I just wanted to wake up every morning and feel okay, you know what I mean? And I didn't even know what that meant, because I never really felt that. But I just wanted to wake up and feel okay, and not have to get high to get out of bed, and not have to get high to feel like a human being. I just wanted to be able to wake up and feel like a human being. Because I knew people like that existed, I just didn't know how they did it.
>
> R: Did you believe it was possible for you?

P6P: I didn't know if it was possible, but I wanted to try.

The participants shared a common misconception in their earlier treatment experiences, which stemmed from a lack of knowledge about their illness. In the aftermath of many failed treatment attempts and relapse episodes, they realized that no amount of treatment could reverse the progression of their addiction and restore their euphoric response to substances. When they fully understood that continued drug use would only prolong their emotional and physical pain, they were ready to maintain abstinence from all mood-altering chemicals. At this point they became receptive to the recommendations they had once ignored. This was one participant's response when asked why she finally felt motivated to recover and follow treatment recommendations after her last relapse:

P5N: I think it was different because I wanted it and I was more like, what's the word, I was more susceptible?

R: Receptive?

P5N: Yeah, I was more receptive to what was going on and how to help myself. Like before I was just taking the bits and pieces in, like I was taking suggestions here and there but like I when I went to XYZ* if somebody told me to stand on my head in the corner I would have stood on my head in a corner.

I asked them to share what they had done differently in their most recent treatment and how it motivated them to recover despite the hopelessness they had experienced during their bottom. Some were helped by reading 12-step program materials, "It instilled in me the importance of literature" (P8F). "And then when I started

to read the NA literature, that's when I started to see, holy shit, this is the one thing that's going to save me" (P7F).

All built sober social support networks by attending their church or 12-step meetings,

> P1N: Yeah, yeah, I'm doing it the right way, that's the thing. I have my people. I'm really connected with the church. I'm going, I'm going to church. Me and my mom. We go to this church every week, and I have really, really, great people. They're just great kids, a great church you know? Good people I can talk to all the time, you know?

> P6P: In the beginning when I was struggling, I reached out to girls in the program for help and they helped me in those couple of months that I was in Florida. So, it was like I stopped using, I went to treatment, I went to meetings, and I kept doing that, and that was it.

> P7F: I started going to NA meetings, and I met people that are like 19 and 20. I'm like 'Wow, I can't believe I thought I'd never get clean. I can get clean.'

Theme 3: Connection and hope. I asked how they avoided relapse and maintained motivation to achieve their recovery goals during the initial, most difficult period of early recovery. They shared how becoming connected to a community of people who had achieved quality of life without using drugs had attracted and inspired them,

> P3: I see other people that are in recovery with 25 years or whatever, and they're happy and they have freedom. Like they're, they have freedom from their brain. Like from the way that their mind used to think.

P5N: I started to go to meetings, like it was a requirement to go to at least three meetings a week while I was in there, so I got introduced to the 12-step program. I saw it differently. I saw that I could live differently.

P7F: And then they would start talking, and I couldn't help it feel close to these people. These people think the same way that I think. They struggle with the same things that I struggled with. I knew they wanted to be there and were happy, and were serious drug addicts, and had found something to make them feel like they don't need drugs anymore and were now totally obsessed with this new high of living life that wasn't that wasn't abstinence.

Ultimately, they found role models for recovery and a connection to others that the filled the void left by their addiction. As one young man poignantly explained:

P7F: I can feel the connection; I can feel what I call the magic of empathy. I felt more comfortable in a crack house than I did at school at 14 years old. There was something drawing me to these people my whole life. I just didn't know that there was a whole other subculture of the same people that were bettering themselves and experiencing spiritual relationships with one another and saving their lives.

EXTERNAL & INTERNAL MOTIVATION PROCESSES

ONSET OF SUBSTANCE USE

EXTERNAL
MOTIVATION

INTERNAL
MOTIVATION

TOLERANCE/ CHASING-THE-HIGH

NEGATIVE CONSEQUENCES &
COERCED TREATMENT

HITTING A BOTTOM

REPEATED
ACTIVATION
OF THE
RELAPSE
CYCLE
EVENTUALLY
LEADS TO

TREATMENT READINESS

INTERNAL
TREAMENT &
RECOVERY
MOTIVATION

TREATMENT
RESISTANCE

RELAPSE
CYCLE ACTIVATED

RECOVERY MOTIVATION

Figure 2. A model of recovery motivation for young opioid users.

Summary

This study examined the experience of becoming motivated to seek treatment and recovery for "Millennials" diagnosed with opioid use disorder (OUD), a diagnostic subcategory of substance use disorder (SUD). Eight individuals residing in recovery houses in urban and suburban areas in the northeastern United States and Florida were interviewed. The participants were asked to relate their story of substance use from its onset through their current state of abstinence and recovery.

The first research question explored their process of becoming motivated for treatment and comprised the larger part of their stories. The narratives began with their

first experience of drug use, which they all described as having an immediate and profoundly positive effect with statements such as, "Right away I knew that this was it for me, I loved that stuff" (P1N), and "It's just the best feeling I ever felt. I wanted to feel like that all the time you know" (P7F). Substances that were used later in their stories had a similar effect. It is important to note that the reactions they described spoke of more than simple intoxication. When asked why the experience was so positive they shared a need or a perceived deficit that was filled or remedied by the drug such as, "It made me feel like, not this scared little girl that I was" (P8F),"'It was, like, a miracle drug, it gave me the ability to talk to people" (P6P), "It just made all my pain go away, my emotional pain" (P1N), and "I guess it just made me feel normal" (P6P).

The immediate relief of these pre-existing conditions underscores the powerful reinforcing effect of the drug and its impact on the developing brain's reward pathways. Resulting changes in the dopaminergic pathways compel the individual to continue to seek out the drug in order to repeat the experience (Volkow & Morales, 2015). However, continued use of mood-altering substances inevitably leads to tolerance, a reduced effect due to a resetting of the hedonic set-point in the brain (Volkow & Morales, 2015). When asked about this stage in their drug use, they responded "I got a tolerance very, very, fast" (P1N), and "I needed them [oxycodone pills] every single day, so I tried to do as many as I could" (P7F). Such comments were present in every narrative.

Ultimately, the drug user becomes caught in a downward spiral of seeking to repeat the original euphoric experience and in failing to so do, engages in an escalation in the amount and frequency of drug use. In the vernacular of the drug culture this is known

as "chasing-the-high." I asked them to describe how this impacted their response to the drug and they shared, "I never felt that same high like I did the first time, I'd say I was just using to maintain," (P1N), and "I was to the point where I was just doing it to feel normal" (P3P).

When questioned regarding how they made sense of their increased tolerance, loss of control, and physical discomfort they generally responded that they had no understanding of what was taking place, "I had no idea what I was in for" (P6P). They also denied having been educated about substance abuse, "I don't remember anyone even talking to me about drugs…period" (P6P) and had no understanding of physical dependence and withdrawal, stating, "People would say 'Oh I'm withdrawing' and I wouldn't even understand what they were talking about" (P7F), or "At this time, I'm thinking I have like the flu" (P4P).

The participants were asked to recall any negative consequences they experienced during this stage. They recounted arrests and overdoses, resulting in external pressure to enter treatment from the legal system or family members who recognized the seriousness of their drug use and tried to intervene. When asked if these consequences had any impact on their awareness of the progression and gravity of their disorder, they admitted being mostly in denial, responding to those who tried to help them, "Oh you guys are so stupid, you don't even know what you're doing, there's nothing wrong with this" (P8F), and "I don't have a drug problem, I don't know what you're talking about" (P5N).

Despite the participants' resistance, legal and family coercion led to their first treatment. When asked about the circumstances that brought about their first admission,

several of the participants related a situation where they agreed to treatment because of legal issues or an overdose, "This was court-ordered. I got arrested and my mom's like ' It'll look good if you get into an IOP' "(P1N), and "I had my first overdose and they tried to get me to go into treatment" (P5N).

When asked about their state-of-mind regarding treatment at that stage of their illness, they generally admitted they were (a) not prepared for what they were about to experience, (b) not committed to recovery, (c) had no intention of maintaining complete abstinence from all mood altering chemicals, and/or (d) were not convinced they needed treatment despite evidence of dependency and loss of control. For example, when one participant was asked why she entered treatment if she intended to continue drinking alcohol upon discharge she responded,

"I was strongly motivated to withdraw from heroin, but I had no real reason to be abstinent" (P6P).

In discussing their response to treatment that resulted from coercion, all of the participants reported they were noncompliant with treatment and discharge recommendations following coerced treatments. Their attitudes regarding the treatment experience itself varied, and in some cases were positive, even though they had no intention of complying with discharge recommendations: "It was a real nice place. I liked that place. But I just did my 30 days and said whatever they wanted to hear. The first day I was out, I was taking pills" (P1N).

Regardless of their attitude towards treatment, ultimately the result was the same. When asked about the outcome of coerced treatment events, all participants reported

relapsing and experiencing a reactivation of the cycle of drug use and withdrawal until they arrived at their "bottom," a place where they surrendered to the reality that they could no longer expect to feel any pleasure or relief from using drugs, "I was like all right this is got to be my bottom. I was like, I don't see me going any further down" (P2P).

This was a critical point in their story where they reported a shift in motivation from external to internal. All agreed that this "bottom" is different for each substance user and that willingness cannot be forced or expedited by external pressure. One young woman explained, "I couldn't be forced to get the help that anybody wanted me to have. You can't force that. Everybody's bottom is different" (P5N). Her statement underscored a common theme throughout the narratives: it is an individual's readiness to accept help rather than any specific treatment modality or intervention that is the key to experiencing a positive outcome.

The second research question dealt with motivation for recovery. When asked about how they became motivated to recover, the participants' agreed that they began the process of recovery as soon as they let go of the belief that they could return to their earlier level of drug use and acquired an attitude of openness towards the suggestions offered in treatment, "If somebody told me to stand on my head in the corner I would have stood on my head in a corner" (P5N). From that point on, they reported being prepared to do whatever was necessary to move past the pain and struggling of active drug use. Therefore, their motivation process for recovery was less about being motivated to recover and more about realizing what was meant by recovery, that recovery was more

than abstinence and that it could replace the role that drugs had played in their life but without the negative consequences.

The respondents' stories revealed a process that consisted of three stages. The first involved developing an understanding of recovery by witnessing it in others, "I got introduced to the 12-step program, I saw it differently. I saw that I could live differently" (P5N). The second was realizing it was possible for them to recover, because those in recovery were simply addicts like themselves who had found a way to live a quality of life without drugs. As one participant explained:

(P7F): The majority of the people I met in the 12-step program that I went to were serious drug addicts, had found something to make them feel like they don't need drugs anymore and were now totally obsessed with this new high of living life that wasn't abstinence.

These first two stages led to the third and final stage, which was being willing to adopt lifestyle changes that support recovery so they could achieve that same quality of life they witnessed in others:

(P7F): I'm like wow, I can't believe I thought I'd never get clean. I can get clean. I'm going to do whatever these people tell me to do, and I hope to God that I'm 99 years old still going to meetings.

Role models for recovery were found in AA and NA meetings, in their faith communities, "And I see other people that are in recovery with 25 years or whatever, and they're happy and they have freedom" (P3P). Once engaged in the process of seeing recovery modeled by others like themselves and becoming hopeful that they could

recover, their motivation for recovery was channeled into positive behavioral change, "The way I do it is I just pray to God every day, and like so far I've been doing things that I never done before, I got a commitment; I chair a meeting in May. January, February, March, April, May, that's something I'd never do. I actually got a home group." Interestingly, these individuals who existed for years as compulsive pleasure-seekers unable to delay gratification, acquired the strength to maintain abstinence throughout the painful and arduous process of acute and post-acute withdrawal for a future goal they now believed was achievable. In the words of one young woman who had recently celebrated 45 days of continuous "clean time," "I just kept telling myself like, don't leave before the miracle happens" (P3P).

Transition

Chapter 5 will present interpretations of the results guided by the theoretical framework that informs the study. Limitations and strengths of the study will be discussed, and recommendations for future research suggested. The study's potential for effecting social change will be presented at the close of the chapter.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this narrative study was to explore the lived experiences of Millennials with a diagnosis of opioid use disorder in order to learn what motivates them to seek treatment and recovery. Eight recovering individuals between the ages of 21-37 living in the eastern United States shared their personal journey from the onset of drug use through recovery. This study addressed a gap in the literature with respect to motivation for treatment and recovery in a demographic that differs greatly from previous generations of opioid addicts (Fleury et al., 2016; Kelly et al., 2014). Additionally, the study extended the knowledge of intrinsic and external motivation and behavioral health outcomes and affirmed previous findings that intrinsic motivation is predictive of engagement in treatment and positive treatment outcomes in this specific sample.

Summary of Key Findings

Participants agreed that their motivation for treatment was generated by their personal experiences of pain and hopelessness, and that readiness to accept help could not be forced. While each individual shared a motivation process that was unique, there were commonalities among the narratives of all participants, which included isolation from loved ones, shame, deprivation, and physical suffering. During the progression of their illness, they were coerced into treatment repeatedly as a result of legal issues or family pressure. All reported relapsing to substance use immediately or shortly after discharge. Participants reported noncompliance during coerced treatment, sharing that they allowed themselves to be admitted to programs with full knowledge that they had no intention of maintaining abstinence after completing treatment.

When they were intrinsically motivated for treatment as a result of what they described as their bottom, they integrated the goal of recovery and readily complied with treatment recommendations. While it is clear that the external circumstances which lead to "hitting a bottom" were different for each participant, the one experience they did share is key to understanding their process of developing intrinsic motivation. That common experience was the realization that they could no longer find relief from their pain through the use of mood-altering chemicals. This left them with few options other than to accept the help they had resisted in active addiction. As a result of this new level of awareness, they became willing to maintain abstinence despite the discomfort of withdrawal and postacute withdrawal for a future goal of living a satisfying and manageable life without drugs. They shared that their interactions and relationships with others in recovery contributed greatly to their motivation for recovery by providing hope, support, and role modeling. Seeing that others were able to recover instilled confidence that they could as well. At the time of their interviews, all participants had maintained continuous abstinence for at least 3 months and were still actively and voluntarily involved in treatment programs.

Interpretation of the Findings

RQ1: What do narratives of young opioid addicts reveal about their motivation to enter treatment?

Factors contributing to the development of motivation for treatment were explored by eliciting narratives of the history of their substance use from onset through current treatment. All participants shared that the initial euphoria associated with their

drug of choice diminished over time due to tolerance; tolerance is a neuroadaptive response to repeated exposure of the brain's reward circuits to mood altering chemicals and is characteristic of physical dependency (Koob & Schulkin, 2018). Participants attempts to offset tolerance through dosage increase contributed to dangerous drug use and behavioral changes, which in turn led to negative consequences and related external pressures to enter treatment. All participants shared a history of at least one coerced treatment resulting from legal issues, hospitalizations for overdose, and/or family pressure. All initial coerced treatments resulted in a lack of engagement followed by relapse to substance use shortly after discharge. Similar findings were presented in previous research, which demonstrated an association between lack of internal motivation and low levels of engagement in treatment with reduced rates of retention (Brorson et al., 2013).

Internal treatment motivation was reported by all participants as occurring at a point when they found themselves in a state of emotional and/or physiological pain that could no longer be relieved by drug use. The development of internal pressure to seek help after "hitting rock bottom" was noted by Opsal et al. (2016, p.7). The average number of years that the participants spent in active drug use from age of onset to their current state of abstinence was 14.5 years. Therefore, the progression process that brought them to their bottom was a lengthy one in relative terms, as they had doubled in age by the time they became motivated to seek help. This aligns with previous studies, which found young substance users were less likely to enter treatment as a result of

coercion and more likely to identify internal motivation for seeking treatment as they aged (Goodman et al., 2015).

Becoming internally motivated for treatment was described by participants as a single event that occurred at the lowest point in their addiction. However, when further exploring their narratives, it became evident that their motivational processes were actually a combination of internal and external events that occurred separately and in concert over the course of their disorder. Ultimately, the participants began to respond to mounting external crises with feelings of shame and desperation to the extent that they internalized the idea of their drug use as harmful. Thus, these emotions, while not intrinsically motivating, represented a shift from external to internal motivation, signaling the onset of integration (i.e., intrinsic motivation for recovery). Integration, in self-determination theory, is the point at which an individual becomes aware of how an activity aligns with their internal value system and thus becomes intrinsically motivated to pursue it. In the case of the participants, it became necessary to first experience a shift in their internal value system or, in some, a return to what they once believed to activate that motivation. Similar examples of external motivation that transitioned to internal motivation in the course of treatment were reported by Cornelius et al. (2016). In a study of adolescent treatment engagement, clients' motivation transitioned from external to intrinsic when they experienced support and feelings of relatedness with their caregivers and significant others. Conversely, the participants in my study developed intrinsic motivation in the isolation of their addiction, not through the support of others. When they reached a point-of-no-return and wholeheartedly accepted treatment, they became

open to the support they had rejected in the past. This was the point at which they experienced relatedness and connection to their caregivers and others in recovery and, in turn, became internally motivated to recover.

RQ2: What do narratives of young opioid addicts reveal about their motivation for recovery?

Participants' motivation for recovery began to surface when they had successfully completed the detox phase of treatment. At that point they had sufficiently stabilized to participate in program components that were previously rejected or ignored. All participants agreed they benefitted most from therapeutic and educational material they perceived as personally relevant. This response was similarly observed by Cornelius et al. (2016) in a study that demonstrated a positive relationship between clinicians' support of clients' personal recovery goals and client engagement in treatment.

When asked to elaborate on the nature of the treatment components that enhanced their motivation for recovery, they identified individualized treatment plans and group sessions that were geared toward the issues that first compelled them to use substances as a coping mechanism such as social phobia, peer pressure, and unresolved grief. Such groups included refusal skills, which allows the client to practice assertive action in the face of peer pressure, education sessions on the neurobiology of SUD, and skill rehearsal for managing anger and social phobia. This supports the recommendations of Blonigen et al. (2015) who suggested that individualized treatment plans designed to address the specific needs that compelled the client to use drugs initially may result in increased recovery motivation. Participants were then asked to rank the characteristics they found

most appealing in clinicians; they identified warmth, mutual respect, and compassion above clinical expertise, professional credentials, or depth of knowledge. Their responses were comparable to those reported in a study by Wolfe et al. (2013) who found strong therapeutic bonds between clients and clinicians were predictive of higher levels of internal motivation.

Treatment programs typically incorporate attendance at 12-step meetings into their therapeutic schedule and encourage clients to engage with others in recovery as a means of establishing and maintaining a network of social support. Participants who adhered to this recommendation experienced benefits from engaging with recovering addicts in stable recovery who engendered in them feelings of self-acceptance while serving as role models for positive behavioral change. Participants shared that they gained hope from these role models that a satisfying life in recovery was possible for them as well. This not only energized their belief that they could recover but inspired them to set immediate and long-term personal goals for their life of recovery. Such benefits were reported by Delucia et al. (2015) who found increased levels of positive self-regard and establishing and achieving meaningful goals were predictors of sustained recovery motivation and continued abstinence.

Finally, participants shared that establishing relationships with others in recovery satisfied a need for connection and belonging, which in turn sustained their commitment to their program of recovery and ongoing abstinence. This association was demonstrated in a study by Litt, Kadden, Kabela-Cormier, and Petry (2009) who found that recovering

adults who develop social support networks as a result of treatment recommendations were more likely to maintain abstinence and involvement in therapeutic activities.

Moreover, while Millennials differ from other addicts with regard to demographics, the latter stages of their motivational process for treatment and recovery are not entirely unique. The internal and emotional nature of the experiences that motivate them and their responses to those experiences are very similar to addicts in general. However, the external factors that lead them to the point of treatment readiness are quite different. One disparity is the comparatively long period of time it may take for them to seek help, which is, to a certain degree, a function of their level of development and their youth. With regard to the latter, in youth the discomfort experienced through repeated use of drugs and withdrawal is not compounded by the physical effects of aging, which allows the young addict to endure for a longer period of time.

With regard to developmental issues, it is appropriate for emerging adults to reject ties to their family in favor of peer relationships. In the case of young substance users, these peers are fellow addicts, which supports, rather than discourages continued substance use. Additionally, in most instances, the developmental delays related to sustained substance abuse interfere with moving past the stage of strong identification with peer groups to the formation of committed romantic relationships and family-building. Addiction further interferes with goal setting and attainment in the areas of education, career and stable employment. Therefore, unlike adults with substance use disorder who may have much to lose as a result of continued drug use, such as marriage, custody of their children, employment and material possessions, young people have

relatively little to lose. Furthermore, they eventually come to see themselves as so delayed in the achievement of such goals compared to their non-using peers that they often give up hope of moving beyond their current predicament. Therefore, unlike adults, the loss of what has been gained through hard work or the promise of a bright future – common sources of internal motivation for adults – do nothing to promote intrinsic motivation for treatment and recovery in young people with substance use disorder.

Theoretical Frameworks

Maslow's theory of human motivation explains that the behavior of human beings is motivated by drive states that evolve from basic needs for self-actualization as each state is achieved. For the participants in this study, motivation for treatment came about as the result of a significant amount of emotional, psychological, and physical pain experienced over the course of months or years before they were ready to seek help; the internal and external consequences they experienced differed among individuals. Their histories varied with regard to their number of previous treatment admissions, the length of time they were in active addiction, the circumstances that caused their pain, and their level of tolerance for these negative experiences, but the nature of the process was the same in all cases. The participants described their progression as a transition from a state of profound pleasure and relief of all physical and emotional pain to a state of ongoing suffering and deprivation. This was similarly reported by Rigg and Ibañez (2010) in their mixed methods study of non-medical opioid users in Southern Florida, which revealed initial motivation for drug use is pleasure seeking but ultimately devolves into avoidance of pain from withdrawal.

All of the participants' stories began with an initial intoxication experience that produced a level of euphoria unsurpassed by previous pleasurable experiences. In the words of P1N "I liked it better than sex. I liked it better than scoring a touchdown. Better than watching a movie, or whatever. It just made me feel, just unbeatable, impeccable, impregnable, I was flawless." Intensely pleasurable experiences, such as opioid intoxication, are associated with other life-sustaining activities such as nourishment and procreation by the brain's reward system, thus activating drug-seeking behavior (Volkow, Koob, & McLellan, 2016; Volkow & Morales, 2015). Drug-seeking behavior is therefore motivated by physiological and safety needs, which are found at the base of Maslow's pyramid of needs. The compulsion to seek drugs is driven by the dopaminergic system, and increasing tolerance ensures that the drive is never fully satisfied. Tolerance occurs when an individual no longer experiences the same effect from the drug and must increase the dose, which signals the onset of progression. Progression is a clinical term used to describe the painful cycle of reduced drug effectiveness, withdrawal symptoms, cravings and loss of control that characterizes opioid addiction (Inaba & Cohen, 2014). One young man described his progression in this way:

> P1N: Yeah, it's like, it slowly progressed. It's like the progression, you know? I remember making a chart about this in one of the rehabs, you know? You'd see the progression, you know? The arrests, you know? Financial problems, family problems, it just slowly progressed…

Engaging in tedious, demeaning, or dangerous activities to pay for drugs is a clear indication of the desperation experienced by the addict during progression as obtaining

drugs becomes a necessity rather than a pleasure. P2P described his heroin use in this manner "[A]t that time I felt like it was survival. It was almost like a survival instinct." This participant's description of his addiction reflects what Maslow (1945) characterized as a survival drive state motivated by deprivation as opposed to higher order needs, which are motivated by gratification.

Several participants related the ways in which they financed their drug habit to avoid withdrawal sickness. P1N described his efforts to earn money by "scrapping," collecting scrap metal from discarded appliances:

> I broke them down and I separated the aluminum and the copper because it was a lot more money if it's separated. If you bring it all together at once it's like $0.03 a pound but if I separate the copper from the aluminum, the aluminum's 50 cents a pound, the copper is $3 a pound. I had all the tools to do it I did HVAC for a while, so I had all the tools. I just broke it down in piles in my mom's garage. It was like piles and piles of copper here, piles and piles of aluminum there.

In a study of opposing drives, Guss et al. (2017) posited that behavior perceived as necessary for one's survival is externally motivated as it falls within Maslow's lower domain of safety. Treatment can be perceived as a place of safety by addicts, which may explain why individuals at times may initially appear motivated for treatment even when coerced. However, such motivation is typically accompanied by ambivalence toward recovery and usually results in relapse shortly after discharge. The participants' motivation did not survive beyond the initial stabilization stage of detox when treatment was coerced or driven solely by relief of withdrawal. As P6P explained:

I really thought at that point that the drugs were out of my system and I was like good. I don't need to listen now, like my problem is not deeper than just needing to take care of the physical side of things, you know what I mean? Like I didn't think it went deeper than that.

Motivation did not emerge in a fixed sequence for any of the participants, but rather developed unevenly over the course of their illness. Participants related that even in their lowest moments, such as following an overdose, they experienced what are sometimes referred to by recovering addicts as "moments of clarity." These may have been minor or profound realizations that there is, as P5P described "…a better way" even though, as she further stated "I just I knew that I had to want the better way. And I just knew that I didn't want the better way yet." Such insights, though not sufficient to motivate behavioral change at the time they occurred, were recounted by several participants as significant contributors to their overall motivation process.

One participant characterized these realizations in this manner: "[L]ike a seed being planted. And like that seed was planted while I was in there [outpatient treatment]" (P5P). This substantiates Rourke's (2015) concept of motivation as dynamic and therefore subject to increases during treatment found in their study of legal mandates and perceived coercion. Findings revealed that even in the case of coerced treatment driven by external motivation, intrinsic motivation can develop through peer support and increased self-efficacy.

In relating their experiences of hitting-a-bottom, the participants identified negative consequences beyond the physical pain of withdrawal such as loneliness and a

sense of regret about their status in life. These feelings contributed to their moments of clarity, which eventually accumulated to an extent whereby intrinsic motivation for treatment developed. This transition was driven by higher level needs such as love/belonging or self-esteem. A similar effect was reported by Guss et al. (2017) in their study of motivation in opposing drives such as deprivation versus gratification. Their findings revealed that external motivation is involved in resolving crises that threaten physical safety, while behaviors that satisfy the need for self-esteem are internally motivated. An example of integrated motivation to achieve higher needs was expressed by P7F in sharing his desire to reach his personal potential:

Like I knew, I knew that if I was able to stay clean, that I could accomplish anything. Like I knew that I was smart, I knew that I was a hard worker, I knew that I would get in shape.

It is important to note that the recovery process takes time. Following detoxification, post-acute withdrawal syndrome (PAWS) can continue to affect brain function for as long as 18 months (Gorski, 2009; Marlatt et al., 1988). PAWS negatively impacts memory, concentration, sleep, physical coordination and emotional stability (Gorski, 2009; Marlatt et al., 1988). As one participant explained, "At 3 months I wasn't going to do a packet. I wasn't working on my attitude; I wasn't going to think about… three months… it took me three months to just wake up" (P7F).

Once the participants begin to think rationally, their motivation shifted from addressing physiological and safety needs to the higher needs identified by Maslow (1943). This is the point at which the participants began to experience motivation for

recovery. When they willingly reached out to others who had achieved long-term

recovery, they began to believe recovery was possible for them as well. As P7F

explained:

> Age was not really a thing, but the fact that I saw a couple younger people made it
> made it feel like it was possible, you know. But what motivated me, was the
> connection with other people, that they had the thing that I had. And once I knew
> that these other people were doing it, it was like 'I can get clean.'

Connecting with others in the treatment community and support groups, fulfilled their

need for belonging and love. The recognition that they were "lovable" positively

impacted their self-esteem. P5N experienced this when she realized her family still loved

her despite her addiction:

> I had that moment of clarity where like when my girlfriend came through the door
> and she was like 'listen your family's worried about you." To know that somebody
> actually cared that much, and I actually cared that I cared? Like it all has to do with
> me. Like it all has to do with the feelings behind it.

Participants shared that in hearing the stories of other addicts with sustained recovery,

they began to see that they too could establish and achieve goals. After graduating to the

outpatient level of care, P2P entered a vocational program to prepare for the carpenters

union exam:

> Well, every other time I never invested my life. This time I went and took the
> Carpenters Union test I passed, um. I'm currently working on my test to get in the
> Carpenters Union in Philadelphia. So that is halfway done cuz you can only do 7.5

hours a day on it and it's a 10-hour course. I bang out 5 hours a day. My brother's

been wanting me to get in the union for three years now. My brother's been wanting

me to get in the union for three years now. [Before I stopped using drugs] I knew I

would never be able to live up to it, never.

Self-Determination Theory

Self-determination theory presents a humanistic view of motivation defined as

that which energizes the individual's efforts to reach potential (Deci & Flaste, 1995). The

theory presupposes that healthy human beings are naturally inclined towards achieving

personal growth and integrity. In the absence of pathology, human beings interact with

their environment in a proactive manner, which supports their movement towards self-

actualization. In general, behaviors that are intrinsically motivated are enjoyable and

rewarding and promote self-perceptions of competence.

Humanists such as Rogers (1951) and Maslow (1943) viewed intrinsic motivation

as an inborne trait of all human beings who experience a sense of enjoyment when

engaged in activities that promote self-fulfillment. Deci and Ryan's (1985) work was

focused on understanding how motivation becomes diminished through social controls

and how it can be reactivated (Deci & Flaste, 1995). Through their research, they

identified varieties of motivation and their relationship to outcomes, particularly with

regard to education and health.

Introjected and integrated motivation. Behavior that is externally motivated by

outside controls such as legal consequences result in introjected motivation. Introjected

motivation may promote compliant behaviors but is not associated with positive

outcomes or long-term results. Participant P1N provided an example of introverted motivation when he shared his feelings about the abstinence requirements of probation, "All right, yeah, my mind still was on, when this is all done, when the justice system is off my back, I will go back to using, you know?" (P1N). All of the participants shared similar examples of compliance driven by introverted motivation when they recounted stories of their earlier, coerced, treatment experiences.

As their illness progressed however, they began to regard their substance use as problematic, and became internally motivated for treatment. They understood that what they were going to face would be unpleasant; they did not believe there was a positive alternative waiting to replace their addiction, because they had never experienced recovery. Despite this, they accepted responsibility for their illness and their treatment with no expectation of enjoying the experience. This is an example of Deci and Ryan's (1985) integrated motivation.

Readiness to change self-destructive behavior needs to be accompanied by the awareness that to do so involves working through the issues that caused the pain or inadequacies that compelled one to use substances in the first place – but without the buffering effect of drugs. Undertaking this with a sense of autonomy, because one is ready to accept responsibility for change and recovery, is associated with prolonged engagement in treatment and maintenance of abstinence (Deci & Flaste, 1995; Ryan, Plant & O'Malley, 1995). P5N expressed her intention to work through painful issues of childhood sexual trauma in this statement: "I wanted to deal with the feelings for what they were, and I was tired like of numbing those negative feelings." P7F demonstrated his

willingness to accept personal responsibility for a relapse, even though it was unintentional:

> I started to really like NA and at 60 days clean I drank with my whole family. I never thought that I had to stop drinking. And I told my sponsor that I drank, and he told me "Oh you relapsed." And I was like "No, I drank alcohol." And he's like "No, you relapsed." And I'm like "I'm not an alcoholic, what am I supposed to never drink again?" You know what I mean? And my sponsor was like "You either want to get clean, or you're gonna go and get high." And I was like "Well I don't want to get high; I want to be clean." And he was like "You can't do both." And I'm like "I'm not giving up my clean time." And he looked at me and said, "You already did." And um, I went to a meeting, I got a white key tag [token presented to someone at their first NA meeting or upon returning after a relapse.]

These behaviors are evidence of integrated motivation, which was the variety of motivation the participants' described when discussing self-referral to their last treatment program:

> P8F: I just wasn't sure that I could, that I was capable of being in recovery. But I was willing to give it a shot.

> P6P: I just wanted to wake up every morning and feel okay, you know what I mean? And I didn't even know what that meant, because I never really felt that. But I just wanted to wake up and feel okay, and not have to get high to get out of bed, and not have to get high to feel like a human being. I just wanted to be able to wake up

and feel like a human being. Because I knew people like that existed, I just didn't

know how they did it.

R: Did you believe it was possible for you?

P6P: I didn't know if it was possible, but I wanted to try.

Competence and intrinsic motivation. Deci and Ryan (2008) asserted that

although competence is a factor in extrinsic and intrinsic motivation, in the case of

intrinsically motivated behavior, a sense of competence contributes to the enjoyment of

any activity in which one is engaged. Participants described their failure to recover,

despite repeated treatments, in self-critical terms, and some expressed that they had, at

times, felt hopeless and incapable of recovering. This hopelessness rendered them

disinclined to seek help and is an example how a perceived lack of competence can

diminish motivation:

P8F: Some of the times I was forced to, but you know a lot of the times I would

just decide to go to treatment, but it just never helped. It never helped.

P7F: I had tried so many times that I just knew it was impossible.

P1P: I was like there's no way I can get sober, I was like I don't know what sober

is, so I don't know what sober is. Yeah, I thought it was like it was pointless…

However, what they had perceived as treatment failure was not due to a lack of

competence. It is was a failure to engage in the process because they had not yet

internalized the goals of treatment (i.e., abstinence and ongoing recovery), as is so often

the case in coerced treatment (Cornelius et al., 2016). By their own admission,

participants revealed that they had entered previous treatment programs for many reasons

other than to recover, such as detoxing to reduce tolerance, partial remission (i.e., abstinence from one/some but not all substances), to minimize the impact of legal issues, or to quiet the protests of family members and significant others. When the participants presented for treatment as a result of integrated motivated, they were successful in accomplishing treatment objectives and found that this sense of competence in turn enhanced their enjoyment of therapeutic activities. As one participant explained:

> P7F: Honestly, so, my whole take on it is if there's something you don't like in treatment it's just as therapeutic as something you like in treatment, because you need to learn how to deal with shit that you don't like, you know? I used to hate arts and crafts. I used to think that arts and crafts was the dumbest thing you could do. I was like, to me, like I'm a grown-ass man. I'm not doing no noodle necklaces. I'm not making drawings of butterflies in my timeline, I'm not going to make a paper mâché globe, you know? And towards, like four months? You couldn't tell me that we weren't doing paper mâché globes. I was so excited to be making a paper necklace. I was so excited that we were going to draw our feelings on a piece of paper. I had bracelets up and down my arms, you know? These were things that I didn't really like, that I learned to enjoy. I learned how to be a kid again.

A feeling of accomplishment is a reward associated with intrinsically motivated behavior (Deci & Flaste, 1995). Treatment is not enjoyable, but meeting abstinence goals can foster a sense of accomplishment. The participants expressed pride in accrual of clean time, which is celebrated in 12-step meetings with refreshments, guest speakers, and the awarding of mementos such as pins, coins, key fobs, and other tokens:

P4P: I have 30 days, and for the first time I grabbed my token, I had it before me, and I'm, this is like a trophy, I likened it to a trophy. I won trophies as an athlete and I'm like okay that's good. Let's work hard and get another trophy.

As the participants progressed in treatment, building support networks with others in recovery and repairing relationships with family members, they began to feel a sense of belonging and the re-establishment of connections with others.

P6P: I remember that one time I relapsed in Florida and I called my mom, and it wasn't like 'you're a scumbag' anymore. It was like 'I just want you to be okay' and she was supportive and loving, you know?

R: And that made a big difference?

P6P: It did.

P5N: Yeah, being here, I feel like this is my family.

R: Do you feel connected to people again?

Yeah, I feel connected and I'm happy again.

P7F: …it changed the family dynamic to a point where my parents were kind of, my mom was encouraging. My sister was, kinda knew what I was going through, and were able to be a part of it.

PF7: I didn't want to feel connected. When I went to those meetings I went there out of curiosity. I did not go there and wanting to feel like I was going to be a part of this place. And I would look at those people and I would say I have nothing in common with them? And then they would start talking, and I couldn't help it feel close to these people. These people think the same way that I think. They struggle

with the same things that I struggled with. And then when I started to read the NA literature, that's when I start to see holy shit, this is the one thing that's going to save me. I knew…

Limitations of the Study

Because of a low response to recruitment efforts, the sample was limited to eight. This fell within the projected sample size but did not reach the desired total of 12, which may have impacted data saturation. All of the respondents were living in or near two major cities on the East Coast and had lived there for most of their lives; their experiences and perceptions may be unique to the culture of these specific locations, potentially limiting the transferability of the findings. Individuals in early remission from SUD may be poor historians due to the cognitive symptoms of post-acute withdrawal (Marlatt et al., 1988; Shillington et al., 2012; Simon and VonKorff, 1995). Triangulation of site location and comparison of information from past and current treatment records was employed to support credibility. However, due to lack of response and/or objections by clinicians, access to these records was limited to diagnosis and treatment history dates and locations. Access to each participant's bio-psych-social assessment would have provided additional details against which to compare narratives for confirmation of accuracy.

<div align="center">

Recommendations

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The results of this study underscore previous findings regarding the positive impact of internal motivation on behavior change and the value of autonomous support for clients while in treatment for opioid use disorder (OUD) (Cornelius et al., 2016;

Wolfe et al., 2013). A large body of research has demonstrated the relationship between internal motivation and positive results in healthcare (Deci & Ryan, 2008) as well as the futility of attempting to generate internal motivation through coercion (Deci et al., 1994). Future research should be directed towards finding ways to foster autonomous support and build alliance between clients and clinicians, as these two factors are positively correlated to treatment engagement and internal motivation for recovery (Cornelius et al., 2016; Wolfe et al., 2013).

A sense of urgency created by rising rates of opioid addiction and related fatalities in the past several decades gave rise to a wealth of research. A large portion of this research points to the ineffectiveness of conventional treatment approaches in emerging adults, the demographic that is most highly represented in recent opioid use statistics (Adams et al., 2014). However, when analyzing the course of this disorder in the context of the culture and developmental processes of young substance users, the problem appears to be one of motivation, not modalities. This perspective is supported by seminal research on human motivation (Deci & Ryan, 1995; Maslow, 1945) and recent literature as well (Brorson et al., 2013; Rourke et al., 2015; Urbanoski & Wild, 2012).

Substance use disorders have been classified as independent disorder in the DSM since 1980 (Robinson & Adinoff, 2016). This classification is based on evidence of observable and consistent neuroplastic changes in the brain. However, it does not discount the many other environmental, sociological, psychological, and economic contributors to the disorder in the individual who is biologically predisposed to SUD (NIDA, 2018). It is this combination of contributing factors, which is unique to each

individual, that should inform treatment goals rather than a universal approach (Blonigen et al., 2015). The recognition and support of clients' personal health goals have been shown to be the best predictors of prolonged engagement in treatment and adherence to treatment recommendations (Deci et al., 1994; Deci, 2008).

Understanding what motivates young opioid users to seek treatment and commit to an ongoing personal recovery program could be used to encourage emerging adults to enter treatment despite past treatment failures. The findings of this study revealed that while the stages of the recovery process are similar in both populations, the motivational process for treatment and recovery does not follow the same course and timeline in emerging adults as it does in older populations. Millennials become internally motivated by the emotional and physical pain they experience from increased tolerance and withdrawal, rather the fear of the loss of relationships, employment and finances, as is typical of adults. This is because they have not yet had time to acquire such things due to their early onset of drug use and rapid progression to drug dependency. While their young age prevents them from acquiring recovery capital, it is also their young age that enables them to endure the physical rigors of heavy drug use for much longer periods of time than their older counterparts. Additionally, adults often have an existing support system that may positively influence their decision to seek treatment, but millennials do not. Young substance users do not develop such relationships until after they enter treatment and become committed to a lifestyle of abstinence and involvement in a 12-step support fellowship. It is at this point that they emotionally connect with others in recovery who have travelled the same path and experienced positive outcomes. These

individuals serve as positive role-models, giving rise to hope and an internal motivation to recover.

Moreover, unlike adults, the entire process of becoming motivated and experiencing the motivational shift can occur over the course of several years and many failed treatment experiences, and each relapse poses a high risk of fatality due to overdose. Therefore, the goal of future research should be to expand the field's understanding of how to identify and support the client's transition toward integrated motivation.

Implications

Positive social change can result from improving the rates of treatment engagement and positive outcomes in emerging adults with opioid use disorder. The loss of life due to opioid abuse continues to rise, with estimates of over 130 deaths per day due to overdose reported by the Centers for Disease Control (2018). The total economic burden of opioid abuse in America due to incarceration and healthcare, loss of productivity, and treatment is an estimated $78.5 billion per year (CDCP, 2018). Research conducted in the past several decades has demonstrated a significant relationship between internal motivation and positive outcomes in behavioral health programs (Wolf et al., 2013). A large body of research points to the need for new approaches in the treatment of opioid addiction, citing the poor response to treatment in emerging adults (Bronson et al., 2013; Matson et al., 2014; SAMHSA, 2015; Vo et al., 2016).

However, the participants in my study benefitted from conventional treatment programs once they were internally motivated to participate and stable enough both medically and cognitively to benefit from treatment. Participants further revealed that their motivation did not result from any specific treatment approach but occurred over time as a result of the progression of their illness and therefore could not have been forced or expedited.

Despite the fact that motivation has been shown to be dynamic in nature and may actually change during treatment (Rourke; 2015), there is no guarantee it will improve. Indeed, the findings of a large body of research on motivation and behavior change in healthcare, including the results from this study, indicate that the motivation process is highly individualized and cannot be coerced or hastened (Deci & Flaste, 1995; Deci & Ryan, 2008). Therefore, channeling research efforts and funding into finding ways to increase motivation may not be the most expedient or efficacious approach to saving lives.

An overriding issue with opioid addiction is the rapid onset of physical dependence to the drug and the relationship between dependence, tolerance, and overdose deaths. This is exacerbated by earlier onset of drug use during critical periods of brain development (Behrendt et al., 2009; Marel et al., 2019). Additionally, the risk of death increases when relapse occurs after treatment as detox reduces tolerance and raises the risk of overdose. Therefore, conventional treatment programs that begin with detox and require total abstinence may actually present a risk to those who are not fully committed to treatment and recovery and who intend to continue their drug use upon discharge.

Since the disorder can be so intractable once activated and the risk of fatalities so great, treatment approaches should involve scaffolded / individualized treatment programs that meet the client at their current level of readiness rather than attempting to force a therapeutic agenda that the client is not ready to accept.

Prolonged engagement in treatment has long been recognized as effective in supporting ongoing abstinence and recovery. This has traditionally been accomplished by stepping-down the level of care from the most intensive, such as residential, to the least, such as outpatient counseling sessions. Unfortunately, in this model, all levels of care are still predicated on total abstinence where failure to comply typically results in dismissal. This leaves the addict vulnerable to additional relapse episodes and less likely to re-engage in treatment (Deci & Ryan, 2000). The results of this study indicate the need for a continuum of care that extends to include those who are not yet abstinent (Magill et al., 2018).

A more inclusive treatment model would be comprised of harm-reduction programs for substance users who are not ready to commit to total abstinence and which includes medically assisted treatment (MAT) for those who wish to remain abstinent but have been unsuccessful due to intense drug cravings (CDC, 2017; Kolodony et al., 2015). In this way, substance users would not be exposed to greater risk due lack of support and would be engaged at some level in the treatment system when they do experience internal motivation for recovery. Meeting the client "where they're at" would be a more effective method of treatment delivery as research shows that excessive coercion can actually

hinder the individual's natural tendency to seek healing and personal growth (Deci & Ryan, 2000).

Conclusion

This study extended knowledge of substance abuse addicts' experience by exploring the motivation processes of a specific population, millennials with opioid use disorder (OUD). In the past decade, a large body of research was generated in response to the opioid crisis in America, and much of what was learned painted a desperate picture of young addicts doomed to repeated treatments with little or no hope of remission.

The participants in this study shared narratives that underscore the singularity of each person's journey from active addiction to sustained abstinence and recovery. Perhaps the most significant contribution of this study was to promote the understanding that intrinsic motivation occurs within the course of one's personal life experience and is a unique process for each individual. It is unlikely that it can be forced or expedited through threats, emotional manipulation, or reward contingencies. However, it is also a dynamic process and is influenced by positive interactions with caregivers and family members that foster autonomy.

For these reasons, it is important not to interpret treatment outcomes that do not result in long-term abstinence as failures or to assume that initial resistance cannot give way to acceptance. Regression and relapse occur at similar rates for substance use disorder (SUD) and other chronic illnesses such as asthma or hypertension, yet only in the former are they evaluated as treatment failures (NIDA, 2018). This is most likely due to society's continued stigmatization of those afflicted with SUD. Unfortunately,

stigmatization often deters addicts from seeking treatment (Crapanzano et al., 2019). In the case of young opioid addicts, anything that discourages rather than engages them in treatment can have lethal consequences. There is no conclusive evidence to support the assumption that opioid addiction in millennials is intractable and that they are resistant to conventional treatment. As stated previously in this study, this is not the first group of individuals to be afflicted with opioid addiction in epidemic proportions, but it is the youngest, and perhaps that has clouded perceptions. It is possible that millennials are not inherently different from other addicts, but simply younger, and thus it is the course, not the nature of their illness that should be the focus of future investigation.

Based on the stories of the young participants in this study, it appears that there is not necessarily a need for different treatment approaches for young addicts as much as more realistic expectations for how long it may take this new generation of drug users to become ready to recover. In the meantime, supporting them throughout their process of becoming ready and ensuring that they survive their active drug use with medically assisted treatments until they are ready, is vitally important.

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Appendix A: Codes Groups and Codes

Code Group	Code	Definition
EXTERNAL TX MOTIVATORS: External pressures or events that compel individual to accept treatment.	**Formal interventions**	Organized event facilitated by a licensed counselor with family members and other significant people in the addict's life with the intent of breaking through denial and increasing awareness of the negative impact of substance use on the addict and the family system. Interventions typically end with an ultimatum to enter treatment or lose family, job, etc. Ex: "I stayed out all night. My brother calls me says 'Your mom's having a heart attack…She wasn't. But like this was their way of getting me home for an intervention…"
	Lack of financial resources	Usually experienced in later stages of progression of SUD when the individual is unable to support drug habit and exhausts financial resources or help of family members who refuse to enable addiction. Often leads to criminal activity to obtain money (i.e.; B&E, forging checks, prostitution). Ex: "You know, like I had nothing to my name, I had no car, no cell phone, nowhere to live, like I had nothing."

	Legal issues /coercion	Legal consequences that often occur as substance abuse progresses (i.e.; D.U.I, possession/distribution charges) that may create leverage for external treatment motivation.
		Ex: "Now I have to do drug court, and everyone in school knows, and people are labeling me as this bad kid."
		"And, when I got arrested that was like my breaking point."
	Pressure from family / employer	External pressure exerted by family members on individual to accept treatment for SUD. May be in the form of loving support or threats.
		Ex: "I had my first overdose and I woke up in the hospital and my mom was standing over my hospital bed crying and that was when I guess they realized that enough had to be enough and they tried to get me to go into treatment…"
FAMILY ISSUES RELATED TO SUD: Issues present in the family of origin that are often reported by substance users when relating their history	**Cultural norms, modeling of substance use**	Exposure to members of immediate or extended family members who drank or used other substances excessively
		Ex: "And then when I moved in with my dad, um, I like really had, it was like a free-for-all. I could like drink whenever I wanted, um and I started drinking, like, very regularly, um, because, there were no

repercussions, because I would like drink with him."

	Divorce	Divorce or separation of parents in childhood or adolescence, especially when this involved domestic violence, loss of time with one parent, ongoing hostility between parents. Ex: "They were getting divorced, and then like nobody was paying attention to me, so that's when I got introduced to cocaine." "My mom worked so much she wasn't around enough to really know what I was doing."
	Enabling, condoning or ignoring substance use	Family engages in protecting drug user from negative consequences of use (enabling), does not forbid use of drugs or condones or overlooks the use of certain substances despite legality or potential harm (i.e.; underage drinking, use of MJ). Ex: "Like alcohol was so acceptable in my family, and everyone drank, and everyone drinks so much."

	Lack of supervision	Lack of family supervision during childhood and early stages of substance use due to issues in the home, (i.e.; marital discord, lack of awareness of signs of substance use, poor parenting skills, serious illness of other family member, limited time at home due to workload of single parent).
		Ex: "My mom worked so much she wasn't around enough to really know what I was doing."
INTERNAL TX MOTIVATION "hitting bottom": Factors that contribute to a substance user's readiness to seek treatment for SUD.	**Cognitive dissonance**	A point at which the addict begins to experience a conflict between their behavior as an active drug user and their "true self."
		Ex: "I was starving, I was hungry, I was thirsty. I didn't think I was going to make it out of this… I was like all right this has got to be my bottom. I was like, I don't see me going any further down."
	Guilt / remorse / shame	Painful emotions associated with SUD, which often lead to motivation for treatment but may also be a part of the relapse process.
		Ex: "I was hurting the people around me that part was bothering me, you know? It really was, it was, it was, just — like it got kind of — it tore me apart, and just tore me apart."

	Homelessness	Loss of housing due to SUD related behaviors, which were unacceptable to family, S/O or sober living residence - usually resulting in living outdoors or in a vehicle (if one was still available).
		Ex: "I was living on the streets of North Carolina for like 2 weeks. And I ended up, I was sleeping outside the hospitals down there, sleeping at the train stations, like anywhere I could sleep I was sleeping."
	Loneliness / alienation	Complete loss of social support, either through rejection by family and friends due to substance use or self-directed due to complete involvement in substance acquisition and use, which can contribute to internal treatment motivation.
		Ex: "I stopped needing people I realized what's the point of having people around, you know um."
		"I was now like in Florida alone, with no one to call, with the news that like this person that I loved had died…"
	Physical / emotional exhaustion	Terms frequently used by those with SUD to describe the way they feel when they are emotionally and physically depleted from trying to purchase drugs and recovering from intoxication and withdrawal effects.

Ex: "It took, it took this long. It finally got to the point; you know. I remember I told my mom I was so tired of sleeping on the ground. I just wanted to sleep in a bed."

"…I definitely was tired. I remember feeling like so tired of what I was doing."

Recognition of SUD / powerlessness	The point at which the substance abuser gains awareness that they are experiencing withdrawal, have lost the ability to control their substance use, and/or begin to believe that they are incapable of maintaining abstinence. Ex: "I think that uh, in the beginning when I started to have consequences, I thought I could just pump the brakes whenever I wanted. But then there came a time when I realized I had no brakes whatsoever, and that I was no longer in control, and that this was going to be more difficult than I thought, you know?"	

	Self-condemnation / lack of achievement	A state self-recrimination the substance user experiences when he/she sees repeated relapse and treatment failures as a sign of personal weakness or "defect of character." Sometimes the result of comparing oneself negatively with their friends who did not develop SUD, especially with regard to their own lack of achievement in the areas of personal relationships, post-secondary education, career, property ownership. Ex: "Yes, and at that point I was probably watching some of my friends starting to graduate from college, like here I was, completely flunked out of college at this point. Cause like I went to Rutgers when I flunked out of West Virginia, and I completely screwed that up. You know, like I had nothing to my name, I had no car, no cell phone, nowhere to live, like I had nothing."
	Spiritual experience	An experience whereby the drug user becomes more aware of his or her spiritual nature / higher-self and or the existence of a "higher power" or God, which may accompany a willingness to accept treatment or a desire to improve their situation. Ex: "I surrendered to God. It was the most crazy feeling ever. I'll just never forget. I surrendered,

and I worked on things, and I stayed. Instead of 30 days I stayed 57. I turned my will over to not just God, my parents, and let them make my decisions. I went to a recovery house…"

	Recognition of physical dependence: "Dope Sick"	Experiencing the symptoms of withdrawal and realizing they are the result of drug dependence rather than symptoms of flu or other malady.
		Ex: "And then finally it clicked. I was like "Oh my God, it's these little blue pills! That's what it's causing this. It's gotta be." Cuz every time I do one, I feel better. Every time I don't do one, I'm like wishing I'd be dead, you know, it was like bad."
		"All the pawn shops know who I am. I've been arrested four or five times. I'm dope sick more than I'm high."
PERCEIVED BENEFITS OF SUBSTANCE USE: Perceived benefits of substance use such as peer acceptance and/or relief of painful affective states such as anxiety, depression, social phobia.	**Balancing drug effects**	Using drugs with opposite effects, such as stimulants and depressants, to offset the negative effects of intoxication. This can extend the time before the user can experience the "high" (e.g., using cocaine to stay awake/conscious when drinking alcohol) or to soften the anxiety associated with withdrawal (e.g., taking Xanax after using crack).

		Ex: "No, because then I was just using heroin and crack at the same time, and like I would come up with crack, then I used the heroin to come down and balance out."
	Financial gains	Selling drugs as a means of supporting the habit and lifestyle of substance use. Ex: "I started selling weed. It was like 60 - 100 lbs. a month getting delivered from Cali. It was like, ok we'll make 10 grand then we'll stop. Okay we'll make 20 grand and we'll stop. I made so much money in a year and a half span, it was out of control." "I was able to afford the car and insurance I had and my phone because I was selling."
	Temporary increase in self-esteem	Using drugs to mask feelings of low self-esteem and boost confidence in social situations. Ex: "I was, kind of like a fat kid, I didn't mature fast. So, like, my self-esteem was damaged from a young age. I was never picked on or bullied. It was more or less like me bullying myself. The way I see it is, it was, like, a miracle drug. It took me outside of myself."

Medical Use	Use of drugs as prescribed for medical issues such as pain management or affective disorders. Ex: "I had my tonsils out, my adenoids out, and I had something wrong with my teeth that I had to get them exposed, and then I got my wisdom teeth out when I was 13. So, they give you liquid Vicodin for wisdom teeth and I, like I was drinking it so much my dad poured it down the sink. Cuz he seen that I was doing it too much, and I was 13. I was 13 at that time."
Novelty	Use of drugs for experiences outside of the user's normal frame of reference. Ex: "I think of all things I just enjoyed that it was something we weren't supposed to be doing, and it was just deviant and exciting, and it was new. And I felt like kids that weren't doing this were just like, missing out."
Peer acceptance / belonging	Experience of acceptance and a sense of belonging when introduced into culture of drug users. Ex: "I started going in that circle of friends and I got like real

		close with everybody, with everybody in there…"
		"Then in seventh grade, I was really popular at that point, had a whole bunch of friends that were older than me. I was going to college parties, I looked older than I was. And I started to become a part of the party scene and that's what I really started to like, the whole popularity contest."
	Relief of boredom	Use of drugs for amusement in lieu of other activities that are not drug-centered such as sports, hobbies. Ex: "I just needed something to fill my time. A lot of other kids were playing sports and I really never liked sports."
	Status	A belief that one is elevated above peers because of knowledge of/ experience with drugs/ dealing drugs…which may be real or imagined. Ex: "Like it wasn't um, this feeling of being intoxicated. It was this feeling of just like superiority and nobody was doing it. This was like adult, hard-core, fun, exclusive."

PERCEPTIONS / MISCONCEPTIONS RE SUD: The beliefs that are held by the substance abuser that contribute to their denial and continued use, such as misconceptions about addictive disease, lack of awareness of the signs of progression and withdrawal, and lack of education regarding the role of abstinence in supporting continued recovery.	Lack of awareness of dependence symptoms	Inability of substance user to recognize physical discomfort as withdrawal symptoms due to lack of knowledge regarding chemical dependency. Ex: "And then once I started withdrawing in 10th grade, that's when I had this whole, like my whole world flipped upside down when I realized 'Holy shit! I got addicted to fuckin' opiates!' Because people would say 'Oh I'm withdrawing.' I wouldn't even understand what they were talking about."
	Lacks education on SUD	Substance user lacks knowledge of the causes and manifestation of substance use disorder, which contributes to denial and treatment refusal. Ex: "Nobody came up to me and said 'Oh, it's okay, you're just an addict.' I had not even heard the word 'addict' out loud. In the whole 7 days of detox nobody said you're an addict." "I don't remember anyone even talking to me about drugs…period." "Yeah, that was it, and you know, and I really thought at that point that the drugs were out of my system and I was like good. Like I didn't think it went deeper than that."

	Rejects abstinence as a condition of recovery	Despite willingness to accept treatment, substance user is not ready to be completely abstinent from all mood-altering chemicals, a standard treatment recommendation.
		Ex: "No, no, I never had intended to stop…my mind still was on, was going on, when this is all done when this, when the justice system is off my back, I will go back to using, you know? "
		"I was like 'all right, I'll get off the drugs', but I had no real reason to be abstinent, you know?"
RECOVERY SUPPORT: Those individuals who either remain connected despite the substance user's addiction or who enter their social system through treatment or 12-step involvement that provide support for ongoing abstinence and recovery.	**12-Step involvement**	A common recommendation of treatment centers is to attend Narcotics Anonymous (NA) or Alcoholics Anonymous (AA) meetings, and to ask other members for their phone numbers, obtain a sponsor, join a home group, etc. The intended result is the development of a strong network of "sober" social support to replace relationships with "using" friends.
		Ex: "But meetings made sense to me. I started really enjoying meetings, and I got a sponsor, and I started to really like NA…"

Emotional connection	Establishing a connection to other people in recovery that is deeper than the superficial connection with fellow drug users that is typical in active addiction. Ex: "…what motivated me, was the connection with other people, that they had the thing that I had. And once I knew that these other people were doing it, it was like "I can get clean."
Non-judgmental acceptance	An often-reported social behavioral norm of 12-step members towards meeting attendees. Ex: And then they would start talking, and I couldn't help it feel close to these people. These people think the same way that I think. They struggle with the same things that I struggled with…and I got a white key tag and the woman chairing gave me the biggest hug, and I started crying, and other people started like encouraging me, and ever since that day to this day I've been clean."
Recovery role models	Individuals who have achieved a level of recovery that reflects internal growth and a quality of life that provides hope for newly recovering individuals who are struggling to maintain abstinence.

Ex: "I could tell you without a shadow of a doubt that the majority of the people I met in the 12-step program that I went to were there because they wanted to be there, and were happy, and were serious drug addicts, had found something to make them feel like they don't need drugs anymore and were now totally obsessed with this new high of living life…"

| RELAPSE:
Return to active addiction. | Behavioral relapse | Return to behaviors that are associated with active addiction and that often precede a return to drug use, such as illegal activities, associating with drug users, decrease of or cessation in 12-step meeting attendance, etc.

Ex: "And I completely lost my mind and I started acting-out on character defects. I got mad, I got resentful. I was like running my mouth all the time not doing what I was supposed to be doing and I was just on that relapse road. and I ended up… it was over a month or month-and-a-half that this was going on."

"Yes! Yes! And also, shortly before I relapsed I I'd started stealing from like CVS and Walgreens again, which was a behavior from the past that was a sign that I was headed in the wrong direction." |

	Toxic relationships	Relationships, often romantic in nature but not always, that are a part of one's relapse process due to codependency, pressure to use drugs, or abuse that leads back to active drug use.
		Ex: "I met a boy in treatment, and we were like, we wound up being together for a while, we lived together. And then like the relationship was like very toxic. I mean it was toxic from the start, but I was just like so in love that I didn't care how toxic it was."
		"And then I started dating a guy that I met in an NA and he was like really bad news. And he started smoking weed and then eventually I decided that I could drink with him. And then one night we were at the bar and he ran into his old coke dealer and he didn't have any money, and like I bought him everything. And he told me that I could either buy him coke or that we were over. And I decided to just buy him coke because I didn't want the relationship to be over. "
SYMPTOMS OF SUD: A combination of physiological, social, and psychological manifestations associated with repeated drug use that characterizes addictive as opposed to casual use. Many of these signs are included in the list of the	**Abandonment of other interests due to drug use**	The acquisition and use of substances become so consuming that the drug user loses interest in most or all other activities that he/she once enjoyed.
		Ex: "School began to plummet, like drastically. I remember I was at 2.83 [GPA]. Within a year

| DSM-IV diagnostic criteria for substance use disorder. | | selling weed and having parties at my house every night of the week, it went from like a to 2.83 to like a 1.6 in a year span."

"I went to WVU and had planned to play softball. I didn't even make it past fall ball." |
|---|---|---|
| | **Changes in primary support network** | A stage in progression of drug use when the individual gravitates towards those who share his/her proclivity for drug abuse and disconnects from non-using peers.

Ex: "I met this girl at this game and started seeing her, and that's like how I started doing heroin…she went to a different school. When I started seeing her, I stopped hanging out with my other friends, and I like just spent all my time with her and her friends."

"I knew a good amount of people down there. But the people I went to go live with weren't the right kind of people…they were people that used." |
| | **"Chasing the High"** | An expression coined by drug users to describe the continued use of drug-of-choice despite diminished effect due to tolerance in the hope of achieving the same level of euphoria experienced at onset of use. |

		Ex: "…it was really a good feeling at first, and then like I chased that feeling, and I wanted that feeling again, and I never found that feeling again, even like relapsing. I never found that feeling again (sigh, then laughter)."
	Continued use despite negative consequences	Drug use persists despite serious issues such as arrests, loss of employment, etc. Ex: "I've been arrested four or five times. I'm dope sick more than I'm high. I've been smoking crack for three years. I've been kicked out of school 4 or 5 times." "And, when I got arrested that was like my breaking point I was like, I can't. Cuz I'm on the run from the military technically right now, I'm AWOL. I just got arrested, it's not a good look. It was like, I don't, I don't have a phone. I sold it. Car's impounded. I already owe 2 months back payments back-pay on the car, so it's going to get repo'ed at the same time. Um, I was like, my life, I'm done."
	Cravings	Strong physical urges to use drugs experienced during withdrawal and post-acute withdrawal. Ex: "Yeah, I don't know, it took the cravings away, it really

helped you know. Really helped, but then at the 9 months point to a year I feel like it wasn't working anymore. Something about it wasn't helping, you know? It wasn't helping.
Yeah, yeah. I started to get cravings again. and you know… it would just come and go drive me crazy."

Dangerous use	Use of substances in a way that poses great risk (i.e.; driving while intoxicated, mixing drugs, using unidentified substance from unknown dealer, sharing needles, etc.) and/ or engaging in illegal and risky behavior to obtain drugs with little awareness or concern for the possible consequences. Ex: "Once I started mixing the two, my tolerance, like I didn't realize where my tolerance really was with that, and then I had my first overdose and I woke up in the hospital and my mom was standing over my hospital bed crying…"	
Defensiveness	Anger and protest of user who is still in a state of denial regarding their SUD when confronted by others regarding their use. Ex: "Yeah, but I rejected it I did everything I could I ran, he chased, I didn't run, I walked, and he kept following me, and I was like dude, fuck yourself, I'm not going to treatment, like I have no problem."	

		"And it was like that for everybody who confronted me about having a problem. I was like I don't know what you're talkin' about I don't have a problem and it was just like I wasn't ready for it. Like I didn't want the help."
	Increasing tolerance/ substance dependence resulting in increased quantity and frequency of drug use.	Adaptation of the brain resulting from continued exposure to psychoactive substances, which results in the need for larger doses to achieve effect. One of the symptoms of progression. Ex: "I still felt pain. Like it didn't, it wasn't making everything okay anymore. And like I wasn't like; I was having to do more…" "Like my tolerance was insane. When I think about it now, I was probably, there were days when I was probably doing a hundred mg. of painkillers — not a hundred, a thousand mg. of painkillers, you know?"
	Preoccupation with drug use	Spending an inordinate amount of time fantasizing about substance use and/or planning to use. Ex: "And then I started to really crave crack, and really obsess about crack. And all I could think about was crack."

SUBSTANCE USE HISTORY: History and details of substance use, including substances used.	Alcohol	A mood altering chemical. Ex: "…the first drug I did was alcohol."
	Circumstances of first use	The details surrounding the onset of substance use, such as age, location, social setting, etc. Ex: "I was with my family. It was around second grade, so it was like a family party and I just got into the alcohol and started drinking, and no one really took it serious. They just thought it was kind of funny, but that's my first recollection doing it".
	Cocaine/crack	An illicit stimulant drug that is either snorted, inhaled, or injected (IV) and its fat-soluble form, which is heated and inhaled in its vaporized form. Ex: "…on coke, you just, you talk a lot, and you feel upbeat…"
	Marijuana	A hallucinogenic drug that is smoked. It is derived from the Cannabis Sativa plant. This drug has been legalized for recreational use in 11 of the United States and legalized for medical use in 20 additional states. Ex: "I think they identify marijuana — it's not an opiate, it's not a stimulant, and I think that it's a hallucinogenic. yeah

and I see why they say that. I mean you just feel spaced."

	Opiates/Opioids/Heroin	A group of drugs derived from the poppy plant used legally by prescription and in a hospital setting for pain relief. Opioids are synthetic opiates. Ex: "I had when I was like 14 and 15, I had gotten a lot of surgeries in one year and that's when I got introduced to Vicodin."
	Reaction to substance	Positive, negative, or neutral response experienced at initiation of drug use. May include physical, affective, and/or perceptual experiences. Ex: "…the first time it was just it's just (laughter) it's just the best feeling I ever felt — I wanted to feel like that all the time you know?"
TREATMENT HISTORY: Settings in which someone with SUD receives therapeutic intervention for their illness, i.e., detoxification, inpatient, intensive outpatient, outpatient and counseling.	Aborting treatment (AMA)	"Against Medical Advice" - elopement or leaving treatment prior to completion; without having achieved maximum therapeutic benefit. Ex: "Once I knew that I could AMA from a place it was impossible to keep me."

	Hopelessness	The descriptor used by addicts for their emotional state when they are unable to control their drug use despite multiple detox and treatment experiences. Ex: "I felt so hopelessly addicted."
	Denial / TX refusal	A psychological defense mechanism which interferes with the user's ability to recognize their level of drug use as harmful or indicative of addiction. Individuals in this state of denial may be resistant to entering treatment as they don't believe they have "a problem." Ex: "I guess they realized that enough had to be enough and they tried to get me to go into treatment and I refused to go into treatment…"
	Medically assisted treatment (MATS)	Pharmacological interventions such as agonist / antagonist therapy (vivitrol, naltrexone) that reduce cravings and/or block the reinforcing effects of opioids. Ex: "When I was on the Suboxone program, when I was on Suboxone maintenance, I really was trying. I thought that that was the solution for me."
	Treatment compliance	Adherence to treatment recommendations during treatment and post-discharge.

		Ex: "I was one year straight. I was going to meetings for one year straight. I did real good. I was really good. It was consistent."
	Treatment response	The clinical response of the substance user's treatment with regard to their disorder, i.e., remission, abstinence Ex: "I just did my 30 days there and just pretty much, pretty much, said whatever they wanted to hear, you know, and I completed. The first day I was out, I was taking pills you know…"

Appendix B: Release of Information Form

CONSENT TO INDIVIDUAL RECIPIENT 42 CFR Part 2 and HIPAA

I,_____
[patient's name]

authorize_____
[name or general designation of individual or entity making the disclosure]

to disclose

_____
[describe how much and what kind of information may be disclosed, including an explicit description of what substance use disorder information may be disclosed; as limited as possible]

to _____
[name of individual(s) who will receive the information]

for the purpose of

_____
[describe the purpose of the disclosure; as specific as possible]

I understand that my substance use disorder records are protected under the Federal regulations governing Confidentiality and Substance Use Disorder Patient Records, 42 C.F.R. Part 2, and the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), 45 C.F.R. pts 160 & 164, and cannot be disclosed without my written consent unless otherwise provided for by the regulations.

I understand that I may revoke this authorization at any time except to the extent that action has been taken in reliance on it. Unless I revoke my consent earlier, this consent will expire automatically as follows:

_____
[describe date, event, or condition upon which consent will expire, which must be no longer than reasonably necessary to serve the purpose of this consent]

I have been provided a copy of this form.

Dated: _____ *Signature of Patient* _____

Signature of person signing form if not patient: _____

Describe authority to sign on behalf of patient: _____

Appendix C: Perceived Benefits Code Tree

Status → is a → **PERCEIVED BENEFITS OF SUBSTANCE USE**
Relief of boredom → is a →
Relief from painful emotions → is a →
Legitimate use for medical issues → is a →
Novelty
Peer acceptance / belonging
Increase in self-esteem
Financial gains → is a →
Balancing drug effects → is a →

Appendix D: Internal Motivation Code Tree with Linked Quotations

Yeah, yeah. I think that, I don't know, I don't really know, but there's got to be a reason that I k...

No, no. I was strongly motivated to withdraw from heroin, but not to do recovery.

the last time that I went to treatment was after like another boy friend of mine had passed away.

To me, honestly, it's, when you really want it, when you really want to stop, you want to stop.

Yeah, at this point I just wanted a phone to call my parents and like, try to get into a place.

So, the end of January, I remember, that's when I like asked for help. I was like, I went to my mom...

got to the point where I was thinking of, I was thinking of, like I can't go on like this, you know?...

INTERNAL TX MOTIVATION (hitting bottom)

Some of the times I was forced to, but you know a lot of the times I would just decide to go to trea...

I believe deep down every addict, if you're a real drug addict, with the disease of addiction, you do not want to use drugs.

is associated with   is associated with

Withdrawal sickness / recognition of physical dependen...

Cognitive dissonance

I didn't want to go to treatment. But, on day 6, when my paper ran out? I was like crying to my mom...

is associated with   is associated with   is associated with

is associated with

is associated with   associated with

is associated with

like my family was me and like obviously my family and like they were crying like. My mom was gray h...

Spiritual experience

Self-condemnation / lack of achievement

Loneliness / alienation from loved ones

Do you know where ... is?" Like, "We don't know where she is, we haven't heard from her, we think...

Recognition of SUD / powerlessness

Physical / emotional exhaustion

Guilt / remorse / shame

I, I couldn't. Like, I wish I could just, like I want to say I never prayed before and I never did,...

I think it was finally my decision, it was my decision, and like hearing that my family...

So, I go to ... I surrendered to God. It was the most crazy feeling ever. I'll just never fo...

My first bottom was when I was trying to kill myself and I realized that I wanted to die, but the...

Homelessness

Yeah, I took that as an opportunity. But without really knowing what I was signing up for. I was lik...

he's like "How about how about you just do what you got to do, and then why don't we just go, I'll d...