Maintaining Natural Recovery from Prescription Opioid Use Disorder

Christina Drymon
Washington University in St. Louis

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WASHINGTON UNIVERSITY IN ST. LOUIS

Brown School of Social Work

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Maintaining Natural Recovery from Prescription Opioid Use Disorder
by
Christina Drymon

A dissertation presented to
The Graduate School
of Washington University in
partial fulfillment of the
requirements for the degree
of Doctor of Philosophy

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Christina Drymon

Washington University in St. Louis

May 2020
Dedicated to Micheal and Colin McGauley.
ABSTRACT OF THE DISSERTATION

Maintaining Natural Recovery from Prescription Opioid Use Disorder

by

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Doctor of Philosophy in Social Work

Washington University in St. Louis, 2020

Professor Francis (Brett) Drake, Chair

Prescription opioid use disorder (POUD) has been steadily rising in the United States since 1999 and is often accompanied by increases in heroin and synthetic opioid use, overdose deaths, and other adverse public health outcomes. Women in particular are at greater risk of developing POUD and associated outcomes. Even though high rates of mortality and morbidity are common among those with POUD, recovery is possible with nearly half of all individuals with POUD recovering naturally (i.e., without formal or informal treatment). The natural recovery process from POUD has received little empirical attention. Using a grounded theory approach, semi-structured qualitative interviews were conducted with 16 women who had been in natural recovery from POUD (or similar substance use disorders) for at least one year to better understand how they spent their time post-POUD and what they did for pleasure and enjoyment without POUD in order to maintain their recovery. Using timelines, participants previous attempts at recovery were also explored in an effort to understand how these factors (i.e., time spent and pleasurable/enjoyable activities) changed over time. The findings lend further support to the effectiveness of cognitive, motivational and behavioral strategies as helpful factors in maintaining recovery from POUD. The findings also generally support the idea that the creation and extension of individuals social support network is critical to all stages of the recovery.
These and other findings are discussed in the context of the broader substance use and natural recovery literature and with respect to implications for policy and practice.
Chapter 1: Introduction

It is important to understand substance use disorder (SUD) across several levels, including etiology, treatment and recovery. While all three domains are inter-related and crucial in order to further our understanding of SUDs, the recovery process has received the least attention. The present study was therefore aimed at better understanding the recovery process from prescription opioid (PO) use disorder (POUD) with a particular view towards investigating natural recovery (i.e., recovery without the use of formal or informal treatment). Similarly, just as there are many different potential pathways to the development of a disorder, there may also be multiple routes involved in recovery from a disorder. One potential pathway, natural recovery, has received the least attention.

The overarching goal of this dissertation is to provide the reader with insights into the resources individuals utilize in assisting them throughout recovery from POUD without treatment (i.e., formal or informal). This dissertation attempts to accomplish this goal by 1) systematically reviewing the literature; 2) providing a detailed outline of the methods employed drawing on the available natural recovery literature including the use of valid and reliable survey instruments and analysis techniques; and 3) discussing the results in comparison to findings from other well-known researchers in the field. However, my argument for why this study (and others like it) is important is simply: the majority of individuals with a SUD (including POUD) do not seek treatment, for a variety of reasons, therefore, it’s imperative that we understand their paths to recovery as well as we can. This may help us to find alternative ways to assist individuals with a SUD throughout recovery beyond our current treatment system. History suggests that we can't simply push people to treatment, we’ve tried it and it doesn't work. Additionally, if
everyone who currently has a SUD tried to seek treatment, our current treatment system could not handle it. We simply don’t have enough resources available to treat everyone who needs it. To make available the necessary resources to treat everyone who needs it, similar to the ways in which we currently do, will take a lot of time and money. It may be helpful, therefore, to talk to people who have recovered naturally and understand more about how they did it, what they used for support, and how those supports changed over time. We don't have a lot of recent literature that speaks to this, particularly focusing on individuals with POUd. For this reason, a small qualitative study would be most fitting.

This chapter provides an overview of the problem followed by a brief discussion of the purpose of the study, including the specific aims. It also includes a historical perspective of the definition and use of various terms throughout this dissertation, (i.e., substance use disorder, treatment and recovery). Lastly, there is a brief discussion regarding the significance of this study including potential implications for research, practice and policy.

1.1 Statement of the Problem
POUD has been steadily rising in the United States (U.S.) since 1999, becoming the second most common illicit drug use disorder, following marijuana (Substance Abuse and Mental Health Services Administration (SAMHSA), 2017a). In 2018, an estimated 1.7 million Americans (aged ≥12) had a POUd (SAMHSA, 2019). While various prevention and treatment efforts (e.g., prescribing guidelines, reformulated medications, medication-assisted treatment) have led to a slight decrease in the number of new nonmedical PO users in recent years (Office of the Surgeon General (OSG), 2016), the number of individuals who have a POUd remains high. POUd is often accompanied by increases in heroin and synthetic opioid use, overdose deaths, and other adverse public health outcomes (Cicero et al., 2014; Dart et al., 2015; Kolodny
et al., 2015; Kuehn, 2014; Volkow et al., 2014; Wilson et al., 2020). Even though high rates of mortality and morbidity are common among those with POU D, recovery is possible. While data on recovery rates from POU D specifically is lacking, it has been estimated that around 50% of individuals who once met lifetime criteria for any opioid use disorder eventually recover (i.e., no longer meeting diagnostic criteria; White, 2012). The main gaps in the literature are identified next and then discussed in greater detail in the background section below (Section 2.5 Gaps in Research, and Methods).

The majority of recovery research has utilized a treatment-seeking population. This is in part because this is a much easier population to reach than the population of those who have recovered naturally. Research has shown that nearly half of individuals with POU D do not seek treatment (Blanco et al., 2013; Kelly et al., 2017; Saha et al., 2016; Wu et al., 2016). In general, natural recovery research is limited, but there are no known studies that have looked at natural recovery from POU D specifically. However, of those studies that have looked at recovery from any opioid use disorder, researchers have found that many recover naturally (Bischof et al., 2012; Carballo et al., 2007; Kelly et al., 2017; Klingemann et al., 2009; McCabe et al., 2016; Sobell et al., 2000; Wu et al., 2016). Little is known about the process of natural recovery from opioid use disorder, let alone POU D, and what resources individuals utilize to assist them in maintaining their recovery (OSG, 2016).

Second, a gap within the natural recovery literature (as well as in the recovery literature generally) exists between theoretical discussions on the meaning of recovery and the operational criteria used by researchers who tend to define recovery as rather short periods (Mean length = 1.2 years, $SD = 0.7$) (Carballo et al., 2007; Klingemann, 2012). This is critically important when trying to identify maintenance factors. Research suggests that maintaining recovery from opioid
use disorder for five years substantially increases the likelihood of future stable recovery (Hser, 2007; Hser et al., 2015).

Third, the majority of natural recovery research has focused on identifying variables associated with either the onset or maintenance of recovery. Of these two, maintenance of recovery has received less empirical attention (Bischof et al., 2012; Carballo et al., 2007; Sobell et al., 2000; Toneatto, 2013). The few studies that have investigated maintenance of natural recovery from an opioid use disorder have identified social support, development of nonsubstance interests (i.e., pleasurable/enjoyable activities) and lifestyle changes (i.e., how time is spent) as important to maintaining recovery (Carballo et al., 2007; Hser et al., 2015; Sobell et al., 2000). The majority of research, specific to maintaining recovery, has focused on the role of social supports (Carballo et al., 2007; Gallus et al., 2006). Specifics regarding how individuals spend their time without using POs including the pleasurable/enjoyable activities they engage in, and ultimately how utilization of these factors change throughout recovery have not been fully explored.

Fourth, in an effort to identify the potential pleasurable/enjoyable activities individuals engage in, researchers have developed specific instruments to assess these activities and their reinforcing value. Data collected among a substance using population currently exists for four of these instruments (Pleasant Events Schedule, Leisure Interest Checklist, Pleasant Activities List, Sober Living Activities; Kaskutas & Oberste, 2002; MacPhillamy & Lewinsohn, 1982; Roozen et al., 2008; Rosenthal & Rosenthal, 1985). While these instruments have provided insights into the recovery process, limitations exist. Two of these instruments were developed more than 20 years ago, before the availability of many new venues such as the internet, social media and
smart phones. Also, none of these instruments have been administered or validated among a naturally recovered sample.

More recently, researchers have begun to utilize quality of life measures to assess individual’s perceptions of overall well-being (Short Form Health Survey; Leidy et al., 1999; Tarlov et al., 1989), and satisfaction with life (World Health Organizations Quality of Life (WHOQOL); The WHOQOL Group, 1995, 1998) as well as their accrual of recovery capital (i.e., quantity and quality of internal and external resources; Granfield & Cloud, 1999). The inclusion of quality of life variables as a measure of recovery is a vast improvement over earlier attempts, yet, these instruments fail to capture how individuals spend their time without using POs, the pleasurable/enjoyable activities they engage in, and ultimately how these factors change over time throughout recovery.

1.2 Purpose of the Study

Given these gaps in knowledge the primary objective of this study is to provide an exploratory portrait of the recovery process from POUD from the perspective of women who have recovered naturally (i.e., without treatment, either formal or informal). Research has found women to be at greater risk for developing POUD and associated outcomes (Center for Disease Control and Prevention (CDC), 2017; discussed in Section 2.4 Women and POUD), therefore, this study focuses on women only.

Using a grounded theory approach, semi-structured qualitative interviews were conducted with 16 women who have been in recovery from POUD for at least one year to better understand how they spend their time post-POUD and what they do for pleasure and enjoyment without POUD in order to maintain their recovery. Each individual’s previous attempts at recovery were
also explored in an effort to identify the differences and similarities in maintenance factors utilized, how time was spent, and pleasurable/enjoyable activities engaged in. The goal of this was to identify those factors that made their most recent attempt at recovery successful.

1.2.1 Specific Aims
The specific aims of this exploratory study are:

Aim 1: Assess feasibility of sample recruitment strategy.

Aim 2: Identify the factors women utilize in maintaining their recovery from POUD.

Aim 3: Explore how identified maintenance factors change over time: a) within participants most recent successful attempt at recovery and, b) across participants prior recovery attempts.

1.3 Definitions and Terms
This section provides a brief description of key terms (i.e., substance use disorder, treatment and recovery) used throughout this dissertation and how these terms have been defined and utilized in research and literature over time. This section is not written with an eye to specific substances or pathways to recovery, rather, it is meant to provide a broad historical perspective of these terms and how they have evolved over time. Additional detail regarding how these terms were defined and operationalized for the purposes of this dissertation are included at the end of each subsection as well as in the methods section (Section 3.4.1 Measures).

1.3.1 Substance Use Disorder
In the U.S. a substance use disorder (SUD) is defined by the American Psychiatric Association’s (APA) 5th edition of the Diagnostic and Statistics Manual (DSM-5) and measured on a continuum from mild to severe (APA, 2013). While each specific class of drugs forms a separate “use disorder,” all drug classes are diagnosed based on the same overarching criteria:
impaired control, social impairment, risky use, and pharmacological criteria which includes
tolerance and withdrawal (APA, 2013). Severity is based on the number of criteria endorsed. The
DSM is utilized by clinicians, researchers, medical insurance plans, and the courts as the
standard for identifying psychiatric disorders including SUDs. See Appendix A for the full
diagnostic criteria for SUD. In short, SUD is defined as:

A diagnostic term in the fifth edition of the Diagnostic and Statistical Manual of Mental
Disorders (DSM-5) referring to recurrent use of alcohol or other drugs that causes
clinically and functionally significant impairment, such as health problems, disability,
and failure to meet major responsibilities at work, school, or home. Depending on the
level of severity, this disorder is classified as mild, moderate, or severe (Volkow et al.,
2016, p. 364).

The first two editions of the DSM (DSM-I and DSM-II) were strongly influenced by
moral and psychoanalytic theory and generated poor diagnostic reliability (APA, 1968; APA &
National Conference on Medical Nomenclature (U.S.), 1952). DSM-III marked a transition point
by enhancing diagnostic reliability and attempting to heighten diagnostic validity and utility
while hinting at biological factors involved in the SUD process (APA, 1980). Also, clear
distinctions between substance use, substance abuse, and substance dependence were identified.
Substance abuse was defined as the presence of drug related problems in the absence of
physiological symptoms whereas substance dependence required one or more signs of
physiological dependence, either tolerance or withdrawal (or both) to be present (APA, 1980).
The DSM-III-R differed markedly from previous versions and formed the foundation for later
classifications. The abuse category remained for people who never met the dependence diagnosis
however abuse and dependence symptoms were not distinct, they overlapped (Nathan et al.,
2016). DSM-IV and DSM-5 reflect an increasingly strong biological view of the SUD process.
Numerous changes were made in DSM-IV to the classification (e.g., disorders were added,
deleted, and reorganized), to the diagnostic criteria sets, and to the descriptive text. Over 100
different substance related disorders for 12 different classes of drugs were identified. Also, substance use dependence was now a “syndrome” involving compulsive use, tolerance and withdrawal (APA, 1994). In 2000 the APA released a text revision of the DSM-IV (DMS-IV-TR) (APA, 2000). Due to new findings on the epidemiology, etiology and treatment of substance abuse and dependence, the DSM-IV-TR defined substance abuse as meeting any of the four criteria revolving around recurrent problems related to the substance. Also, dependence now had to meet three or more of seven physiological or behavioral criteria (APA, 2000; Nathan et al., 2016). This created problems in diagnosing as some individuals would meet none of the criteria for abuse and only one or two of the criteria for dependency and therefore would be “undiagnosable.” The DSM-5 reflected an even stronger biological view of the SUD process pointing to specific brain mechanisms contributing to SUD (APA, 1994, 2013).

In summary, the first two editions of the DSM (DSM-I and DSM-II) were strongly influenced by moral and psychoanalytic theory resulting in poor diagnostic reliability. DSM-III marked a transition point by enhancing diagnostic reliability and attempting to heighten diagnostic validity and utility while hinting at biological factors involved in the SUD process. DSM-IV and DSM-5 reflect an increasingly strong biological view of the SUD process with DSM-5 pointing to specific brain mechanisms. See Appendix B for a brief history of the definition of SUD according to the DSM.

Internationally SUD is defined by the World Health Organizations’ (WHO) Internal Classification of Diseases (ICD). The current edition (ICD-11) was published in May 2019 and differs considerably from the previous edition of the ICD (ICD-10) and the DSM-5 (Saunders, 2017; Saunders et al., 2019; WHO, 2019). For example, the ICD-11 retains substance dependence as the ‘master diagnosis’ in contrast to the broader and heterogeneous concept of
SUD in DSM-5. Some literature provides empirical support for this position, suggesting coherence of substance dependence for alcohol, cannabis, and prescribed opioids (Saunders, 2017; Saunders et al., 2019). The ICD-11 defines substance dependence as a clinical syndrome or cluster of cognitive, behavioral, and physiological features reflecting an ‘internal driving force’ to use the substance. These are just a few of the differences between the ICD-11 and DSM-5, however, given the focus of this dissertation within the U.S. the criteria used to define SUD, and POUD specifically, is based on the DSM-5.

**Prescription Opioid Use Disorder**

Despite the growing prevalence of POUD, the DSM-5 classification for opioid use disorder does not distinguish between subtypes, such as heroin and POs (APA, 2013), and research on POUD specifically using DSM-5 criteria is lacking (Kraus et al., 2020; Saha et al., 2016). This is partly due to the fact that POs were not being manufactured in large quantities and aggressively marketed until the introduction of OxyContin in 1995 by Purdue Pharma (Kolodny et al., 2015; US General Accounting Office, 2003). It wasn’t until 1996 that the rate of PO use began accelerating rapidly (United Nations Publications Staff & EBSCOhost, 2008). Prior to this time, opioid use disorder was associated mainly with increases in the incidence of nonmedical heroin use. For the purposes of this dissertation POUD and SUD will be defined using the DSM-5 diagnosis for lifetime opioid use disorder and SUD. More information regarding specific measures are included in the methods section.

**1.3.2 Treatment**

In its simplest form, treatment is defined as the, “attempted remediation of a health problem, usually following a diagnosis” (“Therapy”, 2020). The goal of most treatment is to help an individual return to a state similar to or better than before the onset of a particular health
problem. Treatments that are able to accomplish this goal are often referred to as curative. In some instances, however, a particular disease or condition cannot be cured by existing medical treatments and therefore must be “managed.” This is typically true of chronic conditions. With SUDs often being defined as a “chronic, relapsing disease,” the goals of SUD treatment are similar to those of treatments for other serious, often chronic, illnesses: “reduce the major symptoms of the illness, improve health and social function, and teach and motivate patients to monitor their condition and manage their threats of relapse” (OSG, 2016, p. 4–14).

Unlike treatments for most other medical illnesses, SUD treatment has traditionally been provided in specialty SUD treatment programs outside of the mainstream health care system. This is in part due to old theories that viewed SUDs as a social problem, best managed at the individual and family levels, and sometimes through the existing social infrastructure – such as schools and places of worship, and when necessary, through civil and criminal justice interventions (OSG, 2016). Appendix C provides a brief history of SUD treatment in the U.S. with an emphasis on both the believed causes and cures of SUD over time.

Historically, treatment services were designed for people with severe SUDs, and programs were generally referred to as “specialty addiction treatment programs” (OSG, 2016). Today, a range of treatment options are available for individuals using substances at varying levels (e.g., risky/heavy use, mild-moderate SUD, severe SUD, etc.). Agencies in which SUD treatment is provided can broadly be divided into two categories, formal and informal. SUD treatment performed in formal treatment agencies is often evidence-based and provided by a medical professional in a clinical setting (Glasner-Edwards & Rawson, 2010; Larios et al., 2013). Informal SUD treatment agencies often provide services that are highly social and involve the support of informal community services such as mutual-aid groups, and religious institutions
requiring strict abstinence (Donovan et al., 2013). Each of these treatment categories are discussed in greater detail next, including specific approaches currently being utilized in the field.

**Formal Treatment**

Formal SUD treatment can include behavioral therapy (such as cognitive-behavioral therapy or contingency management), medications (such as methadone, buprenorphine, or naltrexone), or their combination. The National Institute of Drug Abuse (NIDA) notes that “the best treatment programs provide a combination of therapies and other services to meet the needs of the individual patient” (2012, p. 8). Treatment can focus directly on the individual’s substance use or it can focus on skills training (e.g., employment, anger management, problem-solving, etc.) in an effort to “restore the . . . individual to productive membership in the family and society” (NIDA, 2012, p. 31).

In the past, treatments were designed based on subjective opinions of what worked best (Larios et al., 2013). As the wealth of scientific evidence increases, the field of substance use is better able to make scientifically informed decisions as to which treatments to employ. Evidence-Based Treatments (EBTs) are based on rigorous research that has demonstrated effectiveness in achieving the outcomes that they are designed to achieve (NIDA, 2019) Therefore, EBTs are clinical practices that have been shown to be effective in managing the chronic relapsing nature of SUDs, i.e., reducing substance use and improving health and functioning. These include behavioral therapies and pharmacotherapies, discussed in greater detail next along with specific examples of each.
Behavioral Therapies. Behavioral therapies can be provided in individual, group and/or family sessions and may or may not be provided in conjunction with pharmacotherapy (discussed below). These structured therapies help people recognize the impact of their behaviors on their substance use and ability to function in a healthy, safe and productive manner. These therapies also teach and motivate people in how to change their behaviors as a way to control their SUD. More specifically, behavioral therapies can help motivate people to participate in drug treatment, offer strategies for coping with drug cravings, teach ways to avoid drugs, prevent relapse, and help individuals deal with relapse if it occurs. They can also help people improve communication, relationships, and parenting skills, as well as family dynamics. Among the behavioral therapies shown to be effective in treating SUDs are: Cognitive-Behavioral Therapy (CBT), Motivational Enhancement Therapy (MET), Twelve-Step Facilitation (TSF) Therapy, Brief Intervention (BI), Relapse Prevention (RP), Contingency Management (CM) and Acceptance and Commitment Therapy (ACT). These interventions are utilized by a majority of treatment facilities across the U.S (NIDA, 2018).

Cognitive-Behavioral Therapy (CBT). Cognitive-behavioral approaches are among the most well-defined and rigorously studied behavioral interventions for SUDs. CBT has its roots in classical behavioral theory. According to CBT the learning process plays a vital role in the development and maintenance of addictive behaviors. There are two critical components of CBT: (1) functional analysis of drug use, that is, understanding drug use with respect to its antecedents and consequences; and (2) skills training. CBT is highly structured; generally brief (12-24 weeks) and organized around well-specified treatment goals (Carroll, 2013).

Motivational Enhancement Therapy (MET). Motivational Enhancement Therapy for SUDs has become increasingly popular during the past two decades. Foremost among them is
motivational interviewing (MI). The process of enhancing motivation can be thought of as having two different phases: (1) building individuals’ motivation for change; and (2) strengthening the individuals’ commitment to change, most often through the development of a change plan. MET is comprised of four key principles for interaction between the practitioner and client: (1) rolling with resistance; (2) expressing empathy; (3) developing discrepancy; and (4) supporting self-efficacy. MET has been found to be as effective as other treatments (CBT and Twelve-Step Facilitation Therapy), though it often achieves these effects using fewer treatment sessions (Martino, 2013).

**Twelve-Step Facilitation (TSF) Therapy.** Twelve-Step Facilitation Therapy is a specific, structured, and manual-based intervention that is delivered by professionals. TSF Therapy has multiple objectives that support two overarching goals: (1) to increase abstinence from alcohol and other drugs; and (2) to increase participation in Twelve-Step Organizations (or Self-Help Groups, discussed below under the subheading Informal Treatment), such as Alcoholics Anonymous (AA) and / or Narcotics Anonymous (NA). The first goal of TSF Therapy is based on the disease model of SUD that is characterized by an inability to control the amount of substances consumed. Twelve-Step Organizations (TSO) are often a separate experience from TSF Therapy. In contrast to TSF Therapy, TSOs provide interventions (often similar to TSF Therapy) that are delivered by peers in the community and designed to provide assistance for “sober living” on an ongoing and continuous basis through group meetings and sponsors (Kingree, 2013).

**Brief Intervention (BI).** While many terms and definitions have been developed over the years to describe BI, at its most basic it can be understood as an interaction addressing an addictive behavior lasting typically from 15 min to an hour in duration. The number of sessions
can range from one to six, with the potential for follow-up contacts used to monitor the individual’s progress. Typically, the goal is for a trained interventionist to identify a real or possible problem (e.g. SUD) and motivate the individual to take steps to change the behavior (often using MI). BI is not intended as a stand-alone treatment, rather it is designed to be used as a tool for engagement in more intensive treatment. Miller and Sanchez (1994) developed six important components of BI, easily remembered by the acronym FRAMES. These include: (1) Feedback, (2) Responsibility, (3) Advice, (4) Menu, (5) Empathy, and (6) Self-efficacy. Research supports the efficacy of BI, particularly among a substance using population, however further work is needed to better understand exactly how individual behavior change is facilitated (Borsari & Mastroleo, 2013).

Relapse Prevention (RP). Relapse prevention takes into consideration the cognitive and behavioral components within the process of the relapse phenomenon. RP aims at educating the individual about the relapse process, likelihood of relapse, and how to provide ways to make it through attempts at giving up the problem behavior. Two of the most salient features of these interventions are identifying high-risk situations and providing coping skills to manage them more effectively. RP is effective in improving clinical outcomes for a variety of substances however current research shows improvements for alcohol use, smoking, cocaine, and poly-substance use specifically (Larios et al., 2013). RP has been proven to be more effective than no treatment at all and equally effective as some other treatments (e.g. supportive and interpersonal therapies) (Steckler et al., 2013).

Contingency Management (CM). Contingency management is primarily a process of systematically using positive reinforcement to promote clinically relevant behaviors. CM is based on behavioral principles of operant conditioning; specifically, that presenting an incentive
or reward soon after a specific behavior occurs increases the likelihood that the behavior will reoccur. There are four central tenets of CM: (1) select a specific and objectively verifiable target behavior; (2) monitor the target behavior frequently to maximize reinforcement opportunities and minimize competing behaviors; (3) deliver tangible incentives soon after the target behavior occurs; and (4) withhold incentives when the target behavior does not occur. CM has demonstrated efficacy for improving abstinence and other SUD treatment outcomes in a diverse range of treatment populations and settings (Alessi, 2013).

**Acceptance and Commitment Therapy (ACT).** Acceptance and commitment therapy is a psychological intervention that uses acceptance and mindfulness strategies, together with commitment and behavior change strategies, to increase psychological flexibility. Psychological inflexibility is argued to emerge from experiential avoidance, cognitive entanglement, attachment of a conceptualized self, loss of contact with the present, and the resulting failure to take needed behavioral steps in accord with core values. Based on relational frame theory (RFT), ACT illuminates the ways that language and cognition lead to psychopathology and its amelioration (Hayes et al., 2011). Little research has utilized ACT among a SUD population. Studies have found ACT to be more effective than no treatment and equally if not slightly more effective than other treatments, specifically CBT (Lanza et al., 2014; Smout et al., 2010; Stotts et al., 2012).

**Pharmacotherapies.** There are a variety of approaches to pharmacotherapy for SUDs. All are often used in conjunction with behavioral therapies. One approach is to use medications to alleviate the negative symptoms of withdrawal from the substance. A second approach is to employ medications to treat specific symptoms of withdrawal associated with the drug. An alternative to treating withdrawal symptoms is to focus on blocking the positive subjective
effects of a drug or reducing the extent to which the drug is reinforcing. There are also alternative approaches to medications for SUDs, such as medications that, when combined with the drug of dependence, produce aversive effects, thus limiting use (Bedi et al., 2013).

There are currently five medications that have been approved by the Food and Drug administration (FDA) to treat SUDs. These include: Buprenorphine-Naloxone, or Buprenorphine Hydrochloride, Methadone, Naltrexone, Acamprosate, and Disulfiram. These medications have been developed to treat either alcohol and or opioid use disorders specifically. Currently, no approved medications are available to treat marijuana, amphetamine, or cocaine use disorders (Larios et al., 2013).

**Opioids. Methadone.** Several pharmacotherapies have been developed to treat opioid use disorder. Methadone is an opioid agonist that has been used to treat the symptoms of withdrawal from heroin and other opioids (OSG, 2016). Methadone can only be dispensed for treatment of opioid use disorder within licensed methadone treatment programs, referred to as Opioid Treatment Programs (OTPs). These OTPs must be certified by SAMHSA and registered by the U.S. Drug Enforcement Administration (DEA). Treatment utilizing methadone has been extensively studied, and it is effective and safe, although it has never been approved by the FDA as an independent treatment for opioid use disorder, meaning, methadone must be used “in conjunction with appropriate social and medical services (i.e., behavioral therapies)” (Abraham, 2013; Office of National Drug Control Policy, 2012, p. 1).

**Buprenorphine.** Buprenorphine was approved by the FDA for the treatment of opiate use disorder in 2002. It is a partial opioid agonist that suppresses withdrawal, produces effects similar to other opiates at low doses, and blocks other opiates (OSG, 2016). In May of 2016 the
FDA approved an implantable formulation of Buprenorphine. For individuals who are already on a stable low to moderate does of buprenorphine, the implant delivers a constant low dose of buprenorphine for 6 months (OSG, 2016). Buprenorphine has shown promise in clinical trials however it may still result in overdose if used with tranquilizers and/or alcohol. Unlike methadone however, buprenorphine does not have to be administered from a specialized clinic; physicians who have met the statutory requirements for a waiver in accordance with the Controlled Substance Act (21 U.S.C. 823 (g)(2)(D)(iii)) can prescribe buprenorphine directly (Abraham, 2013; NIDA, 2012). However, these physicians are limited in the number of patients they can treat, initially only being able to prescribe Buprenorphine to 30 individuals, and 100 after the first year.

Naltrexone. Naltrexone is a synthetic opioid antagonist that has been used for many years to reverse opioid overdose and was most recently approved by the FDA in treating opioid use disorder in 2010. Naltrexone as a treatment for opioid use disorder is usually prescribed in outpatient medical settings after detoxification, it has no potential for abuse and it is not addictive. A long acting injectable version of naltrexone, called Vivitrol, was created for the prevention of relapse to opiates. Because Naltrexone is not a controlled substance, it can be prescribed or administered by any physician, nurse practitioner, or physician assistant with prescribing authority (OSG, 2016). Due to its recent approval from the FDA little is known about its efficacy in clinical trials (Abraham, 2013; Larios et al., 2013; NIDA, 2012).

Alcohol. Disulfiram. Disulfiram was the first medication approved by the FDA to treat alcohol use disorder and its efficacy has been widely studied (OSG, 2016). Any alcohol consumed after taking Disulfiram causes a negative reaction making an individual become sick.
Most studies show that disulfiram, when given under supervision, is effective, however when not supervised adherence is typically poor.

**Naltrexone.** Naltrexone as noted above is an opioid antagonist, because of this it counteracts some of the pleasurable aspects of drinking. While many studies have examined the effectiveness of Naltrexone in treating alcohol use disorder, similar to Disulfiram, medication compliance can be a problem.

**Acamprosate.** Acamprosate that normalizes the alcohol-related neurochemical changes in the brain thereby reducing the symptoms of craving that can prompt relapse. Acamprosate has been found to be most effective when used concurrently with behavioral interventions.

**Informal Treatment**

Informal SUD treatment is often highly social (e.g. group meetings, social functions) and involves the use of informal community resources. While informal SUD treatment can be very personalized, it often involves the support of mutual-aid groups and religious institutions. Various terms are often used to refer to these informal community resources and mutual-aid groups such as self-help groups, support groups, self-help organizations, faith-based organizations, and 12-step groups, to name a few. Within the field of substance use the most common term used is self-help groups (SHG). Several well-known and established SHGs include: Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), Secular Organizations for Sobriety of Save Our Selves (SOS), the Mental Illness Addiction Support Group (MASG), and the Calix Society. These various labels and group dynamics make defining informal SUD treatment difficult. Typically, these groups perform two major roles: support and education, while some also include advocacy (Dadich, 2013). The most notable SHG group to date is AA.
Although official statistics are not available for AA, as of January 2019 there were estimated to be over 2 million members in over 150 countries, internationally (General Service Office of Alcoholics Anonymous, 2019). Similarly, NA convenes over 70,000 meetings per week, in approximately 144 countries (Narcotics Anonymous Worldwide Services, Inc, 2018). Epidemiological research suggests that within a 12-month period, approximately 3-7% of Americans, potentially representing over 15 million individuals, frequent a SHG of some kind, and lifetime participation rates are estimated at about 25 million (Center for Behavioral Health Statistics and Quality, 2015; Kessler et al., 1997). Since 2002, SHGs have remained the most common form of treatment among persons 12 and older with a SUD (SAMHSA, 2017b).

Self-help groups can form an important part of recovery for people who experience SUDs. Through the provision of peer supports and sponsors they can facilitate personal, social, and structural change. Furthermore, given their relative accessibility, SHGs can help to sustain change. More specifically, they are economically accessible, as no fees are required, geographically accessible, given the number of established groups and chapters, and cognitively accessible, as group participants can self-determine their degree of involvement (Dadich, 2013). SHGs began as grassroots initiatives by people in recovery and have informed and influenced professional treatment (Kelly & White, 2012). These are often used as adjuncts to formal care.

Because SUD treatment varies substantially in level of specialization, content, duration, setting and cost, and because those receiving services may differ substantially in the severity, duration, and comorbidity of their SUD, throughout this dissertation I will use the phrase “substance use treatment” as a generic term to capture the broad spectrum of formal and informal treatment provided to individuals with mild to severe SUDs. Services must be provided to the
person who has the SUD, by someone other than themselves. Therefore, substance use treatment can be defined as:

A service or a set of services that may include medication, counseling, and other supportive services designed to enable an individual to reduce or eliminate alcohol and/or other drug use, address associated physical or mental health problems, and restore the patient to maximum functional ability (OSG, 2016, pp. 3–4).

For the purposes of this dissertation formal treatment will be defined as attendance during one’s lifetime at an inpatient or outpatient program or receipt of medication assisted therapy (MAT; i.e., pharmacotherapy as discussed above); and informal treatment will be defined as attendance at three or more self-help group meetings (e.g., Narcotics Anonymous, Secular Organizations for Sobriety of Save Our Selves, the Mental Illness Addiction Support Group, and Calix Society). Defining informal treatment in this way is a criterion commonly used in research (Carballo et al., 2007; Mellor et al., 2019; Sobell et al., 2000). Minimal help, such as detoxification, emergency department visits, and advice from primary care doctors or recommendations from self-help books will not be considered treatment. Additional information regarding measurement tools are discussed below in the methods section.

Natural Recovery

However not everyone with a SUD needs ongoing treatment; many require only a brief intervention and monitoring, while others may not receive any treatment at all. These people are sometimes identified as having recovered naturally (Klingemann et al., 2009; Mariezcurrena, 1994; Sobell et al., 2000). As discussed above, substance use treatment often includes a broad spectrum of formal and informal approaches. Therefore, natural recovery can be defined as: Recovery without the use of formal or informal treatment. This definition is consistent with SAMHSA’s definition, which states: “Natural recovery involves using one’s own personal
resources to resolve one’s addictions without the use of treatment or involvement in a mutual aid or self-help group” (Sheedy & Whitter, 2013). This definition, however, does not specify the amount of time, in relation to recovery, that one must receive treatment in order to be considered naturally recovered. For example, if an individual received formal treatment (i.e., 30-day intensive outpatient services) 10 years prior to their most recent attempt at recovery (one to three years ago), it’s unclear if that would constitute “natural recovery.” Due to a lack of longitudinal research on recovery little is known about how the amount of time since receipt of treatment effects recovery outcomes. Similarly, little is known about how the amount and type of treatment received affects recovery outcomes beyond traditional intervention studies with six month to one year follow-ups. Therefore, for the purposes of this dissertation “natural recovery” is being defined as recovery (as defined below in subsection 1.3.3 Recovery) from POUD without the use of any treatment (as defined above in this subsection 1.3.2 Treatment) in lifetime. Additional information regarding measurement tools are discussed below in the methods section.

1.3.3 Recovery

The term recovery is often used to describe the process of transitioning out of SUDs. How it is defined depends greatly on who is using it and for what purposes. There are differences in the meaning of recovery between the scientific community and people in recovery. The concept of recovery among those in recovery was initially developed from the fellowship of Alcoholics Anonymous (AA), whose basic text (the “Big Book”) described a “program of recovery” that involves abstinence from alcohol and developing a new “way of living” in a spiritual framework outlined in the programs 12 steps (AA, 2001). More than half of professional substance use treatment programs use the 12-step concept of recovery to some extent (Roman & Johnson, 2004; SAMHSA, 2014). It should be noted however that not all people transitioning
out of SUDs relate to or identify with the word recovery (Kaskutas et al., 2014). Due to the large variation in individual experiences, people have numerous ways of thinking about and describing the process of transitioning out of SUDs that do not include the word recovery (Kaskutas et al., 2014; Laudet, 2007). It should be noted however that this data was not analyzed by class of drug or demographic characteristics of affected individuals.

In contrast, the scientific community (e.g. physicians, clinicians, other medical and behavioral health care professionals/providers, SUD researchers, medical societies, clinical treatment organizations, and governmental agencies) often bases the definition of recovery on how SUD is defined and understood. Therefore, because SUD is defined as “a chronic relapsing brain disease” recovery should take a medically directed course of clinical diagnosis, treatment, and rehabilitation. As with many other diseases, recovery from SUDs would start with a clinical diagnosis from a medical professional who would eventually prescribe an evidence-based treatment to reduce symptoms, followed by some form of rehabilitation to ensure symptoms don’t return. In the language of the DSM-5, course specifiers and descriptive feature specifiers such as “in early remission,” “in sustained remission,” “on maintenance therapy,” and “in a controlled environment” are utilized to describe recovery from a SUD and are defined within respective criteria sets (APA, 2013). Early remission is defined as “at least three months but less than twelve months” without meeting SUD criteria (except for craving) (APA, 2013). Sustained remission is defined as at least “twelve months without meeting any criteria” (except craving) (APA, 2013). Table 1.1 highlights the progression of different definitions of recovery over time by the scientific community.
<table>
<thead>
<tr>
<th>Source</th>
<th>Year</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Substance Abuse Treatment (CSAT)</td>
<td>2005</td>
<td>Recovery from alcohol and drug problems is a process of change through which an individual achieves abstinence and improved health, wellness and quality of life.</td>
</tr>
<tr>
<td>American Society of Addiction Medicine (ASAM)</td>
<td>2005</td>
<td>A patient is in a “state of recovery” when he or she has reached a state of physical and psychological health such that his/her abstinence from dependency-producing drugs is complete and comfortable.</td>
</tr>
<tr>
<td>Betty Ford Institute</td>
<td>2006</td>
<td>A voluntarily maintained lifestyle characterized by sobriety, personal health, and citizenship.</td>
</tr>
<tr>
<td>William L. White</td>
<td>2007</td>
<td>Recovery is the experience (a process and a sustained status) through which individuals, families, and communities impacted by severe alcohol and other drug (AOD) problems utilize internal and external resources to voluntarily resolve these problems, actively manage their continued vulnerability to such problems, and develop a healthy, productive and meaningful life.</td>
</tr>
<tr>
<td>Substance Abuse and Mental Health Services Association (SAMHSA)</td>
<td>2011</td>
<td>Recovery from mental disorders and substance use disorders is a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.</td>
</tr>
<tr>
<td>American Society of Addiction Medicine</td>
<td>2013</td>
<td>A process of sustained action that addresses the biological, psychological, social and spiritual disturbances inherent in addiction.</td>
</tr>
<tr>
<td>Kelly and Hoeppner</td>
<td>2014</td>
<td>Recovery is a dynamic process characterized by increasingly stable remission resulting in and supported by increased recovery capital and enhanced quality of life.</td>
</tr>
<tr>
<td>Recovery Research Institute Addiction-Ary</td>
<td>2017</td>
<td>The process of improved physical, psychological, and social well-being and health after having suffered from a substance-related condition.</td>
</tr>
</tbody>
</table>

As can be seen from Table 1.1, the elements that often define recovery include: 1) amount, frequency and duration of substances used, 2) varying dimensions of quality of life, and 3) how these elements change over time (i.e., state or process). Early researchers in the field
often defined recovery as a state of being that an individual was or was not in. These definitions were often concerned with two aspects: 1) the quantity/frequency of substance(s) used, in which case any deviation from abstinence would not constitute recovery, and 2) how long abstinence must be maintained before a person can be considered fully “recovered.” From this perspective recovery often required a person to remain abstinent for an extended period of time, from a drug or category of drugs for which they previously met DSM diagnostic criteria. However, there are differing opinions regarding what constitutes abstinence and for how long in order to be fully “recovered” (Recovery Research Institute, 2019; White, 2012).

The focus on abstinence stems from the American Society of Addiction Medicine’s description of recovery in the late 1990s as “a process of overcoming both physical and psychological dependence on a psychoactive drug with a commitment to abstinence-based sobriety” (Graham & Schultz, 1998, p. 1301) and in the centrality of “sobriety” and the use of “sobriety birthdays” in AA/NA and other recovery mutual aid groups (White, 2007). Defining recovery in this way, however, is in contrast with the growing body of evidence that recovery is possible without abstaining from substances, especially for those diagnosed with mild to moderate SUD (Blume & Logan, 2013; Dawson, 1996; Dawson et al., 2007). The research community often identifies this as “asymptomatic use” and/or “risky use”, meaning individuals continue to use substances at varying levels without necessarily experiencing DSM symptomology (Dawson et al., 2007; Sobell et al., 1996; M. B. Sobell & Sobell, 2011; Subbaraman & Witbrodt, 2014; Vaillant, 1966).

Research on the length of time an individual must remain abstinent to be considered “recovered” is very limited despite the fact that a SUD is often defined as “chronic disorder.” The available data has shown that the median duration of an entire SUD career (i.e., time from
first use to last use of that drug followed by a period of one-year continuous abstinence) is approximately 27 years (Dennis et al., 2005). However, it is noteworthy that once an individual has been identified as having a SUD, the length of time to achieve recovery is greatly reduced, ranging from two to 12 years depending on the age of first use, the substance used and when a person enters treatment (Dennis et al., 2005, 2007; Hser, 2007; Lopez-Quintero et al., 2011). It should be noted however, that these studies often utilize a substance use treatment seeking sample which is the minority among individuals with a SUD. The limited research in this area is directly related to the timing and frequency of follow-up evaluations as well as the limited funding available to support longitudinal or cohort study designs spanning several years. Most researchers schedule reassessments at regular intervals (e.g., every three to six months) following treatment, with the one-year end point being the most common (White, 2012). This is, in part, due to limited funding streams available to support research beyond the average one to five year grant cycle (Dennis & Scott, 2007).

Another reason for the difficulty in identifying when someone is fully “recovered” can be found in the varying definitions of relapse. Although relapse is a term commonly used to define SUDs (as discussed above in section 1.3.1 Substance Use Disorder) it is also a frequently identified characteristic of recovery (DiClemente, 2018). Relapse is often defined as the return to drinking or drug use following a period of voluntary abstinence by those who have a history of SUDs (NIDA, 2014; White, 2007). This often results in a binary classification of either complete success (recovered) or complete failure (any substance use). Recently there has been an attempt to distinguish between a lapse or slip (i.e., a brief episode of substance use) and a relapse (i.e., the resumption of more extended and excessive substance use involving a return to symptoms meeting diagnostic criteria for a SUD) (White, 2007). More recent work has begun to
call into question the chronic relapsing nature of SUDs based on research that shows the average number of attempts at recovery is five although the median is closer to two or three attempts (Kelly et al., 2019; MacKillop, 2020). However, even with this change, issues still emerge regarding the quantity/frequency of substance(s) used prior to, during and after a lapse/relapse, and the length of time an individual has remained abstinent prior to and after a lapse/relapse. Also given the high rates of comorbidity in SUDs, it’s unclear what substance(s) would constitute a lapse/relapse (i.e., any substance use or specific substance(s)). For instance, if a person is considered recovered from an alcohol use disorder but later starts using marijuana it is unclear if this would be considered a lapse/relapse. Due to these difficulties many have begun to define recovery as a process.

As can been seen in Table 2, more recent definitions of recovery identify it as a process in which an individual gradually changes over time. This change often includes a reduction in the quantity or frequency of substance(s) used, but it can also include an improvement in various dimensions of quality of life (Laudet, 2011; SAMHSA, 2012; The Betty Ford Institute Consensus Panel, 2007; White, 2007). The focus on quality of life stems from research that has shown the potentially negative affects of SUDs on physical and psychological functioning; personal safety; social relations, roles and obligations; work; and other areas (APA, 1994; Laudet, 2011). Therefore, the process of recovery requires the resolution of the physical, emotional, relational and ontological (spiritual, meaning, purpose) problems in which SUDs are nested. Difficulty arises however in determining the best way to define and measure one’s quality of life.

Researchers have conceptualized two types of quality of life (QOL): health related QOL (HRQOL) and generic or overall QOL (OQOL). See Table 1.2 for a summary of prevalent
concepts and measurements of the QOL construct as proposed by Laudet (2011). HRQOL seeks to identify an individual’s perception of how his or her health status affects physical, psychological, and social functioning and well-being and is measured using the SF-36 or the abbreviated SF-12 (Leidy et al., 1999; Tarlov et al., 1989). The OQOL on the other hand seeks to identify an individual’s satisfaction with life in general, not solely in relation to SUD-related limitations on function and is measured using the World Health Organizations Quality of Life (WHOQOL) instrument and its shorter versions WHOQOL-BREF (The WHOQOL Group, 1995, 1998).

Table 2 Summary of Prevalent Concepts and Measurements of Quality of Life

<table>
<thead>
<tr>
<th></th>
<th>Health-Related Quality of Life (HRQOL)</th>
<th>Overall Quality of Life (OQOL)</th>
</tr>
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<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>An individual’s perception of the effects of illness on the physical, mental, and social dimensions of his/her well-being</td>
<td>An individual’s perception of his/her position in life in the context of the culture and value systems in which he/she lives and as related to his/her goals, expectations, standards, and concerns</td>
</tr>
<tr>
<td><strong>Paradigm</strong></td>
<td>Symptoms, pathology</td>
<td>Wellness</td>
</tr>
<tr>
<td><strong>Instrument</strong></td>
<td>SF-36, SF-12</td>
<td>WHOQOL-100, WHOQOL-BREF</td>
</tr>
<tr>
<td><strong>Domains</strong></td>
<td>Physical, mental, social health</td>
<td>Physical, mental (including spiritual), and social health, and living environment (e.g., housing, finances, safety, access to care)</td>
</tr>
<tr>
<td><strong>What is Assessed</strong></td>
<td>Limitations in functioning due to physical health</td>
<td>Objective functioning and satisfaction with functioning</td>
</tr>
<tr>
<td><strong>Treatment Focus</strong></td>
<td>Symptom reduction</td>
<td>Maximized overall functioning and life satisfaction</td>
</tr>
</tbody>
</table>

The shift to defining recovery as a process, rather than a state, has allowed for the inclusion of quality of life variables that often require significant time, effort and resources to
change. The inclusion of these quality of life variables in the definition of recovery is also more representative of how those who are actively transitioning out of a SUD or have successfully done so describe and/or define recovery. For example, findings from a study of those who were in the process of recovery suggest that the following six elements belong in the definition: (1) being honest with oneself, (2) handling negative feelings without using drugs or alcohol, (3) being able to enjoy life without drinking or using drugs like previously, (4) a process of growth and development, (5) reacting to life’s ups and downs in a more balanced way than previously, and (6) taking responsibility for the things that are amenable to change by the individual (Kaskutas et al., 2014). While the shift in defining recovery as a process, rather than a state, is an improvement, there is still a lack of consensus on the best and most accurate ways in which to operationalize recovery.

Three ways in which recovery has been operationalized in research according to a review by Grella and Laudet (Committee on National Statistics et al., 2016), 1) development or life-course approaches (Dennis & Scott, 2007); 2) clinical indicators of recovery; 3) behavioral indicators of recovery (Garner et al., 2014). The development or life-courses approach operationalizes recovery using cross-sectional survey data to look at the percentage of the population across age groups that falls into different categories of severity in terms of substance use. The clinical indicators of the recovery approach focuses on using the clinical criteria in the DSM to operationalize recovery. Lastly behavioral indicators of recovery approach tend to focus on abstinence and psychosocial functioning.

For the purposes of this dissertation recovery will be defined using the DSM-5 diagnosis for current (less than one year) SUD. Recovery from POU D is inferred by the remission of diagnostic symptoms rather than remission of PO use, which allows for those using at non-
problematic levels to be included. Therefore, abstinence is not a requirement for inclusion. This method of inferring recovery has been employed in previous epidemiological studies of alcohol and drug use, as well as in the natural recovery literature, and many studies have reported low- or moderate-risk use (i.e., substance use without meeting DSM-5 criteria for SUD) as a frequent occurrence (Bischof et al., 2012; Carballo et al., 2007). Additional information regarding measurement tools utilized is included below in the methods section.

1.4 Significance of the Study

Results of this study will provide insights into the factors individuals utilize in maintaining natural recovery from POUD. These findings could help others struggling with POUD identify resources that may assist/support them or their loved ones throughout recovery. Findings from this study can provide physicians and substance use treatment professionals with additional information to assist those struggling to maintain their recovery from POUD. Policy makers can utilize the results of this study to guide decisions about designing and funding treatment for POUD. It’s also possible that the results of this study can help to reduce the stigma associated with SUDs by reinforcing that recovery is possible. Lastly, findings from this study can help to identify additional areas of the quality of life construct that should be considered when measuring recovery (i.e., time spent and pleasurable/enjoyable activities).

1.5 Summary

The remaining sections of this dissertation provide a detailed account of the present study and its relation to POUD and natural recovery literature. Specifically, Chapter 2 provides a comprehensive literature review that covers a variety of topics related to natural recovery from POUD. Chapters 3, 4 and 5 provide the methodology, sampling and results of the present study, respectively. Finally, Chapter 6 provides a discussion on how the results connect to the broader
literature, implications for policy and practice and limitations of the study with directions for future research.
Chapter 2: Background

The purpose of this chapter is to describe the empirical evidence for the importance of this dissertation by identifying the gaps in the literature. This includes a discussion of the prevalence of POUD and current research available specific to POUD. Additionally, research on recovery, specifically natural recovery, is discussed including details about the factors individuals identify as assisting them in maintaining recovery. Lastly, I discuss the prevalence and outcomes of POUD among women and why this is an important population to study. These discussions will lead to the next chapter, which describes the methods used to data collection and analysis.

2.1 Prevalence of Prescription Opioid Use Disorder

POUD continues to be a major drug problem both globally and nationally. In the U.S. it has been well documented that POUD is associated with high rates of mortality, morbidity, and other adverse consequences (e.g., hospital admissions, the transition to heroin) (Hser et al., 2015; OSG, 2016; Wu et al., 2016). Data from the NSDUH (SAMHSA, 2019) suggests that 1.7 million Americans (aged ≥12) had a disorder specific to POs (not heroin) in 2018. It is believed, however, that the total number of those suffering from POUD is likely to be closer to five million due to inconsistencies in data collection efforts (Kolodny et al., 2015). While the creation of various prevention and treatment efforts have led to a decrease in recent years in the number of new nonmedical PO users (Dart et al., 2015; SAMHSA, 2019), the number of individuals who have a POUD remains high and is often accompanied by dramatic increases in overdose deaths (Hedegaard, 2018; Seth et al., 2018; Volkow et al., 2014). Those with a POUD risk of transitioning to heroin use (Cicero et al., 2014; Kuehn, 2014) and/or use of synthetic opioids (i.e., fentanyl and tramadol) (Hedegaard, 2018; Seth et al., 2018). For example, opioid overdose
deaths increased nearly six-fold between 1999 and 2017, with approximately 400,000 Americans dying from an overdose involving opioids during this time (Scholl et al., 2019). In 2017, POs continued to contribute to the epidemic with 36% of the 47,600 opioid related overdose deaths involving POs (Scholl et al., 2019).

2.2 Research on POUd

Despite the prevalence of POUd, the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) classification for opioid use disorder does not distinguish between subtypes, such as heroin and POs, and research on POUd specifically is lacking (APA, 2013). This is partly due to the fact that POs were not being manufactured in large quantities and aggressively marketed until the introduction of OxyContin in 1995 by Purdue Pharma (Kolodny et al., 2015; US General Accounting Office, 2003). It wasn’t until 1996 that the rate of PO use began accelerating rapidly (United Nations Publications Staff & EBSCOhost, 2008). Prior to this time, individuals with an opioid use disorder resulted mostly from increases in the incidence of heroin use. For several years after the creation of OxyContin, opioid manufacturers minimized the risks of POs and exaggerated the benefits of long-term PO use, despite the concerns of physicians regarding addiction, tolerance and physiological dependence (Turk et al., 1994). It wasn’t until the mid-2000’s that prevention strategies aimed at curbing the PO epidemic were implemented (Kolodny et al., 2015) with the first large-scale study examining the treatment of POUd published in 2011 (Weiss et al., 2011). Therefore, throughout this dissertation, when research specific to POUd is not available, I revert to research on opioid use disorder generally or heroin specifically.

Recent research has shown that demographic, socioeconomic, psychosocial and substance use characteristics differ greatly between specific subgroups of opiate users (i.e.,
heroin-only users, PO and heroin users, and PO only users) (Rigg & Monnat, 2015; Wu et al., 2016). Using data from the 2010-2013 NSDUH, Rigg and Monnat (2015) found that socioeconomic disadvantage, older age, disconnection from social institutions, criminal justice involvement, and easy access to heroin were associated with greater odds of using heroin only. Heroin and PO users were more likely to be young white males with poor physical and mental health who also misuse other prescription medications and began such misuse as adolescents. PO only users were the most economically stable, most connected to social institutions, least likely to have criminal justice involvement, and had the least access to heroin. While it is likely that the characteristics of each group are similar today, it is important to note that the dynamics of these groups are changing rapidly and the subset of those with POUD may look different than the larger PO user group.

A more recent study (Wu et al., 2016) examined demographic characteristics and behavioral health of persons aged 12 and older that met criteria for the DSM-IV past year opioid use disorder (n=6,125) in the 2005-2013 NSDUH. The researchers found that the proportions of those who used both heroin and PO (compared to those who used heroin only or POs only) tripled between 2005 (4.95%) and 2013 (14.95%). This is likely due to a number of things, such as PO prevention efforts (e.g., stricter prescriber guidelines, reformulation of OxyContin in 2010 and other POs making them more difficult to crush up and snort or inject) as well as the rising costs of POs and lower cost of heroin (Cicero et al., 2014). Also, in another study examining DMS-5 12-month and lifetime POUD, researchers found an absence of sex differences in POUD and that generally POUD was more common among Whites and individuals with lower incomes, lower education and widowed/separated/divorced marital status. These characteristics are somewhat different from the PO user group identified above (Saha et al., 2016). Therefore, it is
important that moving forward research distinguish between subtypes of opiate use/disorder groups when collecting and analyzing data.

2.3 Recovery Research

Even though high rates of mortality and morbidity exist among those with POUD, recovery is possible. There are no studies to my knowledge that have looked at recovery rates among individuals with POUD specifically, however, recovery rates among those with opioid use disorders are about 50% (White, 2012). This means that of the adults in the general population who once met lifetime criteria for an opioid use disorder, an average of 50% no longer meets those criteria. White (2012), reviewed 415 scientific studies from 1868-2011 that reported recovery outcomes for alcohol and other drug problems in an effort to determine the recovery rate for SUDs. While White differentiated between substances when reporting results, he did not differentiate between subtypes of opioid use disorders. Overall recovery rates for all substances hovered around 50%. White goes on to note that recovery rates and patterns of resumed use are remarkably similar across multiple drug choices (including nicotine), although recovery from opioid use disorder appears to be less stable and durable than recovery from other substances. It’s important to note that the variation in study design and data collection among the scientific studies White (2012) reviewed is broad, therefore, results must be interpreted cautiously.

2.3.1 Treatment Utilization

The majority of recovery research has utilized a treatment-seeking population in part due to the fact that this is a much easier population to reach than the supposed “hidden” population of those who have recovered naturally (i.e., without any treatment, formal or informal). Yet research has found that the majority of individuals with a SUD, including POUD, do not seek
treatment (Blanco et al., 2013; Saha et al., 2016; Wu et al., 2016). According to one of the few studies that have looked at treatment utilization among those with POUd specifically, utilizing data from the 2012-2013 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) – III researchers found that among persons with DSM-5 12-month and lifetime POUd only 17.7% and 28.9%, respectively, sought treatment. This included receiving treatment from physicians/healthcare practitioners, self-help programs, outpatient clinics, rehabilitation programs, emergency departments and detoxification programs (Saha et al., 2016). In an earlier study utilizing data from the 2004-2005 Wave 2 NESARC, among those with DSM-IV POUd, researchers calculated the cumulative probabilities of seeking treatment from the onset of the disorder in the first year (11.1%), first 10 years (24.5%) and ever (42.4%) (Blanco et al., 2013). In this study, treatment was defined as seeing a general medical, mental health or human services professional for POUd. Lastly, looking more broadly at any DSM-IV opioid use disorder, one study utilizing data from the 2005-2013 NSDUH, found that only 26.19% used any alcohol or drug use treatment, 23.07% used any drug use treatment, and 19.4% used opioid-specific treatment (Wu et al., 2016). Unfortunately, this study did not differentiate treatment utilization among those with POUd only vs. other opioid use disorder subtypes. Nonetheless, we see from these studies that the majority of individuals with POUd do not seek treatment. Therefore, it is important to gain a better understanding of how people recover from POUd without treatment.

2.3.2 Natural Recovery Research
Natural recovery is defined as achieving recovery without receiving any treatment, formal or informal in one’s lifetime (See section 1.3.2; Carballo et al., 2007; Sobell et al., 2000; Toneatto, 2013). In general, natural recovery research is limited, however, there are no studies to my knowledge that have looked at natural recovery from POUd specifically. Most natural
recovery studies to date have focused on recovery from an alcohol use disorder and among illicit substances, like heroin (Carballo et al., 2007; Sobell et al., 2000). However, of those studies that have looked at recovery from any opioid use disorder, researchers have found that the majority recover naturally (Bischof et al., 2012; Carballo et al., 2007; Kelly et al., 2017; Klingemann et al., 2009; McCabe et al., 2016; Sobell et al., 2000; Wu et al., 2016). Yet, little is known about the process of natural recovery and what resources individuals utilize to assist them in the recovery process (OSG, 2016).

Notably, natural recovery researchers have started to identify the total resources individuals can utilize in overcoming a SUD, referred to as “recovery capital” (Cloud & Granfield, 2008; Granfield & Cloud, 1999). Recovery capital is often delineated into four categories, physical, human, social and cultural capital. Physical capital refers to the tangible financial assets that can be converted to money (e.g., income, savings, property, investments, etc.). Human capital refers to acquired or inherited traits essential for optimal negotiation of daily life (e.g., knowledge, skills, educational credentials, health, mental health, etc.). Social capital refers to the sum of resources that accrue by virtue of possessing a durable network of relationships of mutual acquaintance recognition. Lastly, cultural capital refers to one’s ability to act within cultural norms to meet basic needs and maximize opportunities (e.g., values, beliefs, dispositions, perceptions and appreciations that emanate from membership in a particular cultural group). The majority of recovery capital research has focused on social capital (Hennessy, 2017). However, just because individuals can utilize these resources, it doesn’t always mean they do. Also, while recovery capital was originally developed using a sample of naturally recovered individuals, they were mostly white, male, adults with existing resources and privilege
Recent conceptualizations of recovery capital have utilized more diverse samples with less of a focus on those who have recovered naturally (Hennessy, 2017).

The focus of most natural recovery studies is on identifying the variables associated with the onset and maintenance of natural recovery (Bischof et al., 2012; Carballo et al., 2007; Sobell et al., 2000; Toneatto, 2013). Research has found that the onset of natural recovery is often mediated by cognitive processes and/or discrete events (Toneatto, 2013). While discrete events (e.g. severe illness, loss of relationships, major injury) certainly play a role, cognitive reappraisals of the advantages and disadvantages of continued use appear to be the more likely factor associated with the onset of natural recovery. However, many individuals with SUDs make multiple, short-lived attempts to change, which initially are successful, but few persist (Hughes et al., 2008; Lozano et al., 2006; Stea et al., 2015).

**Maintenance Factors**

Maintenance of natural recoveries has received less empirical study. Maintenance factors are those factors that individuals utilize to help them maintain their recovery (Carballo et al., 2007; Sobell et al., 2000). The few studies that have investigated this aspect of natural recovery have identified the critical role of social support from significant others (Carballo et al., 2007; Hser, 2007; Sobell et al., 2000). Less is known, however, about other important maintenance factors as identified by early natural recovery researchers, including the development of nonsubstance interests and lifestyle changes (Carballo et al., 2007; Sobell et al., 2000).

The majority of natural recovery studies that have explored maintenance factors have focused on recovery from alcohol (Bischof et al., 2012; Blomqvist, 2002; Carballo et al., 2007; Sobell et al., 2000). One study identified the availability of non-alcohol-related leisure activities, reinforcement from family and friends, and the existence of relatively stable social and economic
support systems as important maintenance factors (Tuchfeld, 1981). Another study comparing treated and untreated individuals found that treated individuals more often cited Alcoholics Anonymous (AA) as a maintenance factor, whereas non-assisted individuals were more likely to cite the role of family members in maintenance (Tucker et al., 1995). Another study that used treated individuals who did not find alcohol treatment beneficial revealed no differences in maintenance factors between treated and naturally recovered individuals (Sobell et al., 1996).

In a more recent study comparing individuals who recovered naturally from DSM-IV cannabis use disorder with those who were involved in treatment (Stea et al., 2015) the top three maintenance factors identified were cognitive strategies (69.7%; e.g., thinking about benefits and negative consequences of cannabis), hobbies/distracting activities (33.6%; e.g., staying busy, distracted and active), and decreased time spent with users/increased time spent with nonusers (31.9%; developing new social networks with non-users). Unfortunately, though, specifics about how people identified, connected with and spent time with nonusers was not identified nor was it determined how the utilization of these factors changed overtime. Interestingly though, the natural recovery group, compared to the treatment-assisted group, was less likely to endorse the category of social support/accountability (19.7% vs 41.5%), i.e., supports such as family and friends who hold the individual accountable for their actions, specifically related to their substance use. Whether this is a phenomenon specific to those with cannabis use disorder or can be applied more generally to those who have recovered naturally is still undetermined.

Notably, there is a gap in the natural recovery literature (as well as in the recovery literature generally) between theoretical discussions on the meaning of recovery and operational criteria used by researchers who tend to define recovery as rather short periods (Mean length = 1.2 years, SD = 0.7) (Carballo et al., 2007; Klingemann, 2012). This is critically important when
trying to identify maintenance factors. Research suggests that maintaining recovery from opioid use disorder for five years substantially increases the likelihood of future stable recovery (Hser, 2007). Therefore, in order to identify and fully understand the factors that individuals utilize in maintaining their recovery, researchers need to ensure operational definitions of recovery are consistent with current theoretical discourse (see further discussion regarding this in Chapter 4).

In a recent review of 28 long-term (i.e., three or more years of follow-up from the baseline assessment) cohort studies of opioid use disorder (published through February 2014; defined using various DSM classification criteria), researchers looked at several parameters that characterized the long-term course of opioid use disorder including maintenance for opioid abstinence and cessation (Hser et al., 2015). The majority of studies use a treated sample, however, the authors go on to note that, “factors affecting cessation of opiate use and maintenance of abstinence generally suggest the importance of engagement in rewarding nondrug activities (e.g., employment, vocation training) and relationships (e.g., friends, family, spouse)” (Hser et al., 2015, p. 82). It should be noted however that the majority of studies identified to support this claim are from the 80’s and 90’s and focused specifically on recovery from heroin (Eland-Goossensen et al., 1998; Klingemann & Efionayi-Mäder, 1994; Rounsaville & Kleber, 1985; Waldorf, 1983). In the most recent study reviewed (Klingemann & Efionayi-Mäder, 1994), individuals who had recovered without the use of formal or informal treatment from opioid use disorder (primarily heroin) identified social and familial relationships, gratifying leisure activities (e.g., hobbies that were engaging), and employment as critical to the maintenance of their recovery. It was also suggested that a conventional lifestyle that brings structure to one’s life was considered crucial in establishing a successful recovery. However, specifics about the types of “gratifying leisure activities” people engage in and what a
“conventional lifestyle” looks like were not identified. Also, this text is rather dated limiting its generalizability.

**Pleasant/Enjoyable Activities**

In an effort to identify the potential “gratifying leisure activities” or pleasant/enjoyable activities, researchers have developed surveys aimed at assessing the activities individuals engage in and their reinforcing value. A frequently and widely used questionnaire is the Pleasant Events Schedule (MacPhillamy & Lewinsohn, 1982). Originally the instrument was designed in the 1970s among patients with active mood disorders. This instrument has since been used among individuals with a SUD. For example, Van Etten and colleagues (1998) examined whether individuals who met DSM-III-R criteria for cocaine abuse or dependence differed from individuals with no current or history of substance-abuse disorders or major psychiatric illness in their frequency and enjoyability of engaging in various events. It appeared that individuals with cocaine abuse reported a lower frequency of nonsocial, introverted, and passive activities. Four other studies explored the association between substance use (i.e., with no known SUD) and the activity level, measured by the Pleasant Events Schedule, among substance using and non-substance using college students (Correia et al., 1998, 2002), among substance misusing (i.e., binge drinking) college students (Correia et al., 2003), and among substance using psychiatric outpatients (Correia & Carey, 1999). In general, these studies demonstrated that a low frequency of nonsocial (i.e., watching TV, just sitting and thinking, taking a nap), introverted (i.e., doing art work, reading stories, novels, poems or plays, going to the library), and passive outdoor (i.e., looking at the moon or stars, seeing beautiful scenery, going on a nature walk or trip) activities and a greater ratio of drug-derived reinforcement as a proportion of all reinforcing activities predicted more substance use, both among college students and psychiatric outpatients. The
Leisure Interest Checklist (Rosenthal et al., 1989; Rosenthal & Rosenthal, 1985) is another survey designed to explore patient’s activity preferences. Until recently the instrument has not received much attention in the literature. Also, the Leisure Interest Checklist does not measure actual behavior, but only addresses the degree of interest.

Both questionnaires (Pleasant Events Schedule and Leisure Interest Checklist) were developed more than 20 years ago, before the availability of many new possibilities such as the internet, social media and smart phones. One may challenge the applicability of these questionnaires in current research because they fail to include important frequently performed activities. In an effort to overcome these issues (along with others), Roozen and colleagues developed the Pleasant Activities List in 2008. While the Pleasant Activities List addresses many of the concerns regarding the Pleasant Events Schedule and Leisure Interest Checklist, there are limitations regarding its creation and its applicability with certain populations, particularly those who have recovered naturally from SUDs. In creating the Pleasant Activities List, Roozen and colleagues (2008) merged all items from the Pleasant Events Schedule and Leisure Interest Checklist and had an expert group (consisting of 10 outpatient health professionals and ten patients) review each item for inclusion. The total merged list began at 455 items and was whittled down to 139 items. The instrument was then validated using both a substance use treatment-seeking sample and a control group of “healthy participants.” Unfortunately, those who were in the maintenance phase of recovery or in natural recovery were never consulted in the creation of the Pleasant Activities List, nor was substance use history recorded for those in the “healthy participants” group.

As researchers began to understand and define recovery as a process (rather than as a “state of being” as discussed above in section 1.3.3) involving factors beyond just the
substance(s) being used, new measurement instruments were created. Specifically researchers began to utilize quality of life measures to assess individual’s perceptions of overall well-being (Short Form Health Survey; Leidy et al., 1999; Tarlov et al., 1989), satisfaction with life (The WHOQOL Group, 1995, 1998) as well as their accrual of recovery capital (i.e., quantity and quality of internal and external resources; Granfield & Cloud, 1999) throughout recovery. The inclusion of quality of life variables as a measure of recovery is an improvement over earlier attempts, yet, these instruments fail to capture the pleasurable/enjoyable activities that individuals engage in. In an effort to address the gap identified among measurement instruments (i.e., no questions focused at collecting data on the pleasant/enjoyable activities), researchers included a qualitative question aimed at identifying fun activities individuals can do when they are trying to remain abstinent (Sober Living Activities) within the manual, Making Alcoholics Anonymous Easier (Kaskutas & Oberste, 2002). Some of the activities identified included: attending picnics, sporting events, or dances, taking a hot bath, joining a choir, taking classes of interest, cooking a meal, inviting friends over for dinner, reading a book, going to a movie, writing a letter, and reading the newspaper. Although this question has not been used beyond a specific group of individuals for a specific purpose, it does provide some insights into the types of pleasurable and enjoyable activities individuals engage in during recovery.

2.4 Women and PLOUD

This dissertation utilizes a grounded theory approach; therefore, it is important that the sample be as homogenous as possible to ensure adequate saturation. In an effort to minimize differences in the sample this study will only include women. However, future research will aim to compare these results with findings of similarly designed studies using only men. Research has found differences in recovery experiences between men and women. For instance, men often
cite the role of the partner as an important maintenance factor while women are more inclined to report esoteric or spiritual experiences as an important part of their recovery (Bischof et al., 2000; Blomqvist, 1999). While early prevalence studies show higher rates of POUd among men vs. women (Center for Behavioral Health Statistics and Quality, 2015; Huang et al., 2006), more recent studies have found that this gap is shrinking. For example, using nationally representative data collected between 2012-2013 researchers found that prevalence rates of DSM-5 12-month and lifetime POUd did not differ between men (0.9%, 2.2%) and women (0.9%, 1.9%) (Kerridge et al., 2015). In another study using nationally representative data collected between 2005-2013 researchers found that being female was actually associated with slightly increased odds of having POUd (Wu et al., 2016). Women are also at greater risk for adverse health outcomes related to PO use. According to the CDC (2017), women are more likely to have chronic pain, be prescribed prescription pain relievers, be given higher doses, and use them for longer time periods than men. Women may also become dependent on prescription pain relievers more quickly than men (CDC, 2017). Overdose deaths from POs among women have risen more sharply than among men as evident by the 400% increase in PO overdose deaths among women between 1999 and 2010 compared to the 265% increase among men (CDC, 2017).

2.5 Gaps in Research, and Methods

There are a number of gaps in research, and methods based on the review of literature above. These gaps are outlined and discussed below:

First, there are no studies to my knowledge that have tried to identify the maintenance factors of individuals who have recovered naturally from POUd. This is in part to due to the “hidden” nature of those in natural recovery which often creates recruitment challenges for researchers. This is also due to the limited understanding of the differences in demographic
characteristics among specific subtypes of opioid use/disorder groups until recently (Rigg & Monnat, 2015; Wu et al., 2016). Second, the few studies that explored natural recovery from opioid use disorder have identified some form of social supports, pleasurable/enjoyable activities, and conventional/structured lifestyles as important to maintain recovery (Carballo et al., 2007; Hser et al., 2015; Sobell et al., 2000), however specifics on what exactly these factors are, what they mean personally to individuals and ultimately how they are utilized throughout recovery are not explored. Third, while there are several surveys focused on collecting data about the quality of life among individuals with and recovering from SUDs (Laudet, 2011; The WHOQOL Group, 1995, 1998), none of these surveys ask about pleasurable/enjoyable activities. Fourth, one survey instrument, the Pleasant Events Schedule, captured different types of “pleasant activities” among those in treatment for SUDs and was originally designed in the 80’s (MacPhillamy & Lewinsohn, 1982). It was created solely by researchers (without input from those in recovery from substance use disorders) and validated using a sample of treatment-seeking individuals. Without input from those who have recovered from SUDs (naturally or with treatment), researchers risk making assumptions about best practices that could ultimately lead to unintended consequences (e.g., instruments which do not accurately measure the intended constructs). The Pleasant Events Schedule was redesigned in 2008 (Roozen et al., 2008) to account for changes in technology (among other things) and renamed the Pleasant Activities List. Yet, again, however, it was created solely by researchers and validated using a treatment-seeking population. To my knowledge, no studies exist that utilize either the Pleasant Events Schedule or the Pleasant Activities List with a naturally recovering sample. Lastly, and most notably is that the majority of natural recovery studies (as well as recovery studies in general), including those focused on identifying maintenance factors, operationalize recovery to be one to two years
(Carballo et al., 2007). As identified by long-term studies on the course of opioid use disorder (Hser et al., 2015), five years of recovery is needed to ensure stability.

2.6 Summary

This chapter provided a broad overview of the research specific to recovery from POUD without treatment (formal or informal). In addition, it attempted to highlighting the gaps in research specific to the factors individuals utilize to support their recovery from POUD. The next chapter of this dissertation describes the methods utilized to collect and analyze information specific to women who have recovered naturally from POUD in an effort to fill these gaps.
Chapter 3: Methods

The methodology of the present study was modeled after retrospective studies in the natural recovery literature (Bischof et al., 2012; Carballo et al., 2007; Hodgins & El-Guebaly, 2000; Sobell et al., 2000; Stea et al., 2015) and incorporated a combined qualitative-quantitative research design whereby timelines, or lifelines were co-constructed (interviewer and participant), and a series of open-ended semi-structured interview questions and self-report measures were administered. This chapter provides a detailed description of the sample recruitment strategy employed including eligibility requirements, followed by a discussion of the various instruments utilized throughout data collection and ultimately how the data was analyzed.

3.1 Sample Recruitment

This dissertation utilized stratified purposive sampling followed by snowball sampling. Participants were recruited using advertisements (Carballo et al., 2009; Subbaraman et al., 2015) through online sources (craigslist, Facebook, local online media/news sites: chicagotribune.com, RedEye, Metromix, Chicagonow, Newsletters, Mobile App), and printed flyers in local establishments (e.g., coffee shops, libraries, laundry mats, bus stops, train stations, park districts) followed by snowball sampling. All media outlets displayed some combination of the following eligibility information:

*If you are a woman who has successfully overcome a drug use problem and did so without treatment, researchers at Washington University in St. Louis want to hear how you did it. The purpose of the study is to learn more about the resources women utilize to assist them in overcoming their drug use problems without treatment, in an effort to help other women who may be struggling with similar problems. All interviews will be kept confidential. Eligible participants will receive $25 at the completion of this study.*

A study website (www.prescriptionpainmedstudy.wordpress.com) was also used to provide eligibility and contact information. See Appendix D for examples of the final
recruitment materials (e.g., an image of the printed flyer and classified ads, screenshot of the homepage of the study website, etc.). Participants who completed the Participant Interview were compensated $25 in either cash or a gift card (i.e., amazon or visa). All media outlets did not include the terms substance use disorder, prescription opioid use disorder or addiction given their stigma and clinical nature and the naturally recovering population being recruited. Advertisements also did not include the term recovery as research has shown not everyone identifies with it (Kaskutas et al., 2014).

3.2 Eligibility Requirements

Originally, participants were eligible for inclusion in the study if they met the following criteria: (a) female; (b) at least 18 years-old; (c) live in Cook County (Chicagoland area); (d) has the ability to participate in a face-to-face meeting in Cook County; (e) meets lifetime DSM-5-defined criteria for POUD, regardless of severity level; (f) last diagnosis of DSM-5-defined criteria for POUD was between three and five years ago; (g) does not meet current (last three years) DSM-5-defined criteria for any SUD (excluding tobacco use or behavioral disorders); (h) does not meet lifetime treatment receipt (i.e., formal or informal as defined below in section 3.4.1); and (i) does not meet current DSM-5-defined criteria for Psychotic Disorders. Over time, however, this inclusion criteria changed due to difficulty in identifying participants. After 12 months of recruitment difficulties, criteria were revised as follows: (a) female; (b) at least 18 years-old; (c) lives in the US; (d) has the ability to participate in semi-structured interviews via phone or computer-video; (e) meets lifetime DSM-5-defined criteria for POUD or other SUDs that have a similar effect on the brain and body to POs (i.e., depressants including Alcohol, Barbiturates, Benzodiazepines & other Opioids), regardless of severity level; (f) last diagnosis of DSM-5-defined criteria for POUD (or other similar SUDs) was at least one year ago; (g) does
not meet current (past year) DSM-5-defined criteria for any SUD (excluding tobacco use or behavioral disorders); (h) does not meet lifetime treatment receipt (i.e., formal or informal as defined below in section 3.4.1); and (i) does not meet current DSM-5-defined criteria for Psychotic Disorders.

Due to the limitations of a retrospective design, a restriction on the length of time in recovery (three to five years, meaning that the person must have been in recovery for at least three years and cannot have been in recovery longer than five years) was initially proposed to minimize the effects of time on recall and memory. As previously noted, research supports five years as stable recovery from opioid use disorder (Hser et al., 2015; Sobell et al., 2000). Therefore, individuals in recovery for three to five years should have clearer recall of the factors that have helped maintain their recovery, the main focus of this study. However, after several months of sample recruitment, and a consistently low response rate, the inclusion criterion was reassessed to determine its impact on the overall sample recruitment strategy. It was decided that the length of time in recovery would be changed to at least one year. It is also noteworthy that with respect to the duration of recovery required for study participation, the most widely used criterion has been 12 months sustained full remission (Bischof et al., 2012). While five years of sustained full remission has been proposed as a way to avoid biased results due to unstable recoveries (Sobell, 2007), a follow-up of people who naturally recovered from alcohol dependence revealed that most natural recoveries with an initial duration of at least 12 months were stable (Rumpf et al., 2006).

3.3 Human Subjects Procedure
The study protocol was approved by Washington University’s Institutional Review Board and Human Research Protection Office (IRB ID #201808108). The IRB approved a waiver of
signed consent to further protect participant confidentiality. Verbal informed consent was obtained from individuals who showed interest in the study prior to completing the Eligibility Screen (Appendix E). The Eligibility Screen took approximately 40 minutes to complete. Eligible respondents were invited to take part in the core interview – the Participant Interview (Appendix F) – either in-person (if living in Cook County), over the phone or via computer video. Those that agreed were provided written informed consent (Appendix G) including consent for audio recording of the Participant Interview either in person, the day of the Participant Interview, or via e-mail, a day prior to the Participant Interview. Participant Interviews that took place in-person, were held in a study room in a Chicago Public Library in a location that was most convenient for the participant. Study rooms were often small, enclosed spaces, with a table and chairs. Study rooms provided a private space for participants to speak freely without concerns regarding others overhearing the conversation. Following the Participant Interview, self-administered assessments were completed, (Appendix H). If meeting in-person, the participant completed the surveys themselves. If meeting via phone or video conference, the participant was read each question aloud and asked to respond verbally. The Participant Interview and self-report surveys took approximately two hours to complete. Once completed, participants were compensated $25 either in the form of cash or a gift card (i.e., amazon or visa). For those who met in-person, they were compensated an additional $5 for parking/transportation fees to get to and from the interview site.

All study participants were informed that participation in the Eligibility Screen or Participant Interview was voluntary and they could choose not to answer any questions or stop participation at any time without negative consequences. Participants were also informed of the risks of participating in the study, which included accidental breach of confidentiality and
potential psychological distress that could result from answering personal questions about substance use. The interviewer explained the methods used in the study to protect the confidentiality of each participant, including the separation of identifying information from the other information provided by each participant, using passwords to protect files, and having data stored on a secure server. This information was written in the consent form, as well as explained verbally during the informed consent process.

3.4 Eligibility Screen

The Eligibility Screen (Appendix E) consisted of eligibility requirement-related questions; the Mini International Neuropsychiatric Interview (MINI), standard version 7.0.2, alcohol use disorder (AUD), SUD (Non-Alcohol) and Psychotic Disorders and Mood Disorders with Psychotic Features sections (Sheehan et al., 1998); and a modified versions of the Global Appraisal of Individual Needs (GAIN-Q3) Standard, substance use section (Titus et al., 2013). The PI conducted the Eligibility Screens. All questions on the screener were asked regardless of whether or not an earlier response indicated that the participant was ineligible. This allowed for assessment of the recruitment strategy, per Aim 1. This also allowed for analysis at the end of the study to determine reasons for ineligibility.

3.4.1 Measures

To ensure successful recruitment the following measures were used:

Substance Use Disorder.

Substance use disorder was defined using the DSM-5 diagnosis for lifetime SUD. Using the AUD and SUD (Non-Alcohol) sections of the MINI International Neuropsychiatric Interview (MINI), vs 7.0.2, individuals were screened for lifetime POUD and current (initially last three
years; later past year only) SUDs (excluding POs, tobacco use or behavioral disorders) during the initial phone call prior to the interview.

The SUD (Non-Alcohol) section of the MINI was used to determine eligibility via providing lifetime DSM-5-defined diagnosis of POU D. If two or more items were endorsed on the 11-item POU D screener the individual was eligible to participate in the study and the PI moved on the next set of questions in the screener. A higher score on the 11-item POU D screener indicates a greater severity of POU D (2-3 items endorsed = Mild, 4-5 items endorsed = Moderate; and 6 or more items = Severe). The AUD and SUD (Non-Alcohol) sections of the MINI were also used to determine eligibility via providing current (initially last three years; later past year only) DSM-5-defined diagnosis of any SUD other than POs (SUD Screener, not including tobacco use or behavioral disorders). A higher score on the 11-item AUD and SUD (Non-Alcohol) Screeners indicates a greater severity of SUDs (2-3 items endorsed = Mild; 4-5 items endorsed = Moderate; and 6 or more items = Severe). If two or more items were endorsed on the AUD and SUD (Non-Alcohol) Screener, initially the individual was not permitted to participate. However, later when eligibility criteria was expanded, if two or more items were endorsed on the AUD and SUD (Non-Alcohol) specifically for Barbiturates, Benzodiazepines and/or other Opioids the individual was eligible to participate in the study. It’s important to note this is specific to current (i.e., initially last three years; later past year only) DSM-5-defined diagnosis of any SUD. For example, an individual was considered ineligible if their last diagnosis of DSM-5-defined criteria for POU D (or other similar SUDs) was at least one year ago but they currently (past year) met DSM-5-defined criteria for another SUD, such as a cocaine use disorder. The 7-item Psychotic Disorders and Mood Disorders with Psychotic Features section of the MINI were used as exclusion criteria for current DSM-5-defined diagnosis of
Psychotic Disorders. If one or more items were endorsed on the Psychotic Disorders screener, the individual was not eligible to participate in the study. The MINI has been shown to perform well in naturalistic substance use treatment settings across gender and ethnic groups (Alexander et al., 2008).

Treatment

Formal treatment was defined as attendance in lifetime at an in-patient or outpatient program or receipt of medication assisted therapy (MAT; i.e., pharmacotherapy as discussed above in section 1.4.2). Informal treatment was defined as attendance at three or more self-help group meetings across lifetime (e.g., Narcotics Anonymous, Secular Organizations for Sobriety of Save Our Selves, the Mental Illness Addiction Support Group, and Calix Society). Defining informal treatment in this way is a criterion commonly used in research on natural recovery (Carballo et al., 2007; Sobell et al., 2000). Minimal help, such as detoxification, emergency department visits, and advice from primary care doctors or recommendations from self-help books that led, according to the participant’s own perception, to him/her reducing use were not considered treatment, therefore, were not reason for exclusion. Additional support for recovery (e.g., advice from nurses, social workers, clergy, etc.) was not considered treatment, nor was it specifically asked about during the Eligibility Screen, therefore, were not reasons for exclusion. Using the Substance Use section of the GAIN-Q3, individuals were screened during the initial phone call prior to the interview for any (formal or informal) lifetime treatment receipt.

The substance use section of the modified GAIN-Q3 was used to determine eligibility via providing lifetime substance use treatment receipt (Substance Abuse Treatment Index). A higher score on the 9-item Substance Abuse Treatment Index indicates more treatment received for
substance use. If one or more items were endorsed on the Substance Abuse Treatment Index, specific to questions (a) inpatient program, (b)/(c) outpatient program, (e) received MAT or (f) attendance at three or more self-help group meetings the individual was not permitted to participate. If one or more items were endorsed on the Substance Abuse Treatment Index, specific to questions (d) attendance as a detoxification program, (g) given a breathalyzer or urine test, (h) gone to an emergency room, (i) worked with a case manager, or (j) attended any other kind of treatment program, the individuals was probed to describe in further detail the situation surrounding the item endorsed. If the situation did not end in the individual receiving treatment as defined above, then endorsement of one of these items was not reason for exclusion. The GAIN-Q3’s 53-item Total Disorder Screener has demonstrated excellent reliability for adults (Cronbach's α = .90) (Titus et al., 2013).

Recovery

Recovery was defined using the DSM-5 diagnosis for current (initially last three years; later past year only) SUD. To ensure recovery from POUD (or similar SUDs) occurred in the last year (initially last three years), any individual who endorsed any of the 11-items on the SUD (Non-Alcohol) section of the MINI was asked the follow-up question: “When was the last time?” and given the options: “Past 12 months; 1-3 years; 3-5 years; 5+ years.” Recovery from POUD (or similar SUDs) is inferred by the remission of diagnostic symptoms rather than remission of PO use (or similar substance use), which allowed for those using at non-problematic levels (i.e., not experiencing DSM-5 symptomology at the level of diagnosis) to be included. Therefore, abstinence was not a requirement for inclusion. This method of inferring recovery has been employed in previous epidemiological studies of alcohol and drug use, as well as in the natural recovery literature, and many studies have reported low-risk use or moderated use as a frequent
occurrence (Bischof et al., 2012; Carballo et al., 2007). Using the SUD (Non-Alcohol) section of the MINI individuals were screened for recovery from POUD. Using the AUD and SUD (Non-Alcohol) sections of the MINI individuals were screened for recovery from any SUD (other than POs) during the initial phone call prior to the interview.

3.5 Participant Interview

The Participant Interview (Appendix F) consisted of the following four content domains: (1) substance use and recovery timeline; (2) maintenance factors; (3) comparison of previous attempts at recovery; and (4) advice. The PI conducted the interviews. It is important to note that the Participant Interview was created with the initial eligibility criteria in mind, therefore a majority of questions focused on POUD and PO use specifically. Given the changes in eligibility part way through the study, the Participant Interview was modified to be consistent with the final eligibility criteria. Specifically, questions were made applicable to similar SUDs (as discussed above in the eligibility criteria). Therefore, throughout this sub-section, please note that when POUD or PO use is mentioned, it is also applicable to similar SUDs unless otherwise noted.

3.5.1 Domain 1: Substance Use and Recovery Timeline

Timelines, or lifelines, were utilized to develop an in-depth understanding of participant’s PO use and recovery. Timelines are a visual depiction of a life history where events are displayed in chronological order (Berends, 2011; Berends & Savic, 2017). Timelines facilitate recollection and sequencing of personal events and they are useful for comparison with other data, to confirm and complete a life history or place a particular research construct or clinical problem in the context of other events (Gramling & Carr, 2004). There is also evidence that timelines facilitate data management and enable insightful analysis (Boyd et al., 1998).
The interviewer (i.e., PI) and participant co-constructed the timeline using an A4 sheet with a horizontal axis (created prior to the interview). Events and experiences related to the creation of an individual’s problem with POs were plotted above the line and experiences related to the resolution of an individual’s problem with POs were plotted below the line. This allowed for a visual depiction of the relationship between PO use and recovery. The interviewer was responsible for plotting events on the timeline to ensure consistency across timelines and steady movement through the interview.

The timeline was utilized as a device to expand and clarify information throughout the remainder of the interview, therefore, during this domain, the focus was on providing dates for specific events. The participant was notified prior to beginning this domain that each of the events plotted on the timeline will be discussed in further detail throughout the remainder of the interview, therefore this section focused on collecting dates for specific events with little discussion of the details surrounding these events. This helped ensure the participant stayed focused and ultimately limited the amount of time spent on this domain – approximately 20 mins. This also helped to ease the participant into the interview process by focusing on factual data collection first before moving into a detailed discussion of personal experiences.

The interviewer prompted for the following specific events related to PO use and recovery, including: (1) First use, (2) start of problematic use, (3) realization of problematic use, (4) contemplation of recovery, (5) first attempt at recovery, (6) return to problematic use (if at all), (7) any significant subsequent attempts at recovery (limit five attempts to stay within interview time and avoid participant fatigue), (8) return to problematic use for each significant attempt at recovery, and (9) final attempt at recovery (prior to interview if not mentioned). The
interviewer also prompted for treatment utilization if any (from screener), and other substance use, including first use, start of problematic use (if any) and recovery.

The final part of this domain included a discussion of preferred terms to be used throughout the remainder of the study that represented three specific phases of the timeline: (1) prior prescription pain med use (e.g., addiction, substance abuse, substance disorder), (2) current state with respect to prior prescription pain med use (e.g., recovery, remission, problem resolution), (3) return to prescription pain med use after an attempt at recovery (e.g., relapse, lapse, setback). This ensures the participant’s perspective is being captured and the interview is representative of their experiences. For the purposes of this dissertation, I utilized the words and/or phrases: (1) prior prescription pain medication use (or similar substance use), (2) recovery, and (3) relapse. If a participant noted they did not feel comfortable with the interviewer using a specific word and/or phrase the interviewer would make a mental note and swap out that word and/or phrase for the participants preferred word throughout the remainder of the interview.

3.5.2 Domain 2: Maintenance Factors

In a semi-structured interview format, open-ended questions were used to assess the factors the participant utilized to assist them in maintaining their recovery from POUD (or similar SUDs). This domain focused exclusively on the participant’s most recent successful attempt at recovery, the one prior to this interview (initially last three years; later past year only). Referring to the timeline and recalling the participant’s most recent successful attempt at recovery from POUD (or similar SUDs) the interviewer first asked: “What led you to attempt recovery at that time?” If needed the interviewer probed the participant for motivations, thoughts, conscious and unconscious decisions and life events that may have led to this most
recent successful attempt at recovery. This initial question did not assess maintenance factors, however, it provided a starting point for further discussion by providing context.

To assess maintenance factors, the interviewer next asked the participant to: “Please describe what factors helped you to avoid a relapse or to avoid a return to having a problem with prescription pain meds. In other words, describe what helped you to remain problem-free from prescription pain meds?” If needed, the interviewer probed for specific maintenance factors identified in other natural recovery studies and included in the Participant Interview (e.g., use of other substances, relationships, physical health, self-control, self-help materials, lifestyle changes, relocation in residence, change in employment, pride, sense of accomplishment, respect from others, financial changes). As a follow-up to this question, the interviewer asked: “How did these factors change over time? Explain.” In this domain, “over time” is referred to as the time since the individual’s most recent successful attempt at recovery (initially last three years; later past year only). Research has found differences in the factors individuals utilized as well as the activities they engaged in during the initial phase of recovery (first three to six month) compared to the maintenance phase (Carballo et al., 2007; DiClemente, 2006; Sobell et al., 2000; Stea et al., 2015) in order to gain insight into how or why these factors changed over time. If needed, the interviewer probed for differences that may have occurred early on in recovery (first three to six months) vs. later in recovery by asking: “Often times, the resources individuals utilize in helping them maintain recovery can look very different in the first three to six months of recovery compared to later on in recovery. How did the factors you utilized in helping you maintain your recovery change over time? Explain.”

The next two sets of questions were focused on identifying specifics about the types of maintenance factors individuals utilized throughout recovery, in particular time spent and
pleasurable/enjoyable activities. To assess how individuals spent their time in recovery the interviewer asked: “Often when someone has a problem with prescription pain meds, they can spend a significant amount of time acquiring the meds, using the meds and recovering from the meds. What did you do in replace of the time you would have spent acquiring, using and recovering from prescription pain meds? In other words, how did you spend your days since this most recent successful attempt at recovery?” Similar to the questions focused on maintenance factors above, as a follow-up the interviewer asked: “How did your daily activities change over time? Explain.” If needed the interviewer probed for differences that may have occurred early on in recovery (first three to six months) vs. later in recovery by asking: “Often times, the activities people engage in can look very different in the first three to six months of recovery compared to later on in recovery, for instance, some people are stricter with how they spend their time in the beginning of recovery and become more lenient later on in recovery. How did your daily activities change over time? Explain.”

To assess the pleasurable and enjoyable non-opioid related activities individuals engaged in during recovery the interviewer asked: “Often when someone has a problem with prescription pain meds they may give up important social, occupational, or recreational activities. During this time, their main source of pleasure may come from using prescription pain meds. Therefore, during recovery, it can be important to find new sources of pleasure and enjoyment that do not involve prescription pain meds. What pleasurable or enjoyable activities did you find (engage in) since this most recent successful attempt at recovery?” If needed the interviewer probed for engagement in specific activities identified in other studies (e.g., picnics, attending sporting events, participating in sports, dances, hot batch, choir, take classes, cook a meal, dinner with friends, read, movie, write). Similar to the questions above, as a follow-up, the interviewer
asked: “How have these activities changed over time? Explain.” If needed the interviewer probed for differences that may have occurred early on in recovery (first three to six months) vs. later in recovery by asking: “Often times what people find pleasure and enjoyment it is very different in the first three to six months of recovery compared to later on in recovery. For instance, early on in recovery, some people complain about being bored because it is difficult to find pleasure in things or they don’t know what to do without using. How have your pleasurable and enjoyable activities changed over time? Explain.” If needed the interviewer probed for engagement in specific activities that often occur annually as an easy comparison (e.g., birthdays, anniversaries, and other significant holidays/events).

The last set of questions in this domain were focused on understanding the level of satisfaction individuals have in the pleasurable and enjoyable activities they currently engage in and if there are any activities they have a concern about engaging in without prescription pain meds including concerns about pain management. Therefore, the first question the interviewer asked was: “How satisfied are you with the pleasurable and enjoyable activities you currently engage in? Why or why not?” The interviewer next asked: “Throughout your recovery, have there ever been things that you worry about being able to do without using prescription pain meds? If so, what and why?” As a follow-up, the interviewer asked: “Did you ever have concerns about how to manage pain without using prescription pain meds? If so, were there activities you could no longer engage in due to pain without using prescription pain meds?”

3.5.3 Domain 3: Comparison of Previous Attempts at Recovery

In a semi-structured interview format, open-ended questions were used to assess the differences and similarities across previous attempts at recovery. The goal of this domain was two-fold: (1) provide a reference point for the most recent successful attempt at recovery (i.e.
what made this most recent successful attempt different from or similar to previous attempts); and (2) provide insights into the long-term recovery process and ultimately how it changes over time. This domain focused exclusively on the participant’s most significant attempts at recovery as identified on the timeline, excluding the most recent one prior to this interview (initially last three years; later past year only). Referring to the timeline, in relation to the participant’s first realization that they had a problem with prescription pain medications, the interviewer first asked: “What led you to the realization that you had a problem at this time?”

Following this question, there were four sets of questions that the interviewer asked in relation to each of the significant previous attempts at recovery as noted by the participant. For participants who did not make more than 1 attempt at recovery, these questions did not apply and therefore were not asked. The first two questions were similar to those posed in Domain 2: (1) “What led you to attempt recovery at that time?” and (2) “What factors helped you to remain problem free from prescription pain meds at that time?” The second question focused on the time period between the participant's attempt at recovery and when they relapsed. If needed the interviewer probed for motivations, thoughts, conscious and unconscious decisions and life events in relation to factors leading to each recovery attempt. If needed the interviewer also probed for specific maintenance factors as well as daily, pleasurable and enjoyable activities in relation to factors used to help individuals remain problem free after each attempt. The next two questions were unique to this domain: (3) “Ultimately what were the situations that led you to return to problematic prescription pain med use at that time?” and (4) “From your perspective, why were you unable to remain problem free from prescription pain meds after this attempt?”

After reviewing each significant previous attempt at recovery identified on the timeline, the last set of questions in this domain ask explicitly about the differences and similarities in
previous attempts compared to participants most recent successful attempt at recovery (the one prior to this interview). Again, for participants who did not make more than one attempt at recovery, these questions did not apply and therefore were not asked. The interviewer first asked: “In thinking about each of the previous attempts at recovery we just discussed, how would you say they differ from your most recent successful attempt?” As a follow-up, the interviewer asked: “In what ways is your most recent successful attempt at recovery different from previous attempts?” Next, the interviewer asked: “Again, in thinking about each of the previous attempts at recovery we just discussed, how are they similar to your most recent successful attempt?” As a follow-up, the interviewer asked: “In what ways is your most recent successful attempt at recovery similar to previous attempts?”

3.5.4 Domain 4: Advice

In the fourth and final domain, a semi-structured interview format with open-ended questions was used to identify any advice the participants might have for others struggling with a similar prescription pain medication problem. Each question asked about the advice the participant would give to individuals at three different stages of the recovery process (contemplation, action, maintenance): (1) “What advice would you give to help another person who is contemplating recovery?” (2) “What advice would you give to help another person who recently attempted recovery?” (3) “What advice would you give to help another person maintain their recovery from a prescription pain med problem?” OR “What would you recommend another person do to help them maintain their recovery from a prescription pain med problem?” The last question in this domain that the interviewer asked was: “What would you like others to know who are struggling with a similar prescription pain med problem?”
3.6 Surveys

Contextual information was collected in the form of a survey and used to inform the qualitative analysis. The first part of the survey collected current and prior to recovery demographic data including: date of birth, gender, information on race/ethnicity, highest level of education, marital status, employment status, annual household income, degree of religiosity and spirituality, religious affiliation. The remainder of the survey included questionnaires aimed at providing information about participants PO use/misuse, recovery capital and maintenance factors.

PO use/misuse was assessed using a modified version of the Texas Christian University (TCU) Drug Screen 5 – Opioid Supplement (Institute of Behavioral Research, 2017). While much of the information gained from this questionnaire was expressed throughout the Participant Interview, these questions are never explicitly asked. Therefore, this questionnaire was utilized to ensure consistent collection of data related to the participant’s PO use/misuse. This questionnaire included specific questions about the types of opioids used/misused, the medical/non-medical reasons for taking opioids, any other medications taken for medical reasons, the buying, using, selling or giving away of prescribed/non-prescribed opioids, overdose-related concerns, and medication-assisted treatment. Individuals who identified themselves as never having used prescription pain medications in their lifetime (i.e., based on their response to the first question “In your lifetime what types of opioids have you used?”) were not asked to complete the questionnaire.

Recovery capital was assessed using the Brief Assessment of Recovery Capital Scale (BARC-10) (Vilsaint et al., 2017). This is a shorter version of the original 50-item measure of recovery capital (Assessment of Recovery Capital). Using a six-point scale from 1 = strongly
disagree to 6 = strongly agree, participants were asked to rate the extent of their agreement/disagreement for each statement as it describes their personal experience. This scale had high internal consistency (α = .90), concurrent validity with the original measure (rpb = .90), and predictive validity with sustained remission using a cut-off score of 47 (Vilsaint et al., 2017).

Maintenance factors were assessed using the Maintenance Factors that Support Change Scale created by Stea and colleagues (2015). This scale was adapted from checklists and categorizations of open-ended responses for maintenance factors from previous studies in the natural recovery literature (Hodgins & El-Guebaly, 2000; Sobell et al., 1993; Tucker et al., 1994). Using a five-point scale from 1= no help to 5 = helped very much, participants were asked to rate the extent to which each factor helped/helps them remain problem-free from prescription pain medications.

3.7 Data Analytic Approach

For this dissertation the PI first assessed the feasibility of the recruitment strategy to ensure a sufficient sample size that was homogenous (Aim 1). In order to do this, questions on the screener were asked regardless of ineligibility and assessed quantitatively throughout the study to identify ways to increase engagement and participation in the study.

Then using a grounded theory approach, the PI conducted semi-structured interviews in order to identify how individuals spent their time post-POUD (or similar SUDs) and what they did for pleasure and enjoyment without POUD (or similar SUDs) in order to maintain their recovery (Aim 2). Lastly the PI explored women’s previous attempts at recovery in an effort to identify the differences and similarities in maintenance factors utilized, time spent and pleasurable/enjoyable activities engaged in (Aim 3). The goal of this was to identify those factors that made their most recent attempt at recovery successful.
A qualitative research design was employed in order to conduct a subjective in-depth exploration of the maintenance factors supporting recovery from POUD (or similar SUDs) and ultimately address Aims 2 and 3. A qualitative design is most appropriate for the research questions under investigation because it gives voice to the individuals themselves and interprets reality according to the perceptions of those who have actually experienced it. Also, given the current state of the literature on natural recovery and the nonexistent research on natural recovery from POUD, it is unclear at this point what may be the best quantitative indicators. Therefore, a qualitative design is most appropriate in order to identify salient constructs and measurement considerations. In order to explore the factors individuals utilize in maintaining their recovery and ultimately how those factors change over time, I utilized a grounded theory approach.

All qualitative interviews were audio recorded and transcribed by the PI. Transcripts were reviewed by both the PI and an additional rater for errors by comparing the transcripts to the digitally recorded data. All study data were entered into QSR*NVivo 12 – a qualitative data analysis software package well-suited to a Grounded Theory method of analysis. NVivo facilitated the inductive creation of codes and the assignment of specific codes to portions of interview text. It also permitted the generation of various reports such as frequency of codes used per individual interview transcript, frequency of a single code’s used throughout all transcripts, etc. NVivo also permitted in-document writing of analytical memos to record insights and conclusions reached by the PI and additional rater that related specifically to portions of text or were generated as a result of data review and comparison.

3.7.1 Grounded Theory

Grounded theory is an inductive form of theorizing that begins the moment the first data are collected and is built slowly over the life span of the project. At the conclusion of the project,
the investigators offer an inductively generated, data-driven theory that serves to both explain/interpret the data obtained from the study and perhaps have application to similar situations and similar contexts.

Analysis of data collected (i.e., participant narratives in the form of interview transcripts) for this study employed an inductive grounded theory approach that consisted of a three-step process of creating initial codes, then focused codes and finally theoretical categories (Charmaz, 2014). Throughout the data collection process and extending into the analysis and writing phases of this dissertation, the PI studied and carefully reviewed collected data by constantly comparing previously collected data with newly collected data and seeking not just a descriptive, surface-level understanding of the data but, in the words of Charmaz, an “imaginative understanding of the studied phenomenon” (2014, p. 231).

**Initial Coding**

The PI personally reviewed and coded all the data for this study. The PI’s initial reviews of study data led to the development of an initial set of codes that generally consisted of short descriptive phrases of specifically what ‘was happening’ in the data. These initial codes stayed as ‘close as possible’ to the data while allowing for a limited amount of analytical interpretation. Often times, initial codes were simpler, shorter, summary paraphrases of sections of text. While initial coding was primarily descriptive in nature, it did allow the PI to begin identifying patterns, themes, repeated relationships among data, and derive deeper meaning from the data.

**Focused Coding**

The second step in the coding process involved a more analytical interpretive analysis of the data and, specifically, a more careful review of sections of text that had already been coded during the initial coding process. Focused coding also involved the identification of the most
significant codes, the most frequent codes and/or the identification of codes the PI deemed to have particularly useful interpretive value to better understanding the data. Charmaz (2014) described the focused coding stage of data analysis as a process of beginning to “identify possibilities suggested by the data rather than ensuring complete accuracy of the data” (p. 120).

**Establishing Theoretical Categories**

Quoting Glaser & Strauss (1967), Charmaz (2014) describes categories as “conceptual elements in a theory” (p. 188). During this phase of data analysis, the PI reviewed the coding scheme to determine if any of the codes related to one another in ways that might lead to a deeper, more conceptual explanation of the data. Some relationships and groupings of codes were identified and ‘raised’ to the level of explanatory theoretical categories. Additionally, some single, stand-alone codes were identified as having more conceptual explanatory power; they were elevated to theoretical category.

Theoretical categories could also be called theoretical assertions or the building blocks of theory. Data analysis within the present study did not lead to the development of a complete, unified theory that explained the studied phenomenon in a seamless whole. However, it did lead to the development of several building blocks of theory that provided a more conceptual explanation of the studied phenomenon.

While this three-step data analysis process is presented here as very linear and sequential; in implementation it is really anything but that. Initial coding sometimes bleeds into focused coding. Ideas for possible theoretical categories or relationships between codes may emerge very early during the initial coding process and are recorded in memos and reviewed later in the data analysis process. During the process of reviewing data for possible patterns/relationships or looking for codes that might be elevated to theoretical categories, the investigator may determine
that initial codes need to revised and relabeled. Initial codes may be combined or deleted altogether. This non-linear, cyclical, organic process that unfolds in a series of fits and starts was the way in which the PI carried out data analysis for this study.

**Inter-rater Reliability**

To ensure reliability, a research assistant familiar with the subject area of this study independently coded a random selection of transcripts using a codebook created by the PI. The codebook consisted of the label for each category or code and a brief (e.g., once sentence) description for each category label. Inter-rater reliability was calculated using kappa coefficients and percentage agreement with a goal of at least 85% (kappa = .85). Any discrepancies in coding were resolved through discussions between the PI and research assistant. In the present study, all inter-rater reliability calculations achieved a kappa coefficient level of .85 of higher on the first attempt at establishing inter-rater reliability. It is noteworthy that participant responses could be coded into more than one category for a particular open-ended question given the nature of the open-ended questions (e.g., participants often provided more than one response when asked to identify the maintenance factors they utilized throughout recovery, and as such, these responses would be coded into more than one category that reflected different maintenance factors).

**3.7.2 Quantitative Data**

All quantitative data collected (i.e., Eligibility Screen and Surveys) was analyzed at the end of the study using SAS software. The PI cleaned the data and conducted univariate statistical tests (frequencies and percentages). As noted above the data collected from the Eligibility Screen was used to determine reasons for ineligibility (Aim 1). Contextual information was collected in the form of a survey and was used to describe characteristics of the study sample as well as inform the qualitative analysis by helping to identify themes. Given the small sample size, the
quantitative data was not analyzed independently for statistically generalizable answers to research questions. As Bringer and colleagues (2006) express it, “the aim is not to provide statistically relevant predictions but rather to explore preliminary relationship” (p. 258).

3.7.3 Substance Use and Recovery Timeline

Representing life stories in an abbreviated manner such as timelines risks reducing and oversimplifying people’s stories (Boyd et al., 1998), therefore, it has been proposed that timelines are most effective when used in conjunction with a more complete data source such as narrative interviews (Patterson et al., 2012). During analysis, the timeline information was compared with the qualitative data to fill gaps and identify major discrepancies in substance use and recovery experiences reported by participants. Recurrent themes (from qualitative and timeline data) was plotted onto “typical timelines,” to show common elements of substance use and recovery pathways among the study participants.

3.8 Summary

This chapter provides details into what data was collected and ultimately how it was collected and analyzed. Therefore, the next two chapters of this dissertation will describe the results of these efforts, beginning first with a detailed discussion of the study sample (Chapter 4) including recruitment outcomes and fit with eligibility, followed by a presentation of the results from the qualitative data analysis of the participant interviews (Chapter 5).
**Chapter 4: Sample Description**

This chapter includes a detailed discussion of the study sample including recruitment outcomes, fit with eligibility criteria, demographics, lifetime PO use, misuse and associated consequences as well as recovery capital. It also includes a discussion of the inclusion and exclusion criteria for the group comparisons presented in Chapter 5.

### 4.1 Recruitment Outcomes (Aim 1)

During the Eligibility Screen, participants were asked the question, “How did you hear about the study?” However, it was often possible to tell how individuals heard about the study based on their initial contact with the PI. For example, when individuals responded to the Craigslist ad via e-mail, the e-mail address was often an anonymous Craigslist generated e-mail address and a link to the advertisement webpage was included in the body of the e-mail. Also, individuals who contacted the PI directly, via phone or e-mail, would often identify how they heard about the study when they introduced themselves prior to being read the informed consent and completing the Eligibility Screen. Table 3 displays the total number of participants that heard about the study via various recruitment strategies by eligibility. It also includes the total number of individuals who contacted the PI regarding the study (Any Contact, n=42). These numbers represent the best attempt to keep a tally of the total number of individuals who contacted the PI about the study, however, this number is on the conservative side as there are likely additional people that reached out (via phone specifically) that the PI never had a chance to speak with. The numbers identified in “any contact” have e-mails, voicemails and/or texts available. As can been seen from the table, the majority of individuals heard about the study via Craigslist regardless of eligibility (n=33, 78.57%). The remainder heard about the study by word
of mouth (Snowball, i.e., from a friend or family member, n=6, 14.29%) and flyers posted around the Chicagoland area (n=3, 7.14%).

**Table 3** Number and Percent of Individuals that Heard about the Study via Various Recruitment Strategies by Eligibility

<table>
<thead>
<tr>
<th>Recruitment Strategy, n (%)</th>
<th>Any Contact (n=42)</th>
<th>Not Screened (n=14)</th>
<th>Ineligible (n=12)</th>
<th>Eligible (N=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craigslist</td>
<td>33 (78.57)</td>
<td>13 (92.86)</td>
<td>9 (75.0)</td>
<td>11 (68.75)</td>
</tr>
<tr>
<td>Flyer</td>
<td>3 (7.14)</td>
<td>1 (7.14)</td>
<td>0 (0.0)</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td>Snowball</td>
<td>6 (14.29)</td>
<td>0 (0.0)</td>
<td>3 (25.0)</td>
<td>3 (18.75)</td>
</tr>
</tbody>
</table>

The PI would respond to requests regarding interest in the research study within 24 hours of receiving the request and would initially respond in the same format the request was received (i.e., phone or e-mail) unless otherwise requested. The initial response from the PI would include some variation of the following: “Thank you for your interest in the study. What I would like to do is chat via phone to tell you a bit more about the study and determine if you are eligible to participate. All of this takes about 20 mins. Would you have some time later today to chat? I am free [time]. If none of these times work for you please propose another date/time when you would be available. Thank you.” Of the individuals who contacted the PI but did not complete the Eligibility Screen (n=14), the main reason was that they simply did not reply to the PI’s initial response (n=9). After sending an initial response, the PI would follow-up multiple times (average 2x per individual). Follow-up contacts would be similar to the initial response but highlight our gratitude for their interest and willingness to accommodate their schedule. Other reasons individuals did not complete the Eligibility Screen (specifically after being read the informed consent, n=5) included (in no particular order): too small of an incentive ($25), scheduling conflicts, misunderstanding of study requirements and confidentiality concerns.
Unfortunately, the newspaper and Facebook advertisements did not generate any contact with the PI. However, as part of these advertisement requirements the PI created a landing website where people could learn more about the study and how to participate after clicking on the advertisement. A screenshot of the website (https://prescriptionpainmedstudy.wordpress.com) is included in Appendix D. The website collects information on where individuals were referred from but it does not collect contact information. Therefore, it was up to the individual to reach out and make contact with the PI. Table 4 provides a breakdown of where individuals who visited the website were referred from. As you can see the majority of individuals who visited the study website were referred by the newspaper ad (n=31, 54.4%), followed by Facebook (n=20, 35.1%) and Craigslist (n=6, 10.5%).

<table>
<thead>
<tr>
<th>Website Referral</th>
<th>Total Visits (n=57)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper Ad</td>
<td>31 (54.4)</td>
</tr>
<tr>
<td>Facebook</td>
<td>20 (35.1)</td>
</tr>
<tr>
<td>Craigslist</td>
<td>6 (10.5)</td>
</tr>
</tbody>
</table>

### 4.1.1 Eligibility Screening Data
In order to assess the feasibility of the sample recruitment strategy (Aim 1) all questions on the screener were asked regardless of eligibility. Screening data was analyzed continuously throughout recruitment to determine what eligibility requirements needed to be revised to ensure a sufficient sample size that was homogenous. Table 5 displays the Eligibility Screen data for the study sample (N=16) that was included in the analysis and compares this group’s sample characteristics (as collected during the Eligibility Screen) to those of excluded participants: (specifically, those who did not meet the eligibility criteria for the study, n=12). As can be seen
from the table, the average age of the study sample was 48.4 (SD = 12.84) with 62.5% (n=10) living in Chicago. Of those excluded from the study, their average age was 41.9 (SD=10.62) with only 25% (n=3) living in Chicago. Statistical comparisons of the Eligibility Screen between participants included versus excluded revealed only one significant difference, specifically the number of symptoms endorsed for lifetime POUD with a mean of 10.08 (SD = 1.08) symptoms endorsed by those included and a mean of 7.7 (SD = 2.63) symptoms endorsed by those excluded, t(20) = 2.87, p = .0095.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Sample (N=16)</th>
<th>Did Not Meet Eligibility Criteria (n=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years, M (SD)</td>
<td>48.4 (12.84)</td>
<td>41.9 (10.62)</td>
</tr>
<tr>
<td>Gender (% female)</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Location, n (% lives in Chicago)</td>
<td>10 (62.5)</td>
<td>3 (25.0)</td>
</tr>
<tr>
<td>MINI POUD in Lifetime,* n (%)</td>
<td>12 (75.0)</td>
<td>10 (83.33)</td>
</tr>
<tr>
<td>MINI POUD lifetime symptoms, M (SD)</td>
<td>10.08 (1.08)</td>
<td>7.7 (2.63)*</td>
</tr>
<tr>
<td>MINI AUD in Lifetime,* n (%)</td>
<td>11 (68.75)</td>
<td>10 (83.33)</td>
</tr>
<tr>
<td>MINI AUD lifetime symptoms, M (SD)</td>
<td>9.73 (.65)</td>
<td>8.9 (2.81)</td>
</tr>
<tr>
<td>MINI Other SUD** in Lifetime,* n (%)</td>
<td>7 (43.75)</td>
<td>5 (41.67)</td>
</tr>
<tr>
<td>MINI Cocaine Use Disorder in Lifetime</td>
<td>3 (42.86)</td>
<td>3 (60.0)</td>
</tr>
<tr>
<td># symptoms endorsed, M (SD)</td>
<td>10.33 (.58)</td>
<td>10.67 (.56)</td>
</tr>
<tr>
<td>MINI Stimulant Use Disorder in Lifetime</td>
<td>2 (28.57)</td>
<td>1 (20.0)</td>
</tr>
<tr>
<td># symptoms endorsed, M (SD)</td>
<td>8.5 (2.12)</td>
<td>10 (0.0)</td>
</tr>
<tr>
<td>MINI Non-Prescription Opioid Use Disorder in Lifetime</td>
<td>1 (14.29)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td># symptoms endorsed, M (SD)</td>
<td>11 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>MINI Sedative Use Disorder in Lifetime</td>
<td>1 (14.29)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td># symptoms endorsed, M (SD)</td>
<td>11 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>MINI Cannabis Use Disorder in Lifetime</td>
<td>0 (0.0)</td>
<td>1 (20.0)</td>
</tr>
<tr>
<td># symptoms endorsed, M (SD)</td>
<td>0 (0.0)</td>
<td>11 (0.0)</td>
</tr>
<tr>
<td>Drug Category</td>
<td>Lifetime taken &gt;1, (^a(^b) n (%)</td>
<td>Treatment Received in Lifetime, (^a) n (%)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Cannabis</td>
<td>12 (75.0)</td>
<td>6 (37.5)</td>
</tr>
<tr>
<td>Cocaine</td>
<td>11 (91.67)</td>
<td>4 (37.5)</td>
</tr>
<tr>
<td>Non-Prescription Opiates</td>
<td>5 (41.67)</td>
<td>4 (37.5)</td>
</tr>
<tr>
<td>Sedatives, Hypnotics or Anxiolytics</td>
<td>5 (41.67)</td>
<td>4 (37.5)</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5 (41.67)</td>
<td>4 (37.5)</td>
</tr>
<tr>
<td>Inhalants</td>
<td>4 (33.33)</td>
<td>2 (33.33)</td>
</tr>
<tr>
<td>Stimulants</td>
<td>3 (25.0)</td>
<td>2 (33.33)</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>3 (25)</td>
<td>2 (33.33)</td>
</tr>
<tr>
<td>Dissociative Drugs</td>
<td>2 (16.67)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>Halfway house, residential, inpatient, or hospital program</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Intensive outpatient or day program</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Regular (1-8 hr/wk) outpatient program</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Detox</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Self-help group mtgs (e.g., AA/NA/CA)</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td># attended M (SD)</td>
<td>80.0 (98.99)</td>
<td>48.57 (56.25)</td>
</tr>
<tr>
<td>Breathalyzer or urine test</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>ER</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Case manager</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Other treatment program</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Current Psychiatric Disorder, n (%)</td>
<td>0 (0.0)</td>
<td>1 (8.33)</td>
</tr>
</tbody>
</table>

\(^a\) Statistically significant, \(P = .0095\)

\(^b\) Not mutually exclusive.

Identified by the individual as causing them the “biggest problem” (other than POUD or AUD).

Question reads: In your lifetime did you ever take any of these drugs more than once, to get high, feel elated, to get “a buzz” or to change your mood?

Please note that in Table 5, POUD, AUD and SUD in lifetime are not mutually exclusive meaning individuals’ responses could be classified into more than one category. As can be seen in the table, the total sample was highly comorbid with lifetime POUD, AUD and other SUDs.
Specifically, 75% (n=12) of the sample met lifetime POUd, 69% (n=11) met lifetime AUD and 44% (n=7) met lifetime other SUD. Patterns of comorbidity are presented in Table 7 and discussed in the following subsection 4.1.2. Fit with Eligibility. As previously noted, of those who met lifetime POUd, a mean of 10.08 (SD=1.08) symptoms were endorsed. This means that of the total sample that met lifetime POUd 100% (n=12) had a severe specification (i.e., endorsing 6 or more symptoms). Similarly, of those who met lifetime AUD, a mean of 9.73 (SD=0.65) symptoms were endorsed, meaning 100% (n=11) had a severe specification (i.e., endorsing 6 or more symptoms).

As part of the screener, individuals were read aloud a list of street drugs or medicines and asked to respond “yes” or “no” to whether or not they had ever (in their lifetime) take any of these drugs more than once, to get high, to feel elated, to get “a buzz” or to change their mood. As can been seen from Table 5, 75% (n=12) of the total analysis sample endorsed at least 1 drug category other than POs or alcohol. On average individuals endorsed 3.88 (SD = 2.99) drug categories, with the two most endorsed categories being Cannabis (100%, n=12) and Cocaine (91.67%, n=11). After being read the entire list of street drugs or medicines, individuals were asked to identify the substance that “caused them the biggest problem.” If an individual identified a substance other than POUd or AUD, the interviewer completed the 11-item MINI to determine if the individual had a disorder in their lifetime specific to that substance, and, if so, when they ultimately recovered from the disorder by asking the follow-up question, “when was the last time?” after each item endorsed. Therefore, it is possible that individuals had a disorder in their lifetime specific to other substances beyond the one identified as “causing them the biggest problem,” however, this study did not capture this information. Of those who endorsed at least one drug category (n=12), a little over half (n=7) were identified as having a disorder. As
can be seen in Table 5, of the 7 participants identified as having an “Other SUD,” 42.86% (n=3) were specific to Cocaine, 28.57% (n=2) were specific to stimulants, (i.e., methamphetamines), 14.29% (n=1) were specific to non-prescription opiates (i.e., heroin), and 14.29% (n=1) were specific to sedatives. Also, of the 7 participants identified as having an “Other SUD”, 100% had a severe specification (i.e., endorsing 6 or more symptoms). It can also be seen from Table 5 that 37.5% of the total sample had received some form of treatment. This is discussed in greater detail in the following subsection (i.e., 4.1.2 Fit with Eligibility).

Of those who were excluded from the study sample, reasons included: not having a disorder specific to POs or similar substances (n=1, 8.3%), length of time in recovery (n=9, 75%), treatment received in lifetime (n=7, 58.3%), and current psychiatric disorders (n=1, 8.3%). It’s important to note that reasons for exclusion were not mutually exclusive. One individual was excluded due to not identifying as having a disorder specific to POs or similar substances (i.e., crack cocaine). Of those excluded due to length of time in recovery (n=9), the average length of time in recovery was 2.2 months ($SD=1.72$; Median=2). Of those excluded due to treatment received in lifetime (n=7); 57.1% (n=4) identified as having received both formal and informal treatment, 14.3% (n=1) identified as receiving formal inpatient treatment only; 14.3% (n=1) identified as receiving formal outpatient treatment only; and 14.3% (n=1) identified as receiving informal treatment only. Lastly, one person was excluded due to a current psychiatric disorder after responding “yes” to all seven questions on the Psychotic Disorders and Mood Disorders with Psychotic Features section of the MINI.

4.1.2 Fit with Eligibility
Given the change in eligibility criteria part way through study recruitment it’s important to briefly discuss the total sample’s fit with eligibility. Also, a review of Table 5 above shows
that not all study participants fit perfectly with the final eligibility criteria, specifically criteria (f)/(g) and (h). This is in part due to difficulty in sample recruitment as discussed in the final chapter of this dissertation under “limitations.” However, given their inclusion in the results discussed in Chapter 5, I briefly address these concerns regarding fit with eligibility criteria for specific study participants. A comparison of the initial eligibility criteria and the final eligibility criteria for inclusion into the study is provided in Table # below for ease of reference.

**Table 6** Comparison of Initial Eligibility Criteria and Final Eligibility Criteria

<table>
<thead>
<tr>
<th>Initial Eligibility Criteria</th>
<th>Final Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) female</td>
<td></td>
</tr>
<tr>
<td>(b) at least 18 years-old</td>
<td></td>
</tr>
<tr>
<td>(c) lives in the Chicagoland area</td>
<td>(c) lives in the US</td>
</tr>
<tr>
<td>(d) has the ability to participate in semi-structured interviews face-to-face</td>
<td>(d) has the ability to participate in conversations via phone or computer-video</td>
</tr>
<tr>
<td>(e) meets lifetime DSM-5-defined criteria for POUD regardless of severity level</td>
<td>(e) meets lifetime DSM-5-defined criteria for POUD or other SUDs that have a similar effect on the brain and body to prescription opioids (i.e., depressants including Alcohol, Barbiturates, Benzodiazepines &amp; other Opioids), regardless of severity level</td>
</tr>
<tr>
<td>(f) last diagnosis of DSM-5-defined criteria for POUD was at least three years ago and not more than five years ago</td>
<td>(f) last diagnosis of DSM-5-defined criteria for POUD (or other similar SUDs) was at least one year ago</td>
</tr>
<tr>
<td>(g) does not meet current (last three years) DSM-5-defined criteria for any SUD</td>
<td>(g) does not meet current (past year only) DSM-5-defined criteria for any SUD</td>
</tr>
<tr>
<td>(h) does not meet lifetime treatment receipt (i.e., formal or informal)</td>
<td></td>
</tr>
<tr>
<td>(i) does not meet current DSM-5-defined criteria for Psychotic Disorders</td>
<td></td>
</tr>
</tbody>
</table>

Regarding eligibility criteria (c) 62.5% (n=10) of the total sample lived within the Chicagoland area. For these participants the Participant Interview was conducted in-person and
the majority (n=9, 90%) were self-administered the surveys. One participant (PPMS01) requested the interviewer read the questions aloud to ensure timely completion of the study. Of the total sample, 37.5% (n=6) lived outside the Chicagoland area, specifically the Tri-State area (NY, NJ & CT) (n=5), and Houston, TX (n=1). For these participants the Participant Interview was conducted via phone and the majority (n=5, 83.33%) were read aloud the surveys by the interviewer. One participant (PPMS14) was e-mailed the survey and asked to complete it on their own and return it via e-mail to ensure timely completion of the study. Table 7 identifies the participants that were self-administered the surveys. This is an important distinction as it could influence the participants response and therefore skew results. Therefore, when possible and where appropriate, results will be presented for participants who were read aloud the surveys (i.e., PPMS02, 03, 04, 05, 06, 07, 08, 09, 10, 14) in an attempt to clarify any differences.

Regarding eligibility criteria (e) study participants met either lifetime DSM-5-defined criteria for either POUD or AUD but no other “similar SUD” as defined above in subsection 4.1.1, Eligibility Screening Data. As can be seen from Table 7, 31.25% (n=5) met lifetime POUD only, 25% (n=4) met lifetime AUD only and 43.75% (n=7) met lifetime POUD and AUD. Given the original focus of this study, women with POUD, when possible and where appropriate, results will be presented for participants who did not meet lifetime POUD (i.e., PPMS11, 12, 13, 15).

Regarding eligibility criteria (f) and (g), while 43.75% (n=7) of participants had recovered from POUD and AUD at least one year prior to the interview, there were some (n=4, 25%) participants who were included in the study if they had recovered from POUD or AUD less than one year, but more than six months prior to the interview (PPMS04, 05, 06, 10).
Additionally, all study participants who met criteria for an “other SUD” in their lifetime recovered from the SUD at either the same time or prior to recovery from POU or AUD.

As discussed above in subsection 1.3.3, Definitions and Terms, there is little consensus on how best to define and operationalize recovery, specifically when recovery begins and ends. Given that more recent definitions of recovery identify it as a process in which an individual gradually changes over time, one thing to consider in relation to length of time in recovery is the total number of significant recovery attempts one has made in their lifetime. Table 7 provides the total number of significant recovery attempts identified by each participant. On average, participants identified a total of 2.75 ($SD = 1.44$; Median = 3) significant recovery attempts in their lifetime. Of the total sample, five participants had only one attempt at recovery at the time of the interviewer (PPMS03, 04, 08, 09, 10). While the limit on significant recovery attempts discussed during the participant interview was set at five to ensure timely completion of the interview, no participant reported more than five significant recovery attempts in their lifetime (including participants most recent attempt at recovery).

Of those who had been in recovery for less than one year, two participants identified only one significant attempt at recovery (PPMS04, PPMS10), one participant identified four significant attempts at recovery (PPMS05), and one participant identified five significant attempts at recovery (PPMS06) in their lifetime.

Lastly, regarding eligibility criteria (h) of those who participated in the study and received treatment in their lifetime, Table 7 provides a breakdown of the type of treatment received and when in relation to participants most recent attempt at recovery. Of the total sample, seven participants (43.74%) identified as having received some form of treatment in their lifetime. Please note, that only six participants indicated they had received treatment in their
lifetime during the Eligibility Screen (PPMS01, 05, 06, 11, 12, 16) as identified in Table 5 above, however, one additional participant was identified as having received treatment in their lifetime during the Participant Interview (PPMS09). As can be seen, the majority (n=4, 57.14%) of study participants that had received treatment did so more than 10 years prior to their latest attempt at recovery, while only one participant (14.23%) had received treatment more than five years (but less than 10 years) prior to their latest attempt at recovery and two participants (28.57%) had received treatment less than five years (but more than one year) prior to their latest attempt at recovery. Of those who received treatment less than five years (but more than one year) prior to their last attempt at recovery, one did so approximately three years prior (PPMS06) and one did so a little over a year prior (PPMS05).

It should also be noted that between completing the Eligibility Screen and conducting the Participant Interview one study participant attempted suicide via overdose (PPMS02). Therefore, an argument can be made that this participant may not fit the eligibility criteria (f)/(g).

Given these results, of the total sample, six participants fit the eligibility criteria (PPMS03, 07, 08, 13, 14 & 15; highlighted in Table 7) while the other 10 strayed for the following reasons:

- Less than a year in recovery (f)/(g) (PPMS04, 05, 06, 10)
- Treatment received in lifetime (h) (PPMS01, 05, 06, 09, 11, 12, 16)
- Relapse/Attempted Suicide after Eligibility Screen but prior to Participant Interview (f)/(g) (PPMS02)
<table>
<thead>
<tr>
<th>Participant ID</th>
<th>Lifetime POU D</th>
<th>Lifetime AUD</th>
<th>Time in Recovery&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Num. of Sig. Recovery Attempts</th>
<th>Lifetime Other SUD</th>
<th>Lifetime Formal Tx</th>
<th>Lifetime Informal Tx</th>
<th>Tx Received (&gt;10)&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Tx Received (&gt;5, &lt;10)&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Tx Received (&gt;1, &lt;5)&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Surveys Self-Administered</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPMS01</td>
<td>X</td>
<td>X</td>
<td>3-5</td>
<td>5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>1-3</td>
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<td>PPMS04</td>
<td>X</td>
<td>X</td>
<td>&lt;12M</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PPMS05</td>
<td>X</td>
<td>X</td>
<td>&lt;12M</td>
<td>4</td>
<td>X</td>
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<td>X</td>
<td>&lt;12M</td>
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<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PPMS07</td>
<td>X</td>
<td></td>
<td>1-3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
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<td>X</td>
</tr>
<tr>
<td>PPMS08</td>
<td>X</td>
<td>X</td>
<td>1-3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PPMS09</td>
<td>X</td>
<td>X</td>
<td>5+</td>
<td>1</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PPMS10</td>
<td>X</td>
<td></td>
<td>&lt;12M</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PPMS11</td>
<td>X</td>
<td></td>
<td>5+</td>
<td>3</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PPMS12</td>
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<td>5+</td>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>PPMS13</td>
<td>X</td>
<td></td>
<td>5+</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>PPMS14</td>
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<td></td>
<td>1-3</td>
<td>4</td>
<td>X</td>
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<td></td>
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<td>X</td>
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<td></td>
<td>1-3</td>
<td>4</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>PPMS16</td>
<td>X</td>
<td>X</td>
<td>1-3</td>
<td>3</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<sup>a</sup> In years; At time of interview

<sup>b</sup> In years; Relative to participants’ most recent attempt at recovery
4.1.3 Group Inclusion/Exclusion Criteria

Of those who strayed from the eligibility criteria, eight strayed for one reason (n=5 received treatment in lifetime; n=2 in recovery for less than one year; n=1 attempted suicide via overdose) while two strayed for two reasons (less than one year in recovery and treatment received in lifetime). Given the significant number of participants included in the study sample that did not fit with the eligibility criteria, it is important to further investigate any differences among this group in comparison to those that did fit with the eligibility criteria in an effort to identify any possible confounding variables. Therefore, as noted, the data has been analyzed and presented (Chapter 5: Results) by groups, specifically those that fit with the eligibility criteria (FE; n=6; PPMS03, 07, 08, 13, 14, 15) and those that did not (DNFE; n=10; PPMS01, 02, 04, 05, 06, 09, 10, 11, 12, 16). The FE participants are highlighted in Table 7.

As previously identified, almost half of the individuals who have recovered from a SUD, including POU and AUD, do not seek treatment (i.e., formal or informal) in their lifetime (Kelly et al., 2017), therefore, it was desirable that the study sample reflect this population with the goal of identifying the resources they utilize in assisting them throughout recovery. Additionally, given 1) the limited research on how the amount of time, since receipt of treatment, effects recovery outcomes, and 2) the criterion commonly used in research to define natural recovery (Carballo et al., 2007; Sobell et al., 2000) participants who have received any treatment (i.e., formal or informal) in their lifetime are included in the DNFE group. When possible and where appropriate, results will be presented for participants who received treatment more than five years prior to their most recent attempt at recovery (i.e., PPMS01, 09, 11, 12 & 16) in an attempt to clarify any differences.
As previously discussed, research has found that five years is seen as stable recovery for those with an opioid use disorder (Hser et al., 2015). Therefore, initial eligibility criteria (f) (Table 6) was identified to support reliable recall of the factors participants utilized in maintaining their recovery. However, given the difficulties in sample recruitment, eligibility criteria (f) was changed to allow individuals in recovery for at least one year participate. Twelve months is the most widely used criterion for recovery in the natural recovery literature (Bischof et al., 2012), and there is evidence that most natural recoveries with an initial duration of at least 12 months are stable (Rumpf et al., 2006). As can be seen in Table 7 above, the amount of time study participants were in recovery at the time of the interview ranged from <12 months to over five years. Therefore, it could be argued that the results of this study apply less specifically to the “maintenance” phase of recovery, and more broadly to the recovery process. It could also be argued that individuals in recovery for less than one year should not be included in the analysis of the total sample, let alone group comparisons. Keeping in mind the goal of this study (i.e., identifying the factors individuals utilize in assisting them throughout recovery) and given Aim 3a of this dissertation (i.e., explore how identified factors change over time within participants most recent successful attempt at recovery) the information these participants provide can be useful in identifying (in real-time rather than relying on memory recall) what resources are most useful early in the recovery process. Therefore, participants in recovery for less than one year will remain in the analysis of the total sample. (Additional support for their inclusion in the total analysis sample is discussed in section 4.2.3, Recovery Capital) They will also remain in the DNFE group, however, when possible and where appropriate, results will be presented for these participants specifically (i.e., PPMS04, 05, 06 & 10).
Lastly, it should be noted that a suicide attempt via overdose, as occurred with participant PPMS02, is not considered relapse at the level of meeting DSM-5 symptomology. However, given the timing of the attempted suicide (after Eligibility Screen but prior to Participant Interview) and its effect on the participants overall demeanor, mental health, and response to interview questions, it was determined that the results of this participant were best categorized in the DNFE group. When possible and where appropriate, results will be presented for this participant specifically (PPMS02).

4.2 Sample Characteristics

This section focuses on data for the total study sample (N=16).

4.2.1 Demographics

Demographic variables collected during the Participant Interview are presented in Table 8. Current demographics as well as demographics prior to recovery were collected in an effort to identify changes over time. Both are presented in Table 8. As can be seen in the table, at the time of the study, the total sample was on average 48.4 years old (SD = 12.84); 100% were female; the sample was predominately African-American (62.5%); over half had some post-secondary education (68.75%); only 25% were married or in a common-law relationship; less than half were employed either full- or part-time (43.75%); the majority had an annual household income of less than $50,000 (87.5%); Three-quarters of the sample were affiliated with a religion, predominantly protestant (50%); religion was on average somewhat important to the sample; and spirituality was on average very important to the sample.

As can also be seen in the table, there was only one statistically significant difference between current demographics and those prior to recovery; participants reported on a four-point scale that spirituality was significantly more important in their current lives compared to prior to
recovery ($M=1.25$ vs $M=2.0$), $t(30) = 2.67$, $p = .01$. This is mostly due to the change in the importance of spirituality among those in the DNFE group ($M=1.1$ vs $M=2.3$), $t(18) = 3.15$, $p = .005$. Similarly, although not quite statistically significant, participants reported on a four-point scale that religion was more important in their current lives compared to prior to recovery ($M=1.69$ vs $M=2.38$), $t(30) = 1.80$, $p = .08$. This is mostly due to the change in the important of religion among those in the DNFE group ($M=1.7$ vs $M=2.6$), $t(18) = 1.99$, $p = .06$. There were no significant differences in demographics between fit with eligibility criteria groups.

Participants who did not meet lifetime POUD (i.e., PPMS11, 12, 13, 15) were on average 52 years old ($SD = 10.03$), African American (100%), unemployed (100%) with an annual household income less than $50,000 (100%) and found both religion ($M = 1; SD = 0$) and spirituality ($M = 1.5; SD = 0.58$) very important. Removing these individuals from the total sample and only including those with a POUD did not reveal any significant differences in comparison to the total sample. Specifically, the remaining sample of those with a POUD were on average 43.5 years old ($SD = 13.82$), African American (50%), employed (58.33%) with an annual household income less than $50,000 ($M = 2; SD = 1.13$), and found both religion ($M = 1.92; SD = 1$) and spirituality ($M = 1.17; SD = 0.39$) to be somewhat important.
<table>
<thead>
<tr>
<th>Variable, N (%)</th>
<th>Current</th>
<th>Prior to Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Sample</td>
<td>FE (n=6)</td>
</tr>
<tr>
<td></td>
<td>(N=16)</td>
<td></td>
</tr>
<tr>
<td>Age in years, M (SD)</td>
<td>48.4 (12.84)</td>
<td>49 (9.65)</td>
</tr>
<tr>
<td>Self-identified ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>10 (62.5)</td>
<td>5 (83.33)</td>
</tr>
<tr>
<td>Mexican American (Hispanic Origin)</td>
<td>2 (12.5)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>4 (25.0)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>Education M (SD)</td>
<td>3.56 (1.71)</td>
<td>3.83 (1.83)</td>
</tr>
<tr>
<td>Some HS or less</td>
<td>1 (6.25)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>HS graduation or GED</td>
<td>4 (25.0)</td>
<td>2 (33.33)</td>
</tr>
<tr>
<td>Some college</td>
<td>5 (31.25)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>Vocational degree</td>
<td>1 (6.25)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>1 (6.25)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>4 (25.0)</td>
<td>2 (33.33)</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>2 (12.5)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>Living as married</td>
<td>1 (6.25)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Married but living apart</td>
<td>1 (6.25)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>Divorced</td>
<td>1 (6.25)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Widowed</td>
<td>1 (6.25)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Single/Never married/Not living as married</td>
<td>10 (62.5)</td>
<td>4 (66.67)</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed Full-Time</td>
<td>3 (18.75)</td>
<td>2 (33.33)</td>
</tr>
<tr>
<td>Employed Part-Time</td>
<td>4 (25.0)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>6 (37.5)</td>
<td>3 (50.0)</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>Retired</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>1 (6.25)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>0 (0.0)</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td></td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Less than $25,000</td>
<td>7 (43.75)</td>
<td>3 (50.0)</td>
</tr>
<tr>
<td>$25,001-$50,000</td>
<td>7 (43.75)</td>
<td>2 (33.33)</td>
</tr>
<tr>
<td>$50,001-$75,000</td>
<td>1 (6.25)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>$101,000-$150,000</td>
<td>1 (6.25)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Total Annual Household Income M (SD)</td>
<td>1.8 (1.05)</td>
<td>1.67 (0.82)</td>
</tr>
<tr>
<td>Importance of Religion, M (SD)</td>
<td>1.69 (0.95)</td>
<td>1.67 (1.21)</td>
</tr>
<tr>
<td>Importance of Spirituality, M (SD)</td>
<td>1.69 (0.95)</td>
<td>1.67 (1.21)</td>
</tr>
<tr>
<td>Attendance at Religious Services M (SD)</td>
<td>3.5 (1.83)</td>
<td>4.17 (1.33)</td>
</tr>
<tr>
<td>More than once a week</td>
<td>3 (18.75)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Once a week</td>
<td>3 (18.75)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>Once or twice a month</td>
<td>1 (6.25)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>A few times a year</td>
<td>4 (25.0)</td>
<td>3 (50.0)</td>
</tr>
<tr>
<td>Seldom</td>
<td>2 (12.5)</td>
<td>1 (16.67)</td>
</tr>
<tr>
<td>Never</td>
<td>3 (18.75)</td>
<td>1 (16.67)</td>
</tr>
</tbody>
</table>

* Statistically significant for total sample between current and prior to recovery, \( P = 0.01 \)

** Statistically significant for DNFE group between current and prior to recovery, \( P = 0.005 \)
4.2.2 Lifetime Opioid Use, Misuse, and Overdose

As part of the surveys, study participants were asked to complete the TCU Drug Screen 5 – Opioid Supplement which asks about lifetime use, misuse and overdose of opioids. Table 9 provides a summary of the individuals’ responses to this survey. This data was used mostly as collateral validity for the information provided during the Participant Interview. Of the total analysis sample, 75% (n=12) completed this survey. This is due to the fact that 4 participants (PPMS11, 12, 13 and 15) had a disorder specific to Alcohol and had not used POs in their lifetime. Of the 12 individuals that completed this survey, only two (PPMS01, 16) were read aloud the questions, the majority (83.33%, n=10) were self-administered this survey. From Table 9 we see the top three opioids participants identified as using and misusing (i.e., used in a way other than prescribed, developed a problem with) in their lifetime were Hydrocodone (91.67%; 83.33), Codeine (75.0%; 50.0%) and Oxycodone (66.67%; 50.0%). On average, participants identified using 4.42 ($SD=2.5$) and misusing 2.42 ($SD=1.56$) opioids in their lifetime. Of those who completed the survey, 100% noted they had taken opioids for medical reasons including: a car accident (25%), surgery (25%), back pain (25%), injuries/arthritis/auto-immune disorder/broken bones (25%). Over half the participants (66.67%) noted they had used other medications or illegal drugs for medical reasons, mostly marijuana (37.5%) and other street drugs (62.5%). Over two-thirds (83.3%) identified that they had taken opioids for non-medical reasons, mostly to get high (50%), due to addiction/avoid withdrawal (30%) and mental/emotional reasons (20%). Almost all participants (91.67%) had a doctor prescribe opioid medications, of which, almost half (45.45%) gave or sold those prescribed medications to someone else. Again, almost all participants (83.33%) had taken an opioid that was not
prescribed for them, with the majority having received the opioids from either a friend (90%) and/or family member (60%).

Of those who had completed the survey, four (33.33%) noted they had ever overdosed in their lifetime; three participants had overdosed once while one participant stated they had overdosed four or more times. The opioids participants were using when the overdose(s) occurred included Heroin, Oxycodone, Hydrocodone and Codeine. Three of these participants noted they went to the ER once because of an overdose on opioids and one participant noted they went to the ER four or more times, of which two were given naloxone (Narcan) once and two were never given naloxone (Narcan). Lastly, two participants noted they had received medication assisted treatment (MAT) in their lifetime, specifically Methadone and Buprenorphine. Both participants also noted they had obtained these medications without a prescription and taken more than were prescribed. These results are consistent with information received during both the Eligibility Screen and Participant Interview. This was determined by reviewing these results in conjunction with the results from presented in subsection 4.1.1, Eligibility Screening Data, as well as the participant timelines.
<table>
<thead>
<tr>
<th>Variable, n (%)</th>
<th>Total Sample (n=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lifetime Opioid Use</strong></td>
<td></td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>11 (91.67)</td>
</tr>
<tr>
<td>Codeine</td>
<td>9 (75.0)</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>8 (66.67)</td>
</tr>
<tr>
<td>Morphine</td>
<td>7 (58.33)</td>
</tr>
<tr>
<td>Heroin</td>
<td>5 (41.67)</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>5 (41.67)</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>5 (41.67)</td>
</tr>
<tr>
<td>Methadone</td>
<td>2 (16.67)</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>1 (8.33)</td>
</tr>
<tr>
<td><strong>Lifetime Opioid Misuse</strong></td>
<td></td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>10 (83.33)</td>
</tr>
<tr>
<td>Codeine</td>
<td>6 (50.0)</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>6 (50.0)</td>
</tr>
<tr>
<td>Morphine</td>
<td>1 (8.33)</td>
</tr>
<tr>
<td>Heroin</td>
<td>3 (25.0)</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>1 (8.33)</td>
</tr>
<tr>
<td>Methadone</td>
<td>1 (8.33)</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>1 (8.33)</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td><strong>Opioids for Medical Reasons</strong></td>
<td></td>
</tr>
<tr>
<td>Doctor Prescribed Opioids</td>
<td>12 (100.0)</td>
</tr>
<tr>
<td>Other Meds/Illegal Drugs for Medical Reasons</td>
<td>8 (66.67)</td>
</tr>
<tr>
<td>Taken Opioids for Non-Medical Reasons</td>
<td>10 (83.33)</td>
</tr>
<tr>
<td><strong>Doctor Prescribed Opioids</strong></td>
<td></td>
</tr>
<tr>
<td>Give or Sell Meds</td>
<td>5 (45.45)</td>
</tr>
<tr>
<td><strong>Take Opioids when Not Prescribed</strong></td>
<td></td>
</tr>
<tr>
<td>From Friend</td>
<td>9 (90.0)</td>
</tr>
<tr>
<td>From Family Member</td>
<td>6 (60.0)</td>
</tr>
<tr>
<td>From Someone Else</td>
<td>6 (60.0)</td>
</tr>
<tr>
<td>From MD/Pharmacy</td>
<td>3 (30.0)</td>
</tr>
<tr>
<td># Opioid Overdoses (n=4), M (SD)</td>
<td>1.74 (2.25)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Heroin</td>
<td>2 (50.0)</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>2 (50.0)</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>1 (25.0)</td>
</tr>
<tr>
<td>Codeine</td>
<td>2 (50.0)</td>
</tr>
<tr>
<td># Times in Hospital or ER (n=4), M (SD)</td>
<td>1.74 (2.25)</td>
</tr>
<tr>
<td># Times given naloxone (Narcan), M (SD)</td>
<td>.5 (0.33)</td>
</tr>
<tr>
<td>Received follow-up Treatment (% yes)</td>
<td>2 (50.0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lifetime MAT</th>
<th>2 (16.67)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone</td>
<td>2 (100.0)</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>1 (50.0)</td>
</tr>
<tr>
<td>Taken Without a Prescription</td>
<td>2 (100.0)</td>
</tr>
<tr>
<td>Taken more than Prescribed</td>
<td>2 (100.0)</td>
</tr>
</tbody>
</table>

### 4.2.3 Recovery Capital

Study participants were also asked to complete the Brief Assessment of Recovery Capital (BARC-10) as part of the surveys. The BARC-10 is a 10-item measure of the quantity of broader personal, social, physical, and professional resources in one’s environment that are used to initiate and sustain recovery as well as structural supports such as a recovery-supportive living space and community relationships (Vilsaint et al., 2017). Table 10 displays the mean score for the total sample for each item on the survey. As can be seen in Table 10 the top three survey items as identified by the total sample were: *Item 1: There are more important things to me in life than using substances* (M = 6, SD = 0); *Item 8: I take full responsibility for my actions* (M = 5.88, SD = 0.34); *Item 10: I am making good progress on my recovery journey* (M = 5.75, S SD = 0.58). *Item 1* is representative of the domain, substance use and sobriety. *Item 8* is representative of the domain, risk-taking. *Item 10* is representative of the domain, recovery experience. Group comparisons on the mean score for individual survey items revealed one significant difference.
between the FE (\(M = 6, SD = 0\)) and the DNFE (\(M = 5.2, SD = 0.63\)) groups, \(t(14) = 3.07, p = .008\), for the survey item 9: I am happy dealing with a range of professional people, which is representative of the domain, coping and life functioning.

Participants from the total sample had an average score of 53.88 (\(SD = 5.03\)) across all questions. Group comparisons on the mean score across all questions revealed no significant difference between the FE (\(M = 54.33, SD = 5.28\)) and DNFE (\(M = 53.6, SD = 5.15\)) groups, \(t(14) = 0.27, p = 0.79\).

**Table 10 Mean and SD of the Total Sample BARC-10 Scores by Item and Fit with Eligibility**

<table>
<thead>
<tr>
<th>BARC-10 Item, M (SD)</th>
<th>Total Sample (N=16)</th>
<th>FE (n=6)</th>
<th>DNFE (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There are more important things to me in life than using substances (Domain: substance use and sobriety)</td>
<td>6 (0)</td>
<td>6 (0)</td>
<td>6 (0)</td>
</tr>
<tr>
<td>2. In general I am happy with my life (Domain: global psychological health)</td>
<td>5.5 (0.73)</td>
<td>5.67 (0.52)</td>
<td>5.4 (0.84)</td>
</tr>
<tr>
<td>3. I have enough energy to complete the tasks I set for myself (Domain: global physical health)</td>
<td>5.25 (0.77)</td>
<td>5.33 (0.82)</td>
<td>5.2 (0.79)</td>
</tr>
<tr>
<td>4. I am proud of the community I live in and feel a part of it (Domain: citizenship and community involvement)</td>
<td>4.63 (1.54)</td>
<td>4.17 (1.47)</td>
<td>4.9 (1.6)</td>
</tr>
<tr>
<td>5. I get lots of support from friends (Domain: social support)</td>
<td>4.81 (1.38)</td>
<td>5 (1.55)</td>
<td>4.7 (1.34)</td>
</tr>
<tr>
<td>6. I regard my life as challenging and fulfilling without the need for using drugs or alcohol (Domain: meaningful activities)</td>
<td>5.31 (0.79)</td>
<td>5.17 (0.98)</td>
<td>5.4 (0.7)</td>
</tr>
<tr>
<td>7. My living space has helped to drive my recovery journey (Domain: housing and safety)</td>
<td>5.25 (0.77)</td>
<td>5.33 (0.82)</td>
<td>5.2 (0.79)</td>
</tr>
<tr>
<td>8. I take full responsibility for my actions (Domain: risk-taking)</td>
<td>5.88 (0.34)</td>
<td>5.83 (0.41)</td>
<td>5.9 (0.32)</td>
</tr>
<tr>
<td>9. I am happy dealing with a range of professional people (Domain: coping and life functioning)</td>
<td>5.5 (0.63)</td>
<td>6 (0)</td>
<td>5.2 (0.63)*</td>
</tr>
<tr>
<td>10: I am making good progress on my recovery journey (Domain: recovery experience)</td>
<td>5.75 (0.58)</td>
<td>5.83 (0.41)</td>
<td>5.7 (0.68)</td>
</tr>
</tbody>
</table>

* Statistically significant, \(P = .008\)

The BARC-10 has been found to help predict recovery stage (Vilsaint et al., 2017). More specifically, Vilsaint and colleagues (2017) found that 12 months or more of abstinence from alcohol and other drugs was associated with a score of 47. Given the eligibility concerns noted above (subsection 4.1.2, Fit with Eligibility) scores on the BARC-10 could act as collateral.
validity for the amount of time participants identified as being in recovery. These scores could also support the inclusion of participants in recovery less than 12 month in the total analysis sample if their BARC-10 score is 47 or greater. BARC-10 scores for these participants are as follows: PPMS04 = 54, PPMS05 = 60, PPMS06 = 52 and PPMS10 = 55, therefore providing support for their inclusion in the total analysis sample. Of the total sample two participants scored below 47 on the BARC-10, PPMS02 = 43 and PPMS14 = 45. Both of these participants identified as being in recovery for one to three years and never having received treatment in their lifetime. PPMS14 is in the FE group, however, PPMS02 as previously noted is in the DNFE group due to attempted suicide via overdose.

4.3 Summary

This chapter provided a detailed discussion of the study sample including recruitment outcomes, fit with eligibility criteria, demographics, lifetime PO use, misuse and associated consequences as well as recovery capital. It also included a discussion of the inclusion and exclusion criteria for the group comparisons presented in the next chapter, Chapter 5.
Chapter 5: Results

This chapter presents the results from the data analysis of the total sample as well as comparisons among eligibility groups as discussed above in Chapter 4 (Sample Description). The purpose of this chapter is to present results specific to the aims under investigation, specifically what factors women utilize in maintaining their recovery from POU (or similar SUDs) and how these identified maintenance factors change over time both within participants most recent successful attempt at recovery and across participants prior recovery attempts.

During the Participant Interview (specifically, Domain 2: Maintenance Factors), participants were prompted to identify factors utilized to assist them in maintaining their recovery (i.e., “Describe what helped you to remain problem-free from prescription pain meds?”) and whether or not those factors changed since their last attempt at recovery (i.e., “How did these factors change over time?”). To assess what a “conventional lifestyle” looks like and the “gratifying leisure activities” people engage in participants were then asked “How did you spend your days after (date of last recovery attempt)?” (i.e., Time Spent) and “What pleasurable or enjoyable activities did you find (engage in) since this most recent successful attempt at (recovery)?” (i.e., Pleasure/Enjoyment). In both instances the interviewer would ask a follow-up question to assess change over time, specifically “How did your daily activities change since your last attempt at recovery?” and “How have these [pleasurable/enjoyable] activities changed since your last attempt at recovery?” While in many instances’ individuals reported the same or similar factors across all three questions (i.e., maintenance factors, time spent and pleasure/enjoyment), prompting for specifics (i.e., time spent, and pleasure/enjoyment) yielded unique responses. Therefore, in section 5.1 responses to the first question (i.e., “Describe what helped you to remain problem-free from prescription pain meds?”) are presented and compared
to responses on the maintenance factor checklist completed during the self-assessments. Then, in
the subsections any unique responses identified to the prompts regarding Time Spent (5.1.1) and
Pleasure/Enjoyment (5.1.2) are discussed.

Similarly, in section 5.2 (Change Over Time) responses to the first follow-up question
related to changes in these factors since the participant’s most recent attempt at recovery are
discussed. Then, in the subsections any unique responses identified to the prompts regarding
Time Spent (5.2.1) and Pleasure/Enjoyment (5.2.2) are presented. Finally, in subsection 5.2.3
(Comparison across Recovery Attempts) results from Domain 3 (i.e., Comparison of Previous
Attempts at Recovery) of the Participant Interview, specifically the differences and similarities
among participants’ previous attempts at (recovery) in comparison to their most recent successful
attempt are provided. Additionally, differences and similarities in the factors participants utilized
to “help them remain problem free from prescription pain medications/alcohol” across recovery
attempts in an effort to understand what made participants most recent successful attempt at
(recovery) different than previous attempts are described.

Lastly in section 5.3 (Additional Outcomes) additional outcomes that have been deemed
most important beyond the original study aims, specifically preferred language (5.3.1), and
advice (5.3.2) are provided.

5.1 Maintenance Factors (Aim 2)
Two methods were used to assess the maintenance factors involved in recovery from
POUD/AUD: open-ended questions and a checklist.

For the open-ended questions, 12 categories were derived from qualitative data analysis.
Excellent inter-rater reliability was obtained (κ = .92, percentage agreement = 91.7%).
Representative content from participant responses that comprised each category can be seen in Table I1 in Appendix I. Table 11 displays the percentage of participants that endorsed each category. As can been seen in Table 11, the top three maintenance factors endorsed by the total sample were: social support / accountability (n=13, 81.25%), religious / spiritual involvement (n=11, 68.75%), and cognitive strategies (n=7, 43.75%). The category of social support / accountability reflected friends and other people, including family, participants turned to in times of need and that often held the participant accountable for their actions. The category of religious / spiritual involvement reflected religious and/or spiritual beliefs and behaviors. The category of cognitive strategies reflected a variety of strategies, such as consciously thinking about the negative consequences of prescription pain medications / alcohol use, thinking about the benefits of not using prescription pain medications / alcohol, adopting positive thinking and attitudes, and setting and focusing on life goals.

There were several differences observed in items endorsed by fit with eligibility criteria groups. The DNFE group was more likely to endorse the categories of social support / accountability (90% vs. 66.67%), work / school involvement (50% vs 0%) and hobbies / distracting activities (30% vs 0%). Responses specific to the FE group are highlighted in Table I1 in Appendix I.

Participants from the total sample endorsed a mean of 3.94 (SD = 1.39) categories. Group comparisons on the mean number of categories revealed no significant difference between the FE (M = 3.16, SD = 0.98) and DNFE (M = 4.4, SD = 1.43) groups, t(14) = 1.87, p = 0.08.
Table 11 Number and Percentage of the Total Samples Endorsement of Maintenance Factors Categories from the Open-Ended Questions by Fit with Eligibility

<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Total Sample (N=16)</th>
<th>FE (n=6)</th>
<th>DNFE (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social support / accountability</td>
<td>13 (81.25)</td>
<td>4 (66.67)</td>
<td>9 (90.0)</td>
</tr>
<tr>
<td>Religious/spiritual involvement</td>
<td>11 (68.75)</td>
<td>4 (66.67)</td>
<td>7 (70.0)</td>
</tr>
<tr>
<td>Cognitive strategies</td>
<td>7 (43.75)</td>
<td>3 (50.0)</td>
<td>4 (40.0)</td>
</tr>
<tr>
<td>Stimulus control/avoidance</td>
<td>6 (37.5)</td>
<td>2 (33.33)</td>
<td>4 (40.0)</td>
</tr>
<tr>
<td>Decreased time spent with users/increased time spent with non-users</td>
<td>5 (31.25)</td>
<td>2 (33.33)</td>
<td>3 (30.0)</td>
</tr>
<tr>
<td>Work/school involvement</td>
<td>5 (31.25)</td>
<td>0 (0.0)</td>
<td>5 (50.0)</td>
</tr>
<tr>
<td>Residence change</td>
<td>4 (25.0)</td>
<td>1 (16.67)</td>
<td>3 (30.0)</td>
</tr>
<tr>
<td>Hobbies/distracting activities</td>
<td>3 (18.75)</td>
<td>0 (0.0)</td>
<td>3 (30.0)</td>
</tr>
<tr>
<td>Exercise / diet</td>
<td>3 (18.75)</td>
<td>1 (16.67)</td>
<td>2 (20.0)</td>
</tr>
<tr>
<td>Treatment / self-help</td>
<td>3 (18.75)</td>
<td>2 (33.33)</td>
<td>1 (10.0)</td>
</tr>
<tr>
<td>Helping others</td>
<td>2 (12.5)</td>
<td>0 (0.0)</td>
<td>2 (20.0)</td>
</tr>
<tr>
<td>Miscellaneous (i.e., self-actualization)</td>
<td>1 (6.25)</td>
<td>0 (0.0)</td>
<td>1 (10.0)</td>
</tr>
</tbody>
</table>

Table 12 displays the means and standard deviations of the five point scaled checklist items that were used to assess participant’s maintenance factors by fit with eligibility. As can be seen in the table, the top four highest rated checklist items for the total sample were: goal commitment (i.e., commitment to staying problem-free) (M=4.81), self-control / will-power (i.e., you use your self-control / will power) (M=4.75), sense of accomplishment (M=4.75), and major positive life-style change (i.e., you have had a major positive lifestyle change and want to maintain it) (M=4.75).

Several differences in the checklist were observed among the fit with eligibility criteria groups, although none that were significant. The FE group rated the following maintenance factors as more helpful than the DNFE group: self-control / will-power (i.e., you use your self-control / will-power) (M = 5.0 vs 4.60), and change in friends (M = 5.0 vs 3.56). In contrast, the
DNFE group rated the following maintenance factors as more helpful than the FE group:

*personal pride* ($M = 4.6$ vs $4.0$), *waiting to maintain better physical health* ($M = 4.40$ vs $3.83$), *recreational / leisure activities* ($M = 4.50$ vs $3.67$), *self-help materials* (i.e., books, internet, websites) ($M = 4.40$ vs $3.50$), *respect gained from other people* (i.e., you don’t want to lose respect) ($M = 4.10$ vs $3.67$) and *concern about worsening physical health* ($M = 4.10$ vs $3.50$).

Table 12 Means and SD of the Total Samples Endorsement of Maintenance Factors Checklist Items by Fit with Eligibility

<table>
<thead>
<tr>
<th>Checklist Item, M (SD)</th>
<th>Total Sample (N=16)</th>
<th>FE (n=6)</th>
<th>DNFE (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal commitment (i.e., commitment to staying problem-free)</td>
<td>4.81 (.54)</td>
<td>4.83 (0.41)</td>
<td>4.80 (0.63)</td>
</tr>
<tr>
<td>Self-control / will-power (i.e., you use your self-control / will power)</td>
<td>4.75 (0.77)</td>
<td>5.00 (0.00)</td>
<td>4.60 (0.97)</td>
</tr>
<tr>
<td>Sense of accomplishment</td>
<td>4.75 (0.77)</td>
<td>4.83 (0.41)</td>
<td>4.70 (0.95)</td>
</tr>
<tr>
<td>Major positive life-style change (i.e., you have had a major positive lifestyle change and want to maintain it)</td>
<td>4.75 (0.58)</td>
<td>4.67 (0.52)</td>
<td>4.80 (0.63)</td>
</tr>
<tr>
<td>Personal pride (i.e., you don’t want to hurt your personal pride)</td>
<td>4.38 (1.09)</td>
<td>4.00 (0.63)</td>
<td>4.60 (1.26)</td>
</tr>
<tr>
<td>Wanting to maintain better physical health</td>
<td>4.19 (1.38)</td>
<td>3.83 (1.60)</td>
<td>4.40 (1.26)</td>
</tr>
<tr>
<td>Recreational / leisure activities change</td>
<td>4.19 (1.09)</td>
<td>3.67 (1.51)</td>
<td>4.50 (0.97)</td>
</tr>
<tr>
<td>Change in friends</td>
<td>4.07 (1.54)</td>
<td>5.00 (0.00)</td>
<td>3.56 (1.74)</td>
</tr>
<tr>
<td>Self-help materials (e.g., books, internet websites)</td>
<td>4.06 (1.29)</td>
<td>3.50 (1.52)</td>
<td>4.40 (1.07)</td>
</tr>
<tr>
<td>Religious influence</td>
<td>4.0 (1.51)</td>
<td>4.17 (1.33)</td>
<td>3.90 (1.66)</td>
</tr>
<tr>
<td>Respect gained from other people (i.e., you don’t want to lose respect)</td>
<td>3.94 (1.57)</td>
<td>3.67 (1.51)</td>
<td>4.10 (1.66)</td>
</tr>
<tr>
<td>Concern about worsening physical health</td>
<td>3.88 (1.45)</td>
<td>3.50 (1.64)</td>
<td>4.10 (1.37)</td>
</tr>
<tr>
<td>Social life activities change</td>
<td>3.88 (1.36)</td>
<td>4.00 (1.67)</td>
<td>3.80 (1.23)</td>
</tr>
<tr>
<td>Family support</td>
<td>3.88 (1.36)</td>
<td>4.00 (1.55)</td>
<td>3.80 (1.32)</td>
</tr>
<tr>
<td>Friends support</td>
<td>3.69 (1.30)</td>
<td>3.67 (1.51)</td>
<td>3.70 (1.25)</td>
</tr>
<tr>
<td>Significant other support</td>
<td>3.63 (1.59)</td>
<td>3.67 (1.75)</td>
<td>3.60 (1.58)</td>
</tr>
<tr>
<td>Past prescription pain med problems recalled (i.e., you think about your past pin med problems)</td>
<td>3.60 (1.59)</td>
<td>3.20 (2.05)</td>
<td>3.80 (1.40)</td>
</tr>
</tbody>
</table>
In order to determine the mean number of items endorsed from the checklist, it was decided that on the five-point scale, a cut-off rating of 5 (“helped very much”) would be a conservative estimate of a categorical endorsement for a checklist item. In this way, participants endorsed a mean of 12.3 items ($SD = 5.58$). Group comparisons revealed no significant differences in number of items endorsed between the FE ($M = 10.33, SD = 5.65$) and DNFE ($M = 13.5, SD = 5.48$) groups, $t(14) = 1.11, p = .28$.

In order to compare the mean number of maintenance factors reported when presented with open-ended questions versus the checklist, a conservative cut-off rating of five was used as an estimate of a categorical endorsement for a checklist item. Even with the use of this conservative cut-off, it is not surprising that participants identified a significantly greater number of factors when presented with the checklist ($M = 12.3, SD = 5.58$) than in response to the open-ended questions ($M = 3.94, SD = 1.39$), $t(30) = 5.82, p < .0001$.

The general pattern of maintenance factors categories derived from qualitative data analysis was somewhat consistent with the factors identified in the checklist with a few

<table>
<thead>
<tr>
<th>Residence change</th>
<th>3.44 (1.79)</th>
<th>2.67 (1.86)</th>
<th>3.90 (1.66)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial status change (i.e., you have less money to spend on prescription pain meds)</td>
<td>3.44 (1.63)</td>
<td>2.67 (1.86)</td>
<td>3.90 (1.37)</td>
</tr>
<tr>
<td>Change in diet</td>
<td>3.31 (1.66)</td>
<td>2.50 (1.97)</td>
<td>3.80 (1.32)</td>
</tr>
<tr>
<td>Change in jobs</td>
<td>3.06 (1.81)</td>
<td>2.67 (1.97)</td>
<td>3.30 (1.77)</td>
</tr>
<tr>
<td>You have decreased other drug use (includes alcohol, nicotine, illegal and legal drugs)</td>
<td>2.63 (1.86)</td>
<td>1.50 (0.84)</td>
<td>3.30 (2.00)</td>
</tr>
<tr>
<td>Self-help groups (e.g., Alcoholics Anonymous, Narcotics Anonymous)</td>
<td>2.13 (1.41)</td>
<td>2.17 (1.60)</td>
<td>2.10 (1.37)</td>
</tr>
<tr>
<td>Employer’s support</td>
<td>1.94 (1.48)</td>
<td>1.67 (1.21)</td>
<td>2.10 (1.66)</td>
</tr>
<tr>
<td>You have increased other drug use (includes alcohol, nicotine, illegal and legal drugs)</td>
<td>1.44 (1.09)</td>
<td>1.50 (0.84)</td>
<td>1.40 (1.26)</td>
</tr>
</tbody>
</table>
deviations. For example, the top 5 items identified in the checklist were all cognitive in nature, which is consistent with the fact that the category of cognitive strategies emerged in the top three maintenance factors in the qualitative data analysis, although, about half the number of participants endorsed cognitive strategies in comparison to the highest maintenance factor participants endorsed, social support / accountability. On the checklist, social support fell further down the checklist for the total sample but emerged as first (i.e., change in friends) for the fit with eligibility criteria group. Relatively more behaviorally based maintenance factors followed in both the checklist and qualitative data analysis, with the focus mostly on wanting to maintain better physical health and recreational / leisure activities changes on the checklist and religious / spiritual involvement on the qualitative data analysis. Moreover, the categories that emerged from the qualitative data analysis appeared for the most part to be covered in the checklist items.

5.1.1 Time Spent
Open-ended questions were used to assess how participants spent their days after their most recent attempt at recovery (i.e., time spent). Nine categories were derived from qualitative data analysis. Excellent inter-rater reliability was obtained (κ = .94, percentage agreement = 94.2%). Representative content from participant responses that comprised each category can be seen in Table I2 in Appendix I. Table 13 displays the percentage of participants that endorsed each category. As can been seen in Table 13, the top four maintenance factors, specific to time spent, endorsed by the total sample were: work / school involvement (43.75%), reality / life / staying busy (43.75%), social support (31.25%) and hobbies (31.25%). The category of work / school involvement reflected engagement in work and/or school specific activities. The category of reality / life / staying busy reflected conducting business as usual, doing things participants didn’t do while using (i.e., paying bills, taking care of business, engaging in life). The category
of social support reflected friends and other people, including family, participants turned to in times of need. The category of hobbies reflected simple activities that may act as a distraction and/or bring enjoyment and pleasure.

There were several differences observed in items endorsed by fit with eligibility criteria groups. The DNFE group was more likely to endorse the categories of social support (50% vs. 0%), hobbies (50% vs 0%), helping others (20% vs 0%), and exercise (20% vs. 0%). In contrast the FE group was more likely to endorse the categories of reality / life staying busy (66.67% vs 30%), self-help / treatment (50% vs 10%), and TV / internet / games (33.33% vs 10%). Responses specific to the FE group are highlighted in Table I2 in Appendix I.

Participants endorsed a mean of 2.19 (SD = 1.17) categories. Group comparisons on the mean number of categories revealed no significant difference between the FE (M = 2.17, SD = 0.75) and DNFE (M = 2.2, SD = 1.40) groups, t(14) = 0.05, p = 0.96.

There were several differences observed in maintenance factors endorsed based on how the interview question was framed (time spent vs general maintenance factors). When asked how participants spent their time post-POUD they were more likely to endorse categories that focused on daily life activities that helped them to stay busy such as work/school involvement (43.75% vs. 31.25%), reality / life / staying busy (43.75%), and hobbies (31.25% vs 18.75%). Similarly, across interview questions, the category of social supports (31.25% vs 81.25%) remained as one of the top three maintenance factors endorsed for the total sample as well as the DNFE group.
Table 13 Number and Percentage of the Total Samples Endorsement of Time Spent Factors Categories from the Open-Ended Questions by Fit with Eligibility

<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Total Sample (N=16)</th>
<th>FE (n=6)</th>
<th>DNFE (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work/School Involvement</td>
<td>7 (43.75)</td>
<td>3 (50.0)</td>
<td>4 (40.0)</td>
</tr>
<tr>
<td>Reality / Life / Staying Busy</td>
<td>7 (43.75)</td>
<td>4 (66.67)</td>
<td>3 (30.0)</td>
</tr>
<tr>
<td>Social Support</td>
<td>5 (31.25)</td>
<td>0 (0.0)</td>
<td>5 (50.0)</td>
</tr>
<tr>
<td>Hobbies</td>
<td>5 (31.25)</td>
<td>0 (0.0)</td>
<td>5 (50.0)</td>
</tr>
<tr>
<td>Self-Help / Treatment</td>
<td>4 (25.0)</td>
<td>3 (50.0)</td>
<td>1 (10.0)</td>
</tr>
<tr>
<td>TV / Internet / Games</td>
<td>3 (18.75)</td>
<td>2 (33.33)</td>
<td>1 (10.0)</td>
</tr>
<tr>
<td>Religious / Spiritual Involvement</td>
<td>2 (12.5)</td>
<td>1 (16.67)</td>
<td>1 (10.0)</td>
</tr>
<tr>
<td>Helping Others</td>
<td>2 (12.5)</td>
<td>0 (0.0)</td>
<td>2 (20.0)</td>
</tr>
<tr>
<td>Exercise</td>
<td>2 (12.5)</td>
<td>0 (0.0)</td>
<td>2 (20.0)</td>
</tr>
</tbody>
</table>

5.1.2 Pleasure & Enjoyment

Open-ended questions were used to assess the pleasurable or enjoyable activities participants engaged in since their most recent successful attempt at recovery (i.e., Pleasure & Enjoyment). 13 categories were derived from the qualitative data analysis. Excellent inter-rater reliability was obtained ($\kappa = .90$, percentage agreement = 90.4%). Representative content from participant responses that comprised each category can be seen in Table I3 in Appendix I. Table I4 displays the percentage of participants that endorsed each category. As can been seen in Table I4, the top three maintenance factors, specific to pleasure and enjoyment, endorsed by the total sample were: hobbies (68.75%), social support (56.25%), and cooking / eating (43.75%). The category of hobbies reflected simple activities that bring enjoyment and pleasure. The category of social support reflected friends and other people, including family, participants looked forward to spending time with. The category of cooking / eating reflected cooking for oneself or others as well as eating certain foods for sheer pleasure and enjoyment.
There were several differences observed in items endorsed by fit with eligibility criteria groups. The DNFE group was more likely to endorse the categories of hobbies (80% vs. 50%), social support (80% vs 16.67%), exercise (40% vs 16.67%), goal-oriented (20% vs. 0%), helping others, (20% vs. 0%) and religious / spiritual involvement (20% vs. 0%). Responses specific to the FE group are highlighted in Table 13 in Appendix I.

Participants endorsed a mean of 3.06 (SD = 1.77) categories. Group comparisons on the mean number of categories revealed no significant difference between the FE (M = 2.17, SD = 2.23) and DNFE (M = 3.6, SD = 1.26) groups, t(14) = 1.66, p = 0.86.

There were several differences observed in maintenance factors endorsed based on how the interview question was framed (pleasure and enjoyment vs general maintenance factors). When asked what participants do for pleasure and enjoyment post-POUD they were more likely to endorse the categories of hobbies (68.75% vs 18.75%), cooking/eating (43.75%), and exercise (31.25% vs 18.75%). Similarly, across interview questions, the category of social supports (56.25% vs 81.25%) remained as one of the top three maintenance factors endorsed for the total sample as well as the DNFE group.

Table 14 Number and Percentage of the Total Samples Endorsement of Pleasurable and Enjoyable Activities Categories from the Open-Ended Questions by Fit with Eligibility

<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Total Sample (N=16)</th>
<th>FE (n=6)</th>
<th>DNFE (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hobbies</td>
<td>11 (68.75)</td>
<td>3 (50.0)</td>
<td>8 (80.0)</td>
</tr>
<tr>
<td>Social Support</td>
<td>9 (56.25)</td>
<td>1 (16.67)</td>
<td>8 (80.0)</td>
</tr>
<tr>
<td>Cooking / Eating</td>
<td>7 (43.75)</td>
<td>3 (50.0)</td>
<td>4 (40.0)</td>
</tr>
<tr>
<td>Exercise</td>
<td>5 (31.25)</td>
<td>1 (16.67)</td>
<td>4 (40.0)</td>
</tr>
<tr>
<td>Self-Help / Treatment</td>
<td>4 (25.0)</td>
<td>2 (33.33)</td>
<td>2 (20.0)</td>
</tr>
<tr>
<td>Goal-Oriented</td>
<td>2 (12.5)</td>
<td>0 (0.0)</td>
<td>2 (20.0)</td>
</tr>
<tr>
<td>Helping Others</td>
<td>2 (12.5)</td>
<td>0 (0.0)</td>
<td>2 (20.0)</td>
</tr>
</tbody>
</table>
Satisfaction with Pleasurable & Enjoyable Activities

During the Participant Interview, near the end of Domain 2 (Maintenance Factors), participants were asked, “How satisfied are you with the pleasurable/enjoyable activities you currently engage in? Why or why not?” Responses ranged from not at all happy to very happy / satisfy. Responses were categorized on a five-point scale from not at all happy / satisfied to very happy / satisfied. Participants endorsed a mean of 3.88 ($SD = 1.20$). Group comparisons on the mean satisfaction with the pleasurable / enjoyable activities participants currently engage in revealed no significant difference between the FE ($M = 3.33$, $SD = 1.51$) and DNFE ($M = 4.2$, $SD = .92$) groups, $t(14) = 1.45$, $p = 0.17$. Findings suggest that overall, the total sample was happy / satisfied with the pleasurable / enjoyable activities they currently engage in. For those that did not identify as very happy / satisfied with the pleasurable / enjoyable activities they currently engage in, reasons included: difficulties with job, money and relationships as well as the inability to be more active due to pain, for example:

- “I'm not happy in my life in a lot of ways, but that's because I have no life. No job, no money, no friends. The thing has always been pain.”
“I'd like to be more active. I'm in the process of changing my medical plan. I'm focusing on that right now. Now I'm starting to finally get into seeing this orthopedic to see where I'm at. I want to focus on my health.”

“A lot of physical activities, I worry that I might get so much pain and I might have to resort again to have to take those medications. That's something that I like I carry as like a struggle. Every day. I mean, at times I forget that I'm not capable of doing certain things that I was before, like lifting or like exercising too much. Before I wasn't ... thinking I'll be fine the next day, but now if I exercise too much or I lift something too heavy, the next day I'm not myself.”

5.2 Change over Time (Aim 3)

Similar to section 5.1 above, I will discuss the responses to the first follow-up question related to changes in maintenance factors since the participant’s most recent successful attempt at recovery. Then, in the subsections I discuss any unique responses to the prompts regarding Time Spent (5.2.1) and Pleasure/Enjoyment (5.2.2).

Open-ended questions were used to assess the how the maintenance factors participants utilized changed since their last attempt at recovery (i.e., Change Over Time). Five broad categories were derived from the qualitative data analysis. Excellent inter-rater reliability was obtained ($\kappa = .96$, percentage agreement = 96.4%). Representative content from participant responses that comprised each category can be seen in Table I4 in Appendix I. Table 15 displays the percentage of participants that endorsed each category. As can been seen in Table 15, the change over time factors endorsed by the total sample were: social support / interaction with others (37.5%), acceptance / gratitude (25.0%), cognitive / behavioral strategies (18.75%),
religious / spiritual involvement (18.75%) and self-control / willpower (12.5%). The category of social support / interaction with others reflected changes in participant’s interactions with friends and other people, including family and others they used to use substances with. The category of acceptance / gratitude reflected participants acceptance of limitations (i.e., due to pain) and/or life without the use of substances as well as appreciate for these changes over time. The category of cognitive / behavioral strategies reflected participant’s use of various strategies in an effort to become aware of and make connections among thoughts, emotions and feelings. The category of religious / spiritual involvement reflected changes in religious and/or spiritual beliefs and behaviors. The category of self-control / willpower reflected participant’s ability to manage and/or control their substance use. Participants endorsed a mean of 1.13 (SD = 0.34) categories.

Table 15 Number and Percentage of the Total Samples Endorsement of Maintenance Factors Change Over Time Categories from the Open-Ended Questions

<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Total Sample (N=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Support / Interaction with Others</td>
<td>6 (37.5)</td>
</tr>
<tr>
<td>Acceptance / Gratitude</td>
<td>4 (25.0)</td>
</tr>
<tr>
<td>Cognitive / Behavioral Strategies</td>
<td>3 (18.75)</td>
</tr>
<tr>
<td>Religious / Spiritual Involvement</td>
<td>3 (18.75)</td>
</tr>
<tr>
<td>Self-control / Willpower</td>
<td>2 (12.5)</td>
</tr>
</tbody>
</table>

5.2.1 Time Spent

Open-ended questions were used to assess how the maintenance factors participants utilized, specific to time spent, changed since their last attempt at recovery (i.e., time spent change over time). Four broad categories were derived from data analysis. Excellent inter-rater reliability was obtained (κ = 1.0, percentage agreement = 100%). Representative content from participant responses that comprised each category can be seen in Table I5 in Appendix I.
16 displays the percentage of participants that endorsed each category. As can been seen in Table 16, the four-maintenance change over time factors, specific to time spent, endorsed by the total sample were: distracted / busy (75.0%), isolate / self-reflection (37.5%), pain management (12.5%) and accountability (6.25%). The category of distracted / busy reflected consciously engaging in various activities throughout the day for the purpose of keeping participants’ minds busy and distracted. The category of isolated / self-reflection reflected avoidance of others for the purpose of self-reflection and self-care. The category of pain management reflected changes in how to manage pain without substances and an acceptance of limitations. The category of accountability reflected the need for others to hold the participant responsible for their actions. Participants endorsed a mean of 1.31 ($SD = 0.48$) categories.

There were several differences observed in maintenance change over time factors endorsed based on how the interview question was framed (time spent vs general maintenance factors). When asked how participants time spent post-POUD changed over time they were more likely to endorse categories that focused on daily life activities that helped them to stay busy and away from others such as distracted / busy (75%), isolated / self-reflection (37.5%) (vs. social support / interaction with others 37.5%).

<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Total Sample (N=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distracted / Busy</td>
<td>12 (75.0)</td>
</tr>
<tr>
<td>Isolated / Self-reflection</td>
<td>6 (37.5)</td>
</tr>
<tr>
<td>Pain Management</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td>Accountability</td>
<td>1 (6.25)</td>
</tr>
</tbody>
</table>
5.2.2 Pleasure & Enjoyment

Open-ended questions were used to assess how the maintenance factors participants utilized, specific to pleasure and enjoyment, changed since their last attempt at recovery (i.e., pleasure and enjoyment change over time). Five broad categories were derived from the qualitative data analysis. Excellent inter-rater reliability was obtained ($\kappa = .94$, percentage agreement = 94.2%). Representative content from participant responses that comprised each category can be seen in Table I6 in Appendix I. Table 17 displays the percentage of participants that endorsed each category. As can been seen in Table 17, the five maintenance change over time factors, specific to pleasure and enjoyment, endorsed by the total sample were: bored/little enjoyment (31.25%), relief/excitement (18.75%), shifted focus (18.75%), social support (12.5%) and acceptance/mourning (12.5%). The category of bored/little enjoyment reflected the initial apathy about life and how to function without substances and how that shifted over time to finding pleasure in the littlest things. The category of relief/excitement reflected the initial release of anxiety and stress and hope for the future. The category of shifted focus reflected turning attention away from substances to something of greater importance (i.e., kids, work). The category of social support reflected the initial hesitation to interact with others due to fear and uncertainty. The category of acceptance/mourning reflected acceptance of life without the use of substances following a period of grief and loss. Participants endorsed a mean of 0.93 ($SD = 0.25$) categories.

There were several differences observed in maintenance change over time factors endorsed based on how the interview question was framed (pleasure and enjoyment vs general maintenance factors). When asked how participants pleasurable and enjoyable activities post-POUD changed over time they were more likely to endorse the categories of bored/little
enjoyment (31.25%), relief/excitement (18.75%), and shifted focus (18.75%). Although the category of social support was endorsed in both groups, when asked about change over time in pleasurable and enjoyable activities post-POUD, participants were less likely to endorse this category (12.50% vs 37.5%).

**Table 17 Number and Percentage of the Total Samples Endorsement of Change Over Time Categories Specific to Pleasurable and Enjoyable Activities from the Open-Ended Questions**

<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Total Sample (N=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bored / Little Enjoyment</td>
<td>5 (31.25)</td>
</tr>
<tr>
<td>Relief / Excitement</td>
<td>3 (18.75)</td>
</tr>
<tr>
<td>Shifted Focus</td>
<td>3 (18.75)</td>
</tr>
<tr>
<td>Social Support</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td>Acceptance / Mourning</td>
<td>2 (12.5)</td>
</tr>
</tbody>
</table>

### 5.2.3 Comparison Across Recovery Attempts

Open-ended questions were used to assess the similarities and differences among participant’s previous attempts at recovery in comparison to their most recent successful attempt in an effort to understand what made participants most recent successful attempt at (recovery) similar and/or different than previous attempts. Questions also inquired about the similarities and differences in maintenance factors utilized to help participants remain problem free from prescription pain medications/alcohol across significant recovery attempts, excluding their most recent successful attempt at recovery as that was discussed in a prior Domain of the Participant Interview (results reported above in section 5.1). These questions only applied to participants with more than one attempt at recovery. Of the 16 total participants, five had only one attempt at recovery at the time of the interview, therefore, this section focuses on data for a subset of the total sample (N=11). While the limit on significant recovery attempts discussed during this
section of the Participant Interview (Domain 3) was set at five to ensure timely completion of the interview, no participant reported more than five significant recovery attempts in their lifetime (including participants most recent attempt at recovery). The average number of significant recovery attempts identified across all participants was a mean of 2.75 ($SD = 1.44$; Median = 3). Group comparisons on the mean number of recovery attempts revealed no significant difference between the FE ($M = 2.5$, $SD = 1.38$) and DNFE ($M = 2.9$, $SD = 1.52$) groups, $t(14) = 0.53$, $p = 0.61$.

Participants who had a AUD only (PPMS11, 12, 13, 15) had, on average, 3.25 recovery attempts (median = 3), those with a POU only (PPMS03, 07, 08, 10, 14) had, on average, 1.8 recovery attempts (median = 1), and those with a POU and AUD (PPMS01, 02, 04, 05, 06, 09, 16) had, on average, 3.14 recovery attempts (median = 3). Additionally, those with a POU only had approximately 1-3 years in recovery. Group comparisons on the mean number of recovery attempts revealed no significant difference between the AUD only ($M = 3.25$, $SD = 0.50$) and POU only ($M = 1.80$; $SD = 1.30$) groups although it was close, $t(7) = 2.09$, $p = 0.08$.

For each significant recovery attempt identified by participants (limit 5; excluding participants most recent successful attempt at recovery), the interviewer inquired about the factors that had helped the participant remain problem free from prescription pain medications / alcohol prior to relapsing. Across all prior recovery attempts 9 categories were derived from the qualitative data analysis. Excellent inter-rater reliability was obtained (κ = 1, percentage agreement = 100%). Representative content from participant responses that comprised each category can be seen in Table I7 in Appendix I. Table 18 displays the percentage of participants that endorsed each category. As can been seen in Table 18, the top four maintenance factors across all prior recovery attempts endorsed by the sample were: religious / spiritual involvement.
(45.45%), stimulus control / avoidance (27.27%), social support (27.27%), and treatment / self-help (27.27%). The category of religious / spiritual involvement reflected religious and/or spiritual beliefs and behaviors. The category of stimulus control / avoidance reflected attempts to limit access to prescription pain medications and/or alcohol via limiting and avoiding exposure to particular triggers and high-risk situations. The category of social support reflected friends and other people, including family, participants turned to in times of need. The category of treatment / self-help reflected the use of self-help and/or treatment (voluntary or mandated) programs. Participants endorsed a mean of 1.91 (SD = 0.83) categories across all prior recovery attempts.

Table 18 Number and Percentage of the Total Samples Endorsement of Maintenance Factor Categories Across All Prior Recovery Attempts from the Open-Ended Questions

<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Total Sample (N=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious / Spiritual Involvement</td>
<td>5 (45.45)</td>
</tr>
<tr>
<td>Stimulus control/avoidance</td>
<td>3 (27.27)</td>
</tr>
<tr>
<td>Social Support</td>
<td>3 (27.27)</td>
</tr>
<tr>
<td>Treatment / self-help</td>
<td>3 (27.27)</td>
</tr>
<tr>
<td>Decreased time spent with users/increased time spent with non-users</td>
<td>2 (18.18)</td>
</tr>
<tr>
<td>Seeing Other Substance Users</td>
<td>2 (18.18)</td>
</tr>
<tr>
<td>Hobbies</td>
<td>1 (9.09)</td>
</tr>
<tr>
<td>Health</td>
<td>1 (9.09)</td>
</tr>
<tr>
<td>Work/School Involvement</td>
<td>1 (9.09)</td>
</tr>
</tbody>
</table>

There were several differences observed in maintenance factors endorsed across recovery attempts. Comparing participants most recent attempt at recovery (section 5.1) to prior attempts, participants were more likely to endorse the categories of cognitive strategies (43.75% vs 0%) and stimulus/avoidance (37.5% vs 27.27%). In contrast, in prior attempts at recovery, participants were more likely to endorse the category of treatment/self-help (27.27% vs.
18.75%). Similarly, across recovery attempts, the category of *social supports* (1st at 81.25% vs 3rd at 27.27%) and *religious/spiritual involvement* (2nd at 68.75% vs 1st 45.45%) remained in the top three categories endorsed for the total sample.

**Similarities Across All Recovery Attempts**

Participants were also asked directly about similarities across recovery attempts, specifically: “In thinking about each of the previous attempts at recovery we just discussed, how are they similar to your most recent successful attempt?” The consensus among the samples was that there were no Similarities (n = 7, 63.64%) among prior attempts at recovery when compared to their most recent successful attempt. Four participants were able to identify one similarity, however, no one identified more than one. Therefore, only three categories were derived from the qualitative data analysis, *initial intentions* (18.18%), *access control* (9.09%) and *resources* (9.09%). Representative content from participant responses that comprised each category can be seen in Table I8 in Appendix I. Table 19 displays the percentage of participants that endorsed each category. The category of *initial intentions* reflected the initial desire and/or goal of an attempt at recovery. The category of *access control* reflected having someone else control a participant’s access to prescription pain medications. The category of *resources* reflected the maintenance factors utilized to avoid a return to problematic use.

<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Total Sample (N=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Similarities</td>
<td>7 (63.64)</td>
</tr>
<tr>
<td>Initial Intentions</td>
<td>2 (18.18)</td>
</tr>
<tr>
<td>Access Control</td>
<td>1 (9.09)</td>
</tr>
<tr>
<td>Resources</td>
<td>1 (9.09)</td>
</tr>
</tbody>
</table>
Differences Across All Recovery Attempts

Participants were also asked directly about differences across recovery attempts, specifically: “In thinking about each of the previous attempts at recovery we just discussed, how are they different to your most recent successful attempt? And/or In what ways is your most recent successful attempt at recovery different from previous attempts?” Ten categories were derived from the qualitative data analysis. Representative content from participant responses that comprised each category can be seen in Table 19 in Appendix I. Table 20 displays the percentage of participants that endorsed each category. As can been seen in Table 20, the top three differences across all recovery attempts categories, endorsed by the total sample were: cognitive strategies (63.64%), desire (63.64%) and, willpower (36.36%). The category of cognitive strategies reflected a variety of strategies, such as consciously thinking about the negative consequences of prescription pain medication and/or alcohol use, thinking about the benefits of not using prescription pain medication and/or alcohol, adopting positive thinking and attitudes, and setting and focusing on life goals. The category of desire reflected a strong feeling of wanting to no longer use prescription pain medication and/or alcohol. The category of willpower reflected exerting control over ones prescription pain medication and/or alcohol use (i.e., restraining impulses). Participants endorsed a mean of 3.18 (SD = .75) categories across all prior recovery attempts.

Table 20 Number and Percentage of the Total Samples Endorsement of Differences Across All Recovery Attempt Categories from the Open-Ended Questions

<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Total Sample (N=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Strategies</td>
<td>7 (63.64)</td>
</tr>
<tr>
<td>Desire</td>
<td>7 (63.64)</td>
</tr>
<tr>
<td>Willpower</td>
<td>4 (36.36)</td>
</tr>
<tr>
<td>Doing it for Oneself Not Others</td>
<td>3 (27.27)</td>
</tr>
</tbody>
</table>
5.3 Additional Outcomes

Given the vast amount of data that was collected and analyzed in this present study, only findings beyond the original study aims that have been deemed most important are discussed in the following section.

5.3.1 Timeline

Timeline data was collected during Domain 1 (Timeline) of the Participant Interview and focused on collecting dates for specific events related to both the creation and resolution of an individual’s problem with POs. Analysis of timeline data provided insights into the total number of significant recovery attempts identified by each participant and discussed above in sections 4.1.2 (Fit with Eligibility) and 5.2.3 (Comparisons Across Recovery Attempts). This section provides further insights into these prior recovery attempts by including additional dimensions of time. This information is presented in Table 21. Participants were on average 21 ($M = 20.69, SD = 11.83$) years old when they first tried any substance and 30 ($M = 30.00, SD = 12.85$) years old when they identified their PO/alcohol use as problematic. Group comparisons of the mean age for when participants noted they had first tried any substance and when they identified their PO/alcohol use as problematic found no significant difference between the FE and DNFE groups. However, group comparisons of the mean age for when participants noted they had first tried any substance revealed a significant difference between those with only one recovery

<table>
<thead>
<tr>
<th>Social Support</th>
<th>3 (27.27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>3 (27.27)</td>
</tr>
<tr>
<td>Physically Debilitating</td>
<td>2 (18.18)</td>
</tr>
<tr>
<td>Religious / Spiritual Involvement</td>
<td>2 (18.18)</td>
</tr>
<tr>
<td>Coping Strategies</td>
<td>2 (18.18)</td>
</tr>
<tr>
<td>Misc.</td>
<td>2 (18.18)</td>
</tr>
</tbody>
</table>
attempt ($M = 31.6, SD = 11.34$) and those with more than one recovery attempt ($M = 15.73, SD = 8.47$), $t(14) = 3.14, p = .007$. Similarly, group comparisons of the mean age when participants identified their PO/alcohol use as problematic revealed a significant difference between those with only one recovery attempt ($M = 41.60, SD = 13.26$) and those with more than one recovery attempt ($M = 24.73, SD = 8.92$), $t(14) = 3.02, p = .009$.

The duration of participants most recent successful attempt at recovery from POU/AUD is bolded in Table 21. For participants in recovery less than five years, the average duration prior to the Participant Interview was 17 months ($M = 16.82, SD = 8.93$). For participants with only one recovery attempt ($n=5$), the duration prior to the Participant Interview varied greatly. One participant had 41 years in recovery while another had five years. Of the remaining three participants, the average duration was 13 months ($M = 13.33, SD = 6.80$). For participants with more than one attempt at recovery ($n=11$), the average duration of their first recovery attempt was 15 months ($M = 14.80, SD = 12.85$) and 11 months ($M = 11.43, SD = 10.92$) for their second recovery attempt. Of those participants with at least three significant recovery attempts ($n=10$), three were in recovery for more than five years (5, 11 and 21 years). Of the remaining seven participants, the average duration was 12 months ($M = 11.57, SD = 6.75$). Of those participants with at least four significant recovery attempts ($n=5$), the average duration was 11 months ($M = 11.20, SD = 5.45$). Lastly, of those with five significant recovery attempts ($n=2$), average duration was 25 months ($M = 24.50, SD = 20.51$).

The average age when participants started their most recent recovery attempt was 42 ($M = 42.19, SD = 10.85$). Group comparisons of the mean age for when participants started their most recent recovery attempt found no significant difference between the FE and DNFE groups or between those with only one attempt at recovery and those with more than one attempt at
recovery. The average length of time between when participants identified their PO/alcohol use as problematic and the start of their most recent recovery attempt (i.e., addiction career) was 12 years ($M = 12.19$, $SD = 9.68$) ranging from less than one year to 32 years. Group comparisons of participants mean addiction career found no significant difference between the FE and DNFE groups. However, group comparisons of participants mean addiction career revealed a significant difference between those with only one recovery attempt ($M = 3$, $SD = 3.24$) and those with more than one recovery attempt ($M = 16.36$, $SD = 8.65$), $t(14) = 3.30$, $p = .005$. While this may seem like a function of time, group comparisons of participants mean addiction career found no significant difference between those whose final recovery attempt was less than three years ago and those whose final recovery attempt was more than 3 years ago.
<table>
<thead>
<tr>
<th>Participant ID</th>
<th>Age*</th>
<th>Num. of Sig. Recovery Attempts</th>
<th>Age of First Use**</th>
<th>Age Start of Problematic Use (in yrs.)</th>
<th>Age Start Most Recent Recovery Attempt (in yrs.)</th>
<th>1st Recovery Attempt Duration (in mos.)</th>
<th>2nd Recovery Attempt Duration (in mos.)</th>
<th>3rd Recovery Attempt Duration (in mos.)</th>
<th>4th Recovery Attempt Duration (in mos.)</th>
<th>5th Recovery Attempt Duration (in mos.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPMS01</td>
<td>42</td>
<td>5</td>
<td>9</td>
<td>19</td>
<td>38</td>
<td>23</td>
<td>3.5</td>
<td>14</td>
<td>12</td>
<td>39</td>
</tr>
<tr>
<td>PPMS02</td>
<td>67</td>
<td>3</td>
<td>8</td>
<td>35</td>
<td>65</td>
<td>6</td>
<td>24</td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>PPMS03</td>
<td>51</td>
<td>1</td>
<td>39</td>
<td>45</td>
<td>46</td>
<td></td>
<td></td>
<td>5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPMS04</td>
<td>67</td>
<td>1</td>
<td>16</td>
<td>60</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>PPMS05</td>
<td>40</td>
<td>4</td>
<td>14</td>
<td>18</td>
<td>39</td>
<td>9</td>
<td>9</td>
<td>3</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>PPMS06</td>
<td>31</td>
<td>5</td>
<td>12</td>
<td>16</td>
<td>30</td>
<td>4</td>
<td>12</td>
<td>12</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>PPMS07</td>
<td>41</td>
<td>2</td>
<td>20</td>
<td>32</td>
<td>39</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>PPMS08</td>
<td>41</td>
<td>1</td>
<td>39</td>
<td>39</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>PPMS09</td>
<td>71</td>
<td>1</td>
<td>23</td>
<td>23</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>41 years</td>
</tr>
<tr>
<td>PPMS10</td>
<td>41</td>
<td>1</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>PPMS11</td>
<td>47</td>
<td>3</td>
<td>18</td>
<td>30</td>
<td>42</td>
<td>8</td>
<td>1</td>
<td></td>
<td></td>
<td>5 years</td>
</tr>
<tr>
<td>PPMS12</td>
<td>43</td>
<td>3</td>
<td>15</td>
<td>19</td>
<td>32</td>
<td>4.5</td>
<td>6</td>
<td></td>
<td></td>
<td>11 years</td>
</tr>
<tr>
<td>PPMS13</td>
<td>66</td>
<td>3</td>
<td>39</td>
<td>41</td>
<td>45</td>
<td>0.25</td>
<td>0.25</td>
<td></td>
<td></td>
<td>21 years</td>
</tr>
<tr>
<td>PPMS14</td>
<td>43</td>
<td>4</td>
<td>12</td>
<td>29</td>
<td>42</td>
<td>36</td>
<td>12</td>
<td>6</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>PPMS15</td>
<td>52</td>
<td>4</td>
<td>14</td>
<td>18</td>
<td>50</td>
<td>12</td>
<td>4</td>
<td>9</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>PPMS16</td>
<td>31</td>
<td>3</td>
<td>12</td>
<td>15</td>
<td>30</td>
<td>24</td>
<td>36</td>
<td></td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

* Age (in years) at time of interview
** Age of first use (in years) of any substance
5.3.2 Preferred Language

At the end of Domain 1 (Timeline), participants were asked to identify a term or word that best describes three different phases of the timeline: 1) prior prescription pain medication/alcohol use (i.e., addiction), 2) current self with respect to prior prescription pain medication/alcohol use (i.e., recovery), and 3) a return to prescription pain medication/alcohol use after an attempt at [recovery] (i.e., relapse). If a participant did not specifically identify the term addiction, recovery, or relapse, the interviewer would ask: “How do you feel about the word [addiction, recovery, and relapse], do you feel like it describes you or your experience?”

Representative content from participant responses that comprised each category can be seen in Table I10 in Appendix I.

Addiction

Of all three terms, “addiction” was the least controversial. When initially asked most participants identified the term addiction or addict to describe their prior use. A few other unique terms that participants identified were: consistent, abuse and/or misuse, dangerous, uncontrollable, dependent, overusing, smoked out and/or hit rock bottom, and lost. Most were comfortable with the interviewer using the term addiction to describe their prior PO / alcohol use. Only two participants (12.5%) did not self-identify with the term even though they met DSM-5 criteria for severe POUD/AUD. Reasons for not self-identifying included:

- “I understand those terms [addiction, substance use, substances abuse] but I wouldn’t call that my level. I call those higher levels of intensity of it.”
- “Addiction or alcoholic don’t really apply to me, because I wasn’t to that extent. I have seen others who were addicted firsthand, family, that wasn’t me. My use was problematic, it was a problem for me.”

Recovery
Of all three terms, “recovery” was the most controversial term with almost half of all participants noting they did not identify with this term (n=7, 43.75%). When initially asked to identify a term or word, four participants used some form of the word recovery (i.e., recovered, recovering). Additional terms that participants identified include: substance free, over and/or survivor, overcame the need, motivated to change, healed, former addict and/or ex-addict, overcomer, formerly addicted, grateful addict, happy and/or excited, little struggle, and a double life. For those not self-identifying with the term recovery, reasons included not being in a treatment program, not having a severe enough level of addiction and not wanting to be labeled. For example:

- “I’m not going to say “recovery” because it’s not like I was a hardcore drug addict. I can’t use that term because I wasn’t a hardcore drug addict. Recovery, to me, is like you’re going to AA or NA trying to stay clean. You’re in recovery.”
- “I don’t use that word [recovery], because people in treatment use that word, and I didn’t go to treatment. I’m not a recovering addict. I was an addict, and I’m not an addict anymore, because I choose not to be an addict.”
- “Recovery is like you’re in the hospital and you’re recovering from a sickness or something. I don’t see it like that.”
- “Recovery would mean, to me, going through the steps with a sponsor, going to meetings, and I didn’t get clean that way.”
- “It’s [recovery] like a label. When people say I’m a ...I don’t know, it’s just like they labeling themselves or whatever. When you believe in God, and when you living day-by-day and you growing, I don’t want to have a label.”
- “[Re: recovery] I would say yes and no, I know I was drinking too much, I know I tried marijuana one time, but to me, I still don’t feel myself to be, how do I explain this . . . A recovery, I wouldn’t consider myself to be in recovery, maybe I am, but I look at it in a different way. I don’t think I was a recovering addict.”
- “[Re: recovery] No. I mean because when I think of recovery, I think you’re in a program.”
Relapse/Lapse/Slip

The term relapse was more controversial than “addiction” but not quite as controversial as the word “recovery”. A total of four participants felt as though these words (i.e., relapse, lapse or slip) did not reflect them or their experience (25%). When initially asked to identify a term or word, five participants identified either the word relapse or lapse. Additional terms that participants identified included: pain problem, insane and/or insanity, trauma and/or distractions, choosing to go back to addiction, higher power, kill myself, mistake, and lost and/or loss control. For those not self-identifying with the term relapse/lapse/slip, reasons included not having a severe enough level of addiction and wanting to take responsibility and control over their substance use. For example:

- “None of those [relapse, lapse, setback, or slip] would fit, no. Not a relapse because, to me, a relapse is when you’re on medications, and you get off your medications. You stop using it and then you go back to it. Oh, I relapsed. I'm not a hardcore drug addict. I'm not going to... I wouldn't call it ‘relapse.’ Return to misuse. Yeah, return to misuse.”

- “It's not a slip. It's not a relapse to me. You know what you're doing. It's a return to addiction. . . But that's a term people use when they don't want to take responsibility.”

- “I would say it doesn’t apply to me. That’s more for someone who has had a problem with a substance and, once they do it, that’s it. They have relapsed and it’s out of control. I don't know, I've always been able to manage mine. I can manage myself.”

- “I didn't. That's what I'm saying, now you're going to battles with it, because it's a, whose going to win, you or me? So, I hardly use those words [relapse, lapse, setback, or slip]. Remission, and things like that. It wasn't a battle, no.”

5.3.3 Advice

Open-ended questions were used to assess the hypothetical advice participants would give to help another person with a similar prescription pain medication / alcohol problem. Participants were prompted for the advice they would give at each stage of the recovery process (i.e., contemplation, action, and maintenance) as well as generally anything else they would “like
others to know who are struggling with a similar prescription pain medication / alcohol problem?” Responses for each stage of the recovery process are discussed below.

**Contemplation**

Seven categories were derived from the qualitative data analysis. Representative content from participant responses that comprised each category can be seen in Table II1 in Appendix I. Table 22 displays the percentage of participants that endorsed each category. As can be seen in Table 22, the top three major contemplation advice categories reported by the total sample were: social support / accountability (56.25%), cognitive strategies (43.75%), and take action (25.0%). The category of social support / accountability reflected talking with friends and other people, including family, in times of need and/or finding someone that can hold the individual accountable for their actions and/or help them manage their use. The category of cognitive strategies reflected a variety of strategies, such as consciously thinking about the negative consequences of prescription pain medications / alcohol use, thinking about the benefits of not using prescription pain medications / alcohol, adopting positive thinking and attitudes, and setting and focusing on life goals. The category of take action reflected not contemplating too long, rather the individual should quickly act on their decisions. Participants identified a mean of 1.63 (SD = 0.89) categories.

**Action**

Six categories were derived from the qualitative data analysis. Representative content from participant responses that comprised each category can be seen in Table II1 in Appendix I. Table 22 displays the percentage of participants that endorsed each category. As can be seen in Table 22, the top three major advice categories reported by the total sample were: social support / accountability (50%), religious / spiritual involvement (25%), and motivation / willpower
(25%). The category of social support / accountability reflected talking with friends and other people, including family, in times of need and/or finding someone that can hold the individual accountable for their actions and/or help them manage their use. The category of religious / spiritual involvement reflected religious and/or spiritual beliefs and behaviors. The category of motivation / willpower reflected exerting control over one’s prescription pain medication and/or alcohol use through the use of motivational techniques (i.e., determination, positive attitude).

Participants identified a mean of 1.25 ($SD = 0.45$) categories.

**Maintenance**

Five categories were derived from the qualitative data analysis. Representative content from participant responses that comprised each category can be seen in Table II1 in Appendix I. Table 22 displays the percentage of participants that endorsed each category. As can be seen in Table 22, the top three major advice categories reported by the total sample were: renew (25.0%) social support / accountability (18.75%) and keep steady (18.75%). The category renew reflected not becoming complacent, rather engaging in pleasurable and enjoyable activities. The category of social support / accountability reflected talking with friends and other people, including family, in times of need and/or finding someone that can hold the individual accountable for their actions and/or help them manage their use. The category of keep steady reflected engaging in the same practices that individuals had done previously to get them to the maintenance phase of recovery. Participants identified a mean of 0.81 ($SD = 0.40$) categories.
<table>
<thead>
<tr>
<th>Category, n (%)</th>
<th>Contemplation</th>
<th>Action</th>
<th>Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Support/Accountability</td>
<td>9 (56.25)</td>
<td>8 (50.0)</td>
<td>3 (18.75)</td>
</tr>
<tr>
<td>Cognitive strategies</td>
<td>7 (43.75)</td>
<td>2 (12.5)</td>
<td>1 (6.25)</td>
</tr>
<tr>
<td>Take action</td>
<td>4 (25.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious/spiritual involvement</td>
<td>3 (18.75)</td>
<td>4 (25.0)</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td>Motivation/Willpower</td>
<td></td>
<td>4 (25.0)</td>
<td></td>
</tr>
<tr>
<td>Renew</td>
<td></td>
<td>4 (25.0)</td>
<td></td>
</tr>
<tr>
<td>Keep Steady</td>
<td></td>
<td></td>
<td>3 (18.75)</td>
</tr>
<tr>
<td>Stimulus control/avoidance</td>
<td>1 (6.25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment/self-help</td>
<td>1 (6.25)</td>
<td></td>
<td></td>
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<tr>
<td>Desire</td>
<td>1 (6.25)</td>
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<td></td>
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<tr>
<td>Hobbies</td>
<td></td>
<td>1 (6.25)</td>
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<tr>
<td>Work/School Involvement</td>
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There were several differences observed in advice category endorsed based on the recovery stage. When asked specifically about the contemplation stage participants were more likely to endorse the categories of cognitive strategies (43.75% vs 12.5% vs 6.25%) and take action (25% vs 0% vs 0%). When asked specifically about the action stage participants were more likely to endorse the category of motivation/willpower (25% vs 0% vs 0%). When asked specifically about the maintenance stage participants were more likely to endorse the categories of renew (25% vs 0% vs 0%) and keep steady (18.75% vs 0% vs 0%). Similarly, across advice questions, the category of social support/accountability (56.25% vs. 50.0% vs. 18.75%) remained as the top advice category endorsed for the total sample.

Anything Else
This was the last interview question asked of each participant and reflected an opportunity for the participant to include any additional advice they may have for someone struggling with a similar PO/Alcohol problem. Representative content from participant responses that comprised the anything else advice category can be seen in Table I12 in Appendix I. Responses to this question were rather broad and often included the participant reflecting on their own unique experience and identifying what was most impactful in supporting their recovery process. However, the overarching advice for the total sample was recovery is possible and individuals are not alone. For example:

- “That everyone's struggle is different, but you are not alone, and there is help available.”

- “If you are motivated to change you, you can stop using. It doesn't have to be your life. There are other ways to be happy in the world. That's not where people's happiness has to lie. There are things that you could do to be happy. You don't have to just settle. You don't have to settle for accepting this life. Believe you me, there are better things out there, because I never got this peace feeling from being out there using. I never got the, like, I'm striving every day to be better. I'm not accepting anything but good no more. There's always room for improvement in my life, so you don't have to settle for that. That don't have to be where your life is restricted to.”

- “That you're not alone. We're not alone and you're not alone in your struggle. It can be done. There is many of our brothers and sisters that have died in their efforts to try to get clean. It's like we have a second chance but definitely for them to know that they are not alone. There is hope. There is a solution and it is possible to achieve sobriety if we want it. The main thing an addict needs to know is that they are not alone because that's what causes the isolation. That's what keeps people into their addiction by not going and sharing because of the shame or whatever, stigma, things like that but definitely for them to know that they are not alone, there is help, there is hope.”

- “I would just say, for myself, it's like if I had to talk to someone, especially if I had to give a story or a testimony, I would tell them, for myself, I was the type of alcoholic that would drink every day, just about all day, and then I started doing cocaine, and I was a very ... I got really depressed and violent. If I can stay sober with being an everyday drinker, drinking all day, every day, for years, and started doing drugs, if I can do it, you got a shot at doing it, because I never thought that I can get one day, and years went by one day at a time, and now I got a little over 11 years. It's possible. It definitely is possible.
We all are miracles, you get one day, you're a miracle. Because the disease of addiction wants to kill us, and is in our heads, so if you can get one day, you already a miracle; you just got to keep going, and if you fall, get back up again.”

5.4 Summary
This chapter presented the results from the data analysis of the total sample as well as comparisons among eligibility groups specific to the aims under investigation. The next chapter will discuss these results in the context of current discourse including implications for future research, practice and policy.
Chapter 6: Discussion

This dissertation is one of the first known studies to attempt to qualitatively examine the process of natural recovery among women with a POU. Moreover, this study is a first attempt to identify how women spend their time post-POU and what they do for pleasure and enjoyment without using POs. This chapter starts with a discussion of the overall findings from the results presented in Chapter 5 and how they compare to current discourse. Next the implications for future research, practice and policies are outlined broadly. The chapter concludes by presenting the limitations and future directions for this study specifically.

6.1 Overall Findings

The two primary objectives of the present study were to (1) provide an exploratory portrait of the recovery process from POU (or similar SUDs) from the perspective of women who have recovered naturally; and (2) better understand how these women spend their time post-POU (or similar SUDs) and what they do for pleasure and enjoyment without POU (or similar SUDs) in order to maintain their recovery. With respect to POU and AUD (although any SUD applies), the construct of recovery has received little empirical attention. With no consensus on how to define the construct of recovery (El-Guebaly, 2012), the present study borrowed from the natural recovery literature insofar as it first inferred recovery via the remission of diagnostic symptoms, and then explored the recovery process predominantly via several interview domains that have often been employed in the context of natural recovery research (but could also readily be applied in the context of treatment-assisted recovery) (Committee on National Statistics et al., 2016). Moreover, with no consensus on how to define natural recovery, reasoned and literature-informed decisions were made to operationally define natural recovery which ultimately had to be re-assessed throughout the duration of the study.
given low sample recruitment outcomes. Several interesting and important findings emerged at the level of the total sample, as well as at the level of group comparisons between participants that fit with the eligibility criteria (FE) and those that did not fit with the eligibility criteria (DNFE). Those are discussed below.

### 6.1.1 Recruitment Outcomes

The recruitment approach utilized in this study had been shown to be efficient and effective among a naturally recovering population (Carballo et al., 2009; Subbaraman et al., 2015). However, society has changed over the last decade specific to how people utilize and interact with technology and the world around them making old approaches (i.e., advertisements, fliers, posters) ineffective. Of the three recruitment strategies utilized in the current study, Craigslist yielded the most contacts with the PI (78.57%) as well as eligible participants (68.75%). The newspaper advertisement was the most expensive recruitment approach and unfortunately did not yield any direct contact with the PI. However, in comparison to Facebook advertisements, it did yield greater indirect contact through the study website (54.4% vs. 35.1%).

Two recent attempts have been made among the research community to identify larger samples of individuals in recovery from SUDs in an effort to increase our knowledge base about these individuals and the mechanisms underlying successful recovery. These attempts highlight the difficulty in sample recruit among this population even with a broader definition of recovery (not specific to recovery pathways, e.g., naturally recovered) as well as additional funding and resources in comparison to the current study.

One attempt utilized population-based probability sampling techniques coupled with e-mail communication and strictly online data collection (Kelly et al., 2017). While this study yielded an initial response rate (i.e., 63.4%) similar to other nationally representative surveys
(i.e., NESARC-III, 60.1%; 2015 NSUDH, 58.3%; 2013-14 National Health and Nutrition Examination Survey (NHANES), 68.5%), the resulting final sample (n=2,002) was rather small in comparison yielding a completion rate of less than 8% among those who responded to the screening question (n=25,229) and only 5% among those in the initial sampling frame (n=39,809). However, given the population-based probability sampling techniques utilized (https://www.gfk.com/fileadmin/user_upload/dyna_content/US/documents/KnowledgePanel_-_A_Methodological_Overview.pdf), according to the authors, the final sample remained as a reliable approximation of the entire U.S. Population.

It’s important to note that this study did not exclusively focus on a naturally recovered population, however, the authors did code the data for “problem resolution pathway.” Findings showed that almost half the sample (46.1%) did not use any form of treatment (formal or informal) in their lifetime and, of the those that did seek treatment (53.9%), the most commonly used services were mutual-help groups (45.1%) such as AA or NA. Interestingly, use of FDA-approved medications, specifically to treat alcohol and opioids was generally low (8.6%) although those with more recent problem resolution were more likely to use medications compared to those with longer time since problem resolution (0-5yrs = 14.7%; 5-15yrs = 11.1%; 15+ yrs = 7.7%) likely due to recent increases in availability and accessibility to medications such as buprenorphine, naloxone and naltrexone.

The International Quit and Recovery Registry (IQRR), an “online community and registry for adults who self-report being in recovery from at least one behavioral or substance addiction” officially launched in 2011(Athamneh et al., 2019, p. 312) The IQRR represents a second attempt among the research community to “understand what allows people to succeed in overcoming addiction” in an effort to “provide scientists with information about their addictions
and their paths to recovery” (Addiction Recovery Research Center, 2019). As “scientists” learn more about recovery from those in the IQRR, they share those findings on the IQRR website (https://www.quitandrecovery.org/). As of their most recent publication, almost a decade since its launch, the IQRR had a total sample of 227 individuals (Aathamneh et al., 2019). It is unknown however, how many of these individuals have recovered naturally as this publication does not present information specific to recovery pathway, nor does it specify whether or not this information was collected.

While these attempts highlight the difficulty in sample recruitment among this population, they also highlight the inconsistencies in data collection and analysis specific to recovery pathways. As previously noted, although large epidemiological studies are not predicated on a treatment seeking population, they often do not collect data specific to recovery pathway, or if they do, there are inconsistencies in how this data is analyzed and/or presented.

### 6.1.2 Sample Characteristics

Participants in the present study were on average 48 years-old (ranging from 31 to 71), mostly African American (62.5%), single (75%), educated (68.75% with post-secondary education), and employed (43.75%) with an annual household income below $50,000 (87.5%).

In one of the more recent studies available comparing recovery pathways (assisted vs. unassisted) among a nationally representative sample, demographic characteristics such as sex and race were unrelated to a specific recovery pathway, suggesting treatment and recovery support resources are utilized equitably across gender and race groups (Kelly et al., 2017). It should be noted however that this data was not analyzed by substance, therefore, it’s unclear if this still holds true for individuals with POU or AUD specifically.
In some of the first studies to examine differences in subgroups of opiate users (i.e., heroin-only users, PO and heroin users, and PO only users) (Rigg & Monnat, 2015; Wu et al., 2016) PO only users tended to be Non-Hispanic White, most connected to social institutions (marriage, religion, employment) and least socioeconomically disadvantaged. While the construct of ethnicity is often ill-defined, including in the present study, the fact the majority of the sample self-identified as African-American and single is unique in that it provides insight into a minority population with additional vulnerabilities. It should be noted however that 25% of the sample did not meet lifetime POUD. While this group was unique with regard to employment status, no significant differences were found in demographics when compared to the total sample.

Current study participants reported greater personal vulnerability characterized by markers of higher SUD severity (100% severe specification) and lifetime SUD comorbidity rates (62.5%). Research suggest these individuals are more likely to use some kind of formal treatment service in their lifetime to help resolve their problems (Kelly et al., 2017, 2019; Klingemann & Sobell, 2001). Given there were no significant differences among the FE and DNFE groups with respect to severity levels and lifetime SUD comorbidity rates, this sample provides support for the notion that recovery without formal treatment is possible even among the most vulnerable.

Current study participants reported that spirituality (significant at p = .01) and religion were more important in their current lives compared to prior to recovery. This is consistent with research that has found religion and spirituality to be a positive factor in SUD recovery (Alcoholics Anonymous, 2001; Grim & Grim, 2019). Interestingly this change was mostly due to changes in the importance of spirituality (significant at p = .005) and religion among those in the DNFE group. The DNFE group was more likely to endorse the category of religious /
spiritual involvement throughout the Participant Interview compared to the FE group, although not statistically significant. Further investigation is needed; however, these results suggest that individuals who seek treatment may be more likely to rely on religion and spirituality throughout recovery.

6.1.3 Maintenance Factors
The factors involved in maintaining recovery from POU/D/AUD were similar across data collection methods. That is, in both the data analysis and the checklist, the top two maintenance factors reported across the entire sample were social support / accountability and cognitive strategies. Often these were followed by more behaviorally oriented factors such as religious / spiritual involvement and stimulus control / avoidance. This pattern of results differs from the natural recovery literature insofar as across a number of previous studies, the top maintenance factors have tended to be more behavioral rather than cognitive in nature (Bischof et al., 2012; Carballo et al., 2007; Sobell et al., 2000). It’s important to note that these studies did not differentiate maintenance factors by gender or specific SUDs. A more recent study looking specifically at cannabis use disorder found a similar pattern of results as the current study, however, the authors did not present the results by gender (Stea et al., 2015).

Moreover, it has been suggested that independent of treatment status, a difference between those with alcohol compared to drug problems with respect to maintenance factors is that people who consume drugs are more likely to leave the environment in which drugs are consumed. They are also more likely to break off social relationships with drug-consuming friends (i.e., people, places and things; Bischoff et al., 2012; Sobell et al, 2000). It should be noted however that this may just be a result of the substance itself given alcohol is more ubiquitous and/or normative in U.S society and culture than other drugs. However, the results
from the present study suggest that individuals with POUD specifically might be relatively unique compared to other SUDs insofar as maintenance factors that were either social or cognitive in nature were by far the most frequently endorsed (i.e., approximately 81.25% of participants endorsed social support / accountability as the top factor in the qualitative data analysis compared to stimulus control / avoidance which was the fourth most endorsed factor at approximately 37.5%; and the top five checklist items were all cognitive in nature). These results suggest that a relatively stronger dose of cognitive and motivational therapy elements, compared to behavioral therapy elements, might be particularly useful in the development of longer-term treatment and self-help protocols for POUD/AUD. They also suggest that a conscious effort should be made to increase individuals social support networks.

It should also be noted that the DNFE group was consistently more likely to endorse social supports as a factor in maintaining their recovery regardless of how the question was framed (general maintenance factors, time spent, pleasure and enjoyment), whereas the FE group was more likely to endorse cognitive strategies. These results are somewhat surprising given the focus on social supports as a key factor in maintaining natural recovery among much of the literature (Carballo et al., 2007; Hser et al., 2015; Sobell et al., 2000). On the other hand, given that a large proportion of those in the DNFE had received treatment in their lifetime, it makes sense that they may also be more likely to seek help from social supports. It should also be noted that women are more likely to identify social supports as a key factor in overcoming a SUD compared to men (SAMHSA, 2009). Therefore, additional research focusing specifically on men who have recovered naturally from POUD are needed as a means of comparison.

Additionally, the top four maintenance factors endorsed by the total sample (social support / accountability, cognitive strategies, religious / spiritual involvement and stimulus
control avoidance) are reminiscent of standard twelve-step facilitation interventions (e.g., AA and NA). The original AA intervention is purported to work via its social fellowship and 12-step program (AA, 2001). The social components operate through peer support and role modeling of successful SUD recovery, and through providing close mentoring and recovery management oversight through “sponsorship.” Members are encouraged to obtain a 'sponsor' - a recovery mentor well-established in sobriety - who can offer guidance, daily support, and accountability to help new members stay sober. Furthermore, the observation of others who are sustaining recovery in AA can instill much-needed hope for a better future. (i.e., social support / accountability). AA also provides an arena for members to learn, and model, effective communication and coping skills, as well as specific strategies for abstaining from substances (i.e., stimulus control / avoidance). The 12-step program is intended to facilitate the internal psychological, emotional, and spiritual changes deemed necessary to sustain abstinence and lead to enhanced psychological well-being and improved relationships that can compete with the more immediate rewards provided by substance use (i.e., cognitive strategies). AA has an ostensibly 'spiritual' basis, which some members consider central to the program, and which may underlie the altruistic behavior that can help promote recovery (i.e., religious / spiritual involvement). In a recent review of research comparing 12-step facilitation interventions to other treatments, specifically CBT and MET, findings show 12-step facilitation interventions to lead to better outcomes over the subsequent months and years in terms of producing higher rates of continuous abstinence (Kelly et al., 2020). Traditionally, however, AA was created by white/Caucasian men, for white/Caucasian men and meetings tended to be white/Caucasian male dominated, which can be particularly off putting to women and individuals of varying ethnicities and cultures. In recent years, AA has expanded to include mixed sex or women only groups
(AA, 2018) as well as other ethnic minority groups (AA, 2018, 2019), although membership is still skewed heavily to white/Caucasian (89% white) men (62% men vs 38% women) (AA, 2014). Among those attending NA however, membership tends to be more evenly split between men and women (57% men vs 42% women, and 1% other) but still high among white/Caucasians (70%; NA, 2018).

In terms of how people spend their time post-POUD/AUD while social supports were still high on the list (31.25%), work/school involvement (43.75%) and reality/life/staying busy (43.75%) were most often endorse. These results suggest the need for continued effort in building job and life skills throughout the recovery process, maybe even more so among those in the contemplation stage. In terms of what people do for pleasure and enjoyment without POUD/AUD, hobbies were most often endorsed (68.75%) followed by cooking/eating (43.75%). Hobbies included things like going to the movies, coloring, knitting, reading, writing, being outdoors, picnics, concerts, shopping, festivals, sporting events, and listening to music. Although some participants identified smart phone applications such as Candy Crush, it was surprising that there were not more references to technology or social media throughout the Participant Interview. This may have something to do with the average age of the participants as well as socioeconomic status. None the less these results are consistent with findings from studies utilizing existing measurement instruments (i.e., Pleasant Events Schedule, Leisure Interest Checklist, Pleasant Activities List, Sober Living Activities). These results also highlight the need for quality of life measures to include questions specific to pleasure and enjoyment.

6.1.4 Change Over Time

Anecdotal evidence supports the idea that it takes several attempts at recovery before individuals can remain clean and sober. For example, NIDA defines addiction as a “chronic,
relapsing disorder characterized by compulsive drug seeking and use despite adverse consequences” (NIDA, 2018). Also, with regard to AUD, the National Institute of Alcohol Abuse (NIAA) similarly defines AUD as “a chronic relapsing brain disease characterized by compulsive alcohol use, loss of control over alcohol intake, and a negative emotional state when not using” (NIAAA, 2011). These definitions imply that once the condition has developed, it will require long-term or permanent clinical management, and that it is inherently and persistently characterized by setbacks in the form of excessive drug use. There is, however, a growing body of empirical evidence that refutes this idea (Cunningham & McCambridge, 2012; Heyman, 2013; Kelly et al., 2019; MacKillop, 2020; Peele, 2016).

In the current study the limit of significant attempts was set at five both during completion of the timeline (Domain 1) as well as Domain 3 (i.e., Comparison of Previous Attempts at Recovery) to ensure timely completion of the interview, yet, no participant identified more than five significant attempts at recovery in their lifetime. Nearly 70% of the total sample reported that they had relapsed to problematic POU/D/AUD after they had already begun to overcome their problem, with an average of approximately 2.75 (Median = 3) significant recovery attempts across the total sample. These results are consistent with the findings from Kelly and colleagues (2019) in which they found that participants reported on average five recovery attempts with a median of two or three (depending on the analytic approach). This is not to say that individuals didn’t make additional attempts at recovery, but it is likely those attempts did not stand out as significant in some way. Significant recovery attempts often had some major life event surrounding them such as the passing of a loved one, birth of a child, or arrest/incarceration likely making them easier to recall.
Additionally, Kelly and colleagues (2019) found that individuals who had received treatment or recovery support services, including inpatient, outpatient, mutual help, or any support service, reported a greater number of recovery attempts. They go on to note that this association may be due to a greater severity of alcohol and other drug related impairment (i.e., lower age of onset; poly-substance use) requiring greater degrees of focused and intensive support. Unfortunately, the authors did not analyze the data with regard to the number of DSM-5 SUD symptom criteria endorsed. The results of this current study, however, are inconsistent with this claim as the total sample (100%) had a severe POUD and/or AUD specification.

Kelly and colleagues (2019) also analyzed this data by specific substances noting that although there were differences in the distribution of number of recovery attempts by primary substance, these did not reach statistical significance. They continue stating this is likely due to the large amount of variability, particularly within alcohol and opioid groups. The mean number of recovery attempts for individuals whose primary substance was alcohol was five (median = 2) while the mean number of recovery attempts for individuals who primary substance was opioids was eight (median = 3). It should be noted however that results were not presented by gender. Findings from the current study are in contrast as participants with AUD only had on average a higher number of recovery attempts (M = 3.25, median = 3) compared to those with a POUD only (M = 1.8, median 1). Therefore, findings from the current study suggest women with a SUD specific to POs may require less significant attempts at recovery compared to women with AUD only.

Changes in factors utilized across participants most recent attempt at recovery focused mostly on social supports / interactions with others (37.5%). Specifically, participants discussed not isolating, interacting with the world, and spending more time with family and friends later in
recovery whereas earlier in recovery (i.e., first 3-6 months) participants were more likely to spend time alone in self-reflection (i.e., change over time factor specific to time spent, isolation / self-reflection was the 2nd most endorsed category, 37.5%). The top change over time factor, specific to time spent, endorsed was distracted / busy (75%) meaning, early on in recovery (i.e., first 3-6 months) individuals were more strict with their time constantly trying to stay busy so as not to have idle time to think about using substances or act on impulses to use. As time went on however, individuals would often become less strict and sought a slower pace of life, finding pleasure and enjoyment in everyday things. This took time to foster however as individuals often described the first 3-6 months of recovery as boring and had a difficult time finding enjoyment or pleasure in anything (i.e., change over time factor specific to pleasure and enjoyment, bored / little enjoyment was the most endorsed category, 31.25%). Consistent with the literature, these findings highlight the difficulties (i.e., lack of enjoyment) as well as a key factor (i.e., staying busy) in maintaining recovery from SUDs (Carballo et al., 2007; DiClemente, 2006; Sobell et al., 2000; Stea et al., 2015).

6.1.5 Additional Outcomes
Analysis of timeline data yielded some interesting results. The average age of first use of any substance among the total sample was 21. This is higher than literature suggesting that most substance use occurs before age 15 for individuals with more severe SUDs (Kelly et al., 2017). Of the total sample, half noted that their first use of any substance occurred at age 15 or younger. Interestingly though, participants who had more than one recovery attempt had, on average, first used any substance at age 16, while participants who had only one recovery attempt were significantly older with an average age of 32 when they first used any substance. A similar pattern was found when looking at the average age when individuals identified their use as
problematic with those having multiple recovery attempts beginning at age 25, while those with only one recovery attempt beginning at age 42. These findings are inconsistent with recent literature that found no significant association between age of onset and number of recovery attempts (Kelly et al., 2019). This research did not differentiate between substance, gender or recovery pathway when reporting results, therefore, further research is needed to fully understand these findings. Interestingly though, this pattern was no longer present when looking at the age at which participants started their most recent recovery attempt. Participants with multiple recovery attempts started their final recovery attempt on average at age 41, while participants with only one recovery attempt started their final recovery attempt on average at age 45. While these findings are consistent with literature arguing that the likelihood of recovery increases with age (i.e., maturing out; Heyman, 2013; Winick, 1962) a subset of this population, specifically those who have made only one recovery attempt, are unique in that their age of first use and start of problematic use is much older than expected. Further research is needed to know if this is unique to this sample or the broader population of individuals who recover after only one attempt.

On average there were 10 years between when participants identified having first used any substance and when their use became problematic. This finding was similar across all group comparisons (i.e., FE vs DNFE, one recovery attempt vs multiple recovery attempts, less than three years in recovery vs more than three years in recovery). This highlights a critical time when prevention efforts should be made to reduce the risk of substance use developing into a problem. Additionally, the duration across recovery attempts was fairly consistent among the total sample hovering around 10-15 months regardless of the number of recovery attempts. Therefore, future
studies may want to consider two-year follow-ups or target women in recovery from POU for at least two years as it may be a better predictor of stability for this population.

The average duration of participants addiction career (i.e., age when individuals identified use as problematic to age of most recent attempt at recovery) was 12 years ranging from less than a year to 32 years. In the literature, the length of time it often takes individuals to achieve recovery can range from nine to 27 years, depending on how you define an addiction career, when an individual is identified as having a SUD, when a person seeks treatment and how recovery is defined (Dennis et al., 2005; Hser & Anglin, 2010). A significant difference in the duration of participants addiction career was found between those with one recovery attempt, averaging 3 years, and those with multiple recovery attempts, averaging 16 years. While this may seem like simply a function of time, no significant difference was found in duration of addiction career between those with less than three years in recovery (M=13.9) and those with more than three years in recovery (M=9.33). Again, further research is needed to fully understand if this finding is unique to this sample or the broader population of individuals who recover after only one attempt. Additionally, this highlights the need for consistency across studies with regard of how they define and operationalize SUD and recovery terms.

Of the three terms questioned, “addiction” was the least controversial. Only two participants did not self-identify with the term even though they met DSM-5 criteria for severe POU/AUD. This is in part due to the efforts that have been made to reduce stigma associated with the word addiction (Center for the Application of Prevention Technologies, 2017; Committee on the Science of Changing Behavioral Health Social Norms et al., 2016). This is counter to the decisions of the DSM-5 to omit the word “addiction” because of its “potentially negative connotation.” In the current study the term “recovery” was the most stigmatizing likely
in part due to the large variation among recovery pathways and lack of consensus on how to define recovery. Across all three terms [addiction, recovery, and relapse] the main reason study participants did not self-identify was not having a severe enough level of addiction despite having a “severe” specification of POU/AUD according to DSM-5 diagnostic criteria. Despite efforts to reduce stigma, terms like “addiction” and “recovery” can bring an image to mind of the homeless junky on the street corner begging for money and committing crimes to get their next fix. We know however that this is not the case and many seemingly “normal” individuals can be suffering with a SUD. Therefore, future efforts should continue to focus on reducing the stigma associated with these terms.

6.2 Implications for Research, Practice, and Policy

It is certainly timely to conduct research into the recovery process from POU. There has been ongoing concern regarding the number of overdose deaths associated with the use of POs as well as the consistently high rates of POU. With what appears to be a continuing trend even with the numerous attempts at curbing the use of POs (i.e., restrictions on prescribing, changing the formulation, etc.) it remains unclear to what extent these changes might impact the incidence of POU specifically and OUD broadly. While the majority of individuals who use POs will not develop a problem, the substantial minority of individuals who will develop a problem deserve greater access to non-stigmatizing and improved treatment options (Han et al., 2017). With a view towards identifying public health and community level interventions the present study explored the natural recovery process from POU (and substances with a similar reaction to the body and brain, specifically AUD), the findings of which hold a number of implications for research, practice and policy.
First, in light of the promising evidence base for cognitive behavioral and motivational enhancement therapy approaches for the treatment of POU (Hruschak et al., 2018; Moore et al., 2016), the findings from the present study lend further support to the effectiveness of cognitive, motivational, and behavioral strategies as helpful factors involved in the recovery process from POU and AUD. Furthermore, the results of this study provide additional support to an already growing body of evidence for effectiveness of 12-step facilitation interventions for women with an AUD (Kelly et al., 2020). It is therefore incumbent upon policy makers to ensure that these evidence-based treatments are being disseminated to, and employed in, substance use treatment programs. Unfortunately, despite treatment need for POU, most evidence-based substance use treatments do not easily find their way into practice (Manuel et al., 2011; Miller et al., 2006), and this challenge might be expected to be exacerbated with respect to treatments that are specific to POU given that the lag in its evidence base relative to alcohol and other SUD treatments. However, given the visibility and devastating effects due to overdoses, one would hope this would give impetus to ensure quick dissemination and implementation of these evidence-based treatments into practice. Additionally, the findings that cognitive strategies were rated as one of the more helpful factors involved in the recovery process relative to behaviorally based supports, suggests that one way to improve the effects of POU treatments might be to increase the dose or potency of cognitive and motivational components in treatments relative to behavioral components. Additional research is needed however to test this hypothesis.

Second, the findings suggested that for the most part, the recovery process is similar among those that have recovered naturally and those that have sought a limited amount of treatment in their lifetime. This is consistent with Klingemann et al.’s (2009) contention that there exists a shrinking gap between the natural recovery and treatment outcome literature.
However, some notable differences between these groups (i.e., FE and DNFE) did emerge, specifically that the DNFE group was consistently more likely to endorse the category of social supports / accountability in comparison to the FE group. These findings suggest that individuals who seek treatment in their lifetime might be more likely to make use of social supports and social accountability throughout their recovery. Therefore, increasing social support networks might be particularly helpful for individuals seeking treatment for POUD. These results are similar to those identified among individuals seeking treatment for a cannabis use disorder (Stea et al., 2015).

Third, the findings highlight the need for more research into public health and community level interventions aimed at targeting individuals who do not seek treatment. Research has found that more individuals are utilizing community-based recovery support services in the past 15-20 years, such as faith-based recovery services, sober living environments, and recovery community centers (Kelly et al., 2017). Apart from sober living environments, little is known about these recovery support services – an important knowledge gap given they appear to be used at least by a substantial minority of individuals around the U.S (22%; Kelly et al., 2017). Additionally, finding ways to support and expand programs like AA and NA (with particular focus on 12-step principles and social fellowship) within communities to be more inclusive of all genders, races, ethnicities, sexual identities, disabilities, etc., could have promising results for reducing SUDs and should be further explored.

6.3 Limitations and Future Directions

The findings from the present study ought to be viewed in light of several theoretical and methodological limitations. Theoretically, one of the major challenges in the present study was how to navigate the issue of operationally defining the construct of recovery and more
specifically natural recovery. Indeed, this challenge is not unique to the present study, as it is intrinsically difficult to carve out groups of participants that can represent different recovery pathways; that is, irrespective of the parameters that are used to define such groups, there will remain the risk that artificially-determined groups will become reified that may or may not approximate the desired construct. Nevertheless, this challenge should not stifle an attempt to extend our knowledge – but the results need to be interpreted in light of this challenge.

With respect to natural recovery, an argument might be made that participants who reported only one or a few sessions of substance use treatment 10+ years prior to their most recent successful attempt at recovery, or that treatment was not helpful, were not naturally recovered, and therefore should not have been included in the total sample. On the other hand, it can be argued that this idea of retaining the integrity of the total sample based on the categorical report of ever seeking substance use treatment is too conservative. Including participants in the present study based on reports of only experiencing one or a few sessions of treatment or not finding treatment helpful assumes that in reality, absolutely no benefit from seeking treatment was imparted to the participant, which might not always be the case; further, it artificially creates a sub-group of treatment-seekers and it is unclear as to how this sub-group would be expected to differ from individuals who have never sought treatment. Indeed, it is not uncommon for individuals who had been in treatment to report that treatment played no role in their recovery or even that they had recovered despite having been in treatment (Klingemann et al., 2009). Thus, including participants in the present study even if they reported seeking treatment may not be the most objective way to proceed and makes assumptions about the impact of treatment. However, as Klingemann et al. (Klingemann et al., 2009, p. 1511) has suggested, "researchers should not become so tied down in methodological particularities (e.g., how many Alcoholics Anonymous
(AA) meetings, if any, an observer should be allowed; should a passing comment by a physician that one should cut down drinking be considered treatment) so as to lose sight of the greater question—how does change occur?" Therefore, future studies should focus less on identifying the “prefect sample” based on stringent inclusion / exclusion criteria, rather, studies should be inclusive of a broader population while still collecting data specific to variables of interest (e.g., substance use disorder, treatment utilization and recovery pathways), and ensure analysis and reporting is based on these variables and consistent across studies.

An argument might also be made that even though the naturally recovered group had reported never seeking substance use treatment, only the participants who had never sought any other forms of treatment (i.e., mental health) should be considered naturally recovered. Again, however, it was safer and more conservative to demarcate the sample based on the participants' perceptions of ever seeking substance use treatment, so as to not make any assumptions about the source of change—and in this instance, assumptions particularly about the impact of cross-treatment effects on recovery from POU/AUD. Indeed, while cross-treatment effects might be expected to influence the recovery from any mental health or SUD problem (not just POU/AUD), one of the primary objectives of the present study involved exploring natural recovery from POU/AUD per se and with a view towards maximizing external validity, not natural recovery from all mental health and SUD problems.

Another theoretical issue concerns the broader definition of recovery that was employed in the present study, whereby recovery was defined as 12-months sustained full remission from POU/AUD. One concern with this definition is that the 12-month duration of recovery might be considered unstable, and indeed, five years of sustained full remission has been proposed as a way to avoid biased results due to unstable recoveries (Sobell, 2007). However, as already noted,
the most widely used criterion for recovery in the natural recovery literature has been 12-months sustained full remission (Bischof et al., 2012), and there is evidence that most natural recoveries with an initial duration of at least 12-months are stable (Rumpf et al., 2006). It’s important to note, however, that 25% of the total sample in the current study had less than 12-months in recovery. Scores on the BARC-10 for these participants provide support for their inclusion in the total sample, however, future studies could benefit from defining recovery in longer terms to account for any instabilities.

Yet another objection that might be levied towards the definition of recovery used in the present study is that a rather narrow definition of recovery has been employed that does not fully account for a holistic view of the recovery experience (e.g., does not measure healing and growth processes and personal characterological change). While this objection might be valid, it should be balanced with the recognition that the present study did account for other recent developments in the SUD and natural recovery literature, such as the acceptance of harm reduction approaches via the recognition that recovery and abstinence are not isomorphic concepts, and the inclusion of individuals who may still use substances but just not at levels that meet diagnostic criteria. Nevertheless, future research would indeed benefit from an examination of recovery that goes beyond the remission of symptoms to include improvements in psychosocial functioning and personal transformation.

An additional issue can be made with regard to the sample recruitment strategy utilized. The current study relied heavily on Craigslist for recruitment. While this method of recruitment yielded the largest proportion of the final sample (68.75%) recent changes to Craigslist’s “terms of use” impacted recruitment efforts, namely posting across multiple cities and associated costs with certain advertisements. Craigslist notes in their terms of use that users may “post to one
category and in one city, no more than once every 48 hours” (Craigslist, Inc. 2019). Essentially users are not allowed to post the same ad in multiple cities and once an ad is posted, it cannot be posted in another city for at least 48 hours. Additionally, in order to avoid specific fees posts must meet certain criteria making it less appealing and less likely to be seen. While this, and other recruitment methods utilized in this study have been shown to be effective and efficient previously, it’s important to identify additional ways to recruit hard to reach populations in an age of digital technology and social media. It should also be noted that individuals recruited via Craigslist may differ in some way from those recruited via other methods. Additionally, findings need to be interpreted in light of this making them less generalizable.

Moreover, this study raised concerns more broadly regarding the need for effective and efficient recruitment methods in the age of technology and social media. The digital revolution has changed the way people interact with technology and the world around them (Brownstein, 2015; McKee et al., 2019). The challenge becomes not only grabbing people’s attention, so they interact with an advertisement to learn more or respond to an initial prompt, but to keep people’s attention so they follow through with fully participating in the study (as discussed above in section 6.1.1. Recruitment Outcomes). Study recruitment becomes a marketing campaign with the researcher being the creative director. It’s difficult for anyone to be an expert in all fields, therefore, most large scale nationally representative studies higher companies to develop advertisements and conduct recruitment. However, smaller studies with limited funds don’t always have that option and may find this process more challenging. Therefore, new strategies need to be identified that are cost effective and efficient at recruiting participants. One possible solution is social media platforms like Facebook, Instagram and Twitter. Many of these platforms offer advertising options at a minimal fee. While the current study utilized Facebook
advertisement, this recruitment method did not yield any study participants. This is likely due to the limited knowledge on the authors part regarding how best to utilize this tool for maximum effectiveness and how to create a compelling advertisement. Future studies could benefit from better utilization of these social media outlets and their advertising capabilities.

Methodologically, one issue is that the data were derived from self-reported and retrospective accounts of the recovery process from a cross-sectional sample, which raises concerns about the validity of participants' memory of their recoveries. This concern is exacerbated in the case of recovery from POUD, whereby long-term PO use has been found to be associated with cognitive and memory impairments (Baldacchino et al., 2012; Baldini et al., 2012; Garland et al., 2013; Kroll et al., 2018). Nevertheless, retrospective research of this nature has by far been the norm in the natural recovery literature and research has shown that both untreated and treated individuals with a SUD tend to provide reasonably accurate accounts of their pre- and post-recovery substance use and related experiences when compared to collateral reports (Bischof et al., 2012; L. C. Sobell, 2007; Stea et al., 2015). However, despite the precautions taken to increase the reliability of participants' retrospective self-reports (i.e., relatively recent recovery, the use of timelines), future research would certainly benefit from the incorporation of real-time data collection procedures—such as journaling or diaries incorporated into longitudinal designs to investigate multiple recovery pathways from POUD.

Both a methodological limitation and strength of the present study was that its eligibility criteria maximized external validity at the expense of internal validity with respect to comorbidity. That is, by including participants with lifetime comorbidity of other SUDs and (possibly) psychiatric disorders, the findings are potentially confounded by variables related to comorbid conditions, which threatens the internal validity of the findings as they specifically
relate to recovery from POUd. On the other hand, comorbidity of POUd with other SUDs and psychiatric disorders has been found to be the rule rather than the exception (Saha et al., 2016), therefore, the findings can be considered to be derived from a representative sample of individuals who have had POUd and who have both sought and not sought substance use treatment. In maximizing external validity with respect to comorbidity, the findings become generalizable to individuals with POUd and thus transferable to clinical practice.

At the same time, however, the external validity of the findings is threatened by other aspects of the sampling. Specifically, the present study used a media-solicited convenience sample in Chicago, IL, initially then broadly across the U.S. (mainly New York, NY, Los Angeles, CA and Houston, TX), and therefore, the findings might not reflect the experiences of individuals in other geographical locations and cultures. Moreover, in the natural recovery literature, media-solicitation has been found to lead to biased samples of strongly dependent participants with higher rates of abstinence compared to general population samples; though variables related to reasons for resolution and maintenance factors have been reported to be less affected (Bischof et al., 2012). Future research is thus needed that examines the recovery process from POUd in general population-based random samples.

Another potential methodological concern is that some self-report surveys were verbally administered during the various interviews rather than administered in the paper-pencil format in which they were originally intended. These questionnaires were verbally administered in order to decrease the length of the interview (i.e., participant fatigue) and to ensure consistency of administration across the other various interviews that were conducted via telephone. While it is possible that demand characteristics due to the verbal administration of the questionnaires might have resulted in the under-reporting of problem severity, this possibility is unlikely to have
dramatically affected the findings given that participants volunteered for the study and were made aware via the study advertisements and informed consent procedures that participation would involve the disclosure of PO/alcohol problems.

Lastly, the exploratory nature of the present study was successfully able to generate hypotheses and provide directions for future research. The following set of 7 hypotheses, which were alluded to throughout this dissertation, were either derived from, or consistent with, the findings of the present study, and are empirical questions/statements that deserve further attention in future research: 1) Identify and test various technology-based recruitment strategies for a naturally recovered population, while also, 2) petitioning current large-scale epidemiologic studies to collect, analyze and report on data specific to recovery pathways. This will likely require 3) continued discussions among experts in the field on identifying standardized measures for defining and operationalizing recovery broadly, as well as specific pathways (i.e., abstinence-oriented, moderation-oriented, treatment-assisted and natural recovery), and ensuring it 5) includes variables specific to how individuals spend their time and what they do for pleasure and enjoyment post-SUD. 4) An experimental cognitive behavioral and motivational enhancement therapy intervention composed of an increased dose of cognitive and motivational strategies relative to behavioral strategies might outperform a standard cognitive behavioral motivational enhancement intervention for POUĐ throughout all stages of the recovery process. 5) A public health campaign that decreases substance use treatment stigma and increase awareness of PO-specific treatments (both abstinence- and moderation-based) and 12-step based programs might increase treatment seeking. 6) Further research that focuses specifically on men in relation to natural recovery from POUĐ as a means of comparison to the current study findings. 7)
Development of community level interventions focused on increasing social support networks for women with POUD that seek treatment.

6.4 Conclusion

This grounded theory study serves as an important contribution to the literature in furthering the understanding of the resources women utilize in assisting them throughout the recovery process from POUD, and ultimately how those resources change over time within individuals most recent attempt at recovery as well as prior attempts. There remains much work to be done to fully understand the mechanisms that underly recovery from POUD specifically, as well as SUDs broadly. This work will be complex and will take time but may ultimately improve our ability to assist individuals throughout the recovery process both for those that seek treatment and those that don’t.
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Appendix
Appendix A: DSM-5 Definition of Substance Use Disorder

Features

Substance Use Disorders

Overall, the diagnosis of a substance use disorder is based on a pathological pattern of behaviors related to use of the substance. To assist with organization, Criterion A criteria can be considered to fit within overall groupings of impaired control, social impairment, risky use, and pharmacological criteria.

Impaired control over substance use is the first criteria grouping (Criteria 1–4).

- The individual may take the substance in larger amounts or over a longer period than was originally intended (Criterion 1).
- The individual may express a persistent desire to cut down or regulate substance use and may report multiple unsuccessful efforts to decrease or discontinue use (Criterion 2).
- The individual may spend a great deal of time obtaining the substance, using the substance, or recovering from its effects (Criterion 3). In some instances of more severe substance use disorders, virtually all of the individual’s daily activities revolve around the substance.
- Craving (Criterion 4) is manifested by an intense desire or urge for the drug that may occur at any time but is more likely when in an environment where the drug previously was obtained or used. Craving has also been shown to involve classical conditioning and is associated with activation of specific reward structures in the brain. Craving is queried by asking if there has ever been a time when they had such strong urges to take the drug that they could not think of anything else. Current craving is often used as a treatment outcome measure because it may be a signal of impending relapse (Miller et al., 1996).

Social impairment is the second grouping of criteria (Criteria 5–7).

- Recurrent substance use may result in a failure to fulfill major role obligations at work, school, or home (Criterion 5).
- The individual may continue substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (Criterion 6).
- Important social, occupational, or recreational activities may be given up or reduced because of substance use (Criterion 7). The individual may withdraw from family activities and hobbies in order to use the substance.
Risky use of the substance is the third grouping of criteria (Criteria 8–9).

- This may take the form of recurrent substance use in situations in which it is physically hazardous (Criterion 8).

- The individual may continue substance use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (Criterion 9). The key issue in evaluating this criterion is not the existence of the problem, but rather the individual’s failure to abstain from using the substance despite the difficulty it is causing.

Pharmacological criteria are the final grouping (Criteria 10 and 11).

- Tolerance (Criterion 10) is signaled by requiring a markedly increased dose of the substance to achieve the desired effect or a markedly reduced effect when the usual dose is consumed. The degree to which tolerance develops varies greatly across different individuals as well as across substances and may involve a variety of central nervous system effects. For example, tolerance to respiratory depression and tolerance to sedating and motor coordination may develop at different rates, depending on the substance. Tolerance may be difficult to determine by history alone, and laboratory tests may be helpful (e.g., high blood levels of the substance coupled with little evidence of intoxication suggest that tolerance is likely). Tolerance must also be distinguished from individual variability in the initial sensitivity to the effects of particular substances. For example, some first-time alcohol drinkers show very little evidence of intoxication with three or four drinks, whereas others of similar weight and drinking histories have slurred speech and incoordination (Schuckit et al., 2011).

- Withdrawal (Criterion 11) is a syndrome that occurs when blood or tissue concentrations of a substance decline in an individual who had maintained prolonged heavy use of the substance. After developing withdrawal symptoms, the individual is likely to consume the substance to relieve the symptoms. Withdrawal symptoms vary greatly across the classes of substances, and separate criteria sets for withdrawal are provided for the drug classes. Marked and generally easily measured physiological signs of withdrawal are common with alcohol, opioids, and sedatives, hypnotics, and anxiolytics. Withdrawal signs and symptoms with stimulants (amphetamines and cocaine), as well as tobacco and cannabis, are often present but may be less apparent. Significant withdrawal has not been documented in humans after repeated use of phencyclidine, other hallucinogens, and inhalants; therefore, this criterion is not included for these substances. Neither tolerance nor withdrawal is necessary for a diagnosis of a substance use disorder. However, for most classes of substances, a past history of withdrawal is associated with a more severe clinical course (i.e., an earlier onset of a substance use disorder, higher levels of
substance intake, and a greater number of substance-related problems) (Chen et al., 2009).

Severity and Specifiers

Substance use disorders occur in a broad range of severity, from mild to severe, with severity based on the number of symptom criteria endorsed. As a general estimate of severity, a mild substance use disorder is suggested by the presence of two to three symptoms, moderate by four to five symptoms, and severe by six or more symptoms. Changing severity across time is also reflected by reductions or increases in the frequency and/or dose of substance use, as assessed by the individual’s own report, report of knowledgeable others, clinician’s observations, and biological testing. The following course specifiers and descriptive features specifiers are also available for substance use disorders: “in early remission,” “in sustained remission,” “on maintenance therapy,” and “in a controlled environment.” Definitions of each are provided within respective criteria sets.

Substance Intoxication and Withdrawal

Criteria for substance intoxication are included within the substance-specific sections of this chapter.

- The essential feature is the development of a reversible substance-specific syndrome due to the recent ingestion of a substance (Criterion A).
- The clinically significant problematic behavioral or psychological changes associated with intoxication (e.g., belligerence, mood lability, impaired judgment) are attributable to the physiological effects of the substance on the central nervous system and develop during or shortly after use of the substance (Criterion B & C).
- The symptoms are not attributable to another medical condition and are not better explained by another mental disorder (Criterion D). Substance intoxication is common among those with a substance use disorder but also occurs frequently in individuals without a substance use disorder. This category does not apply to tobacco.

The most common changes in intoxication involve disturbances of perception, wakefulness, attention, thinking, judgment, psychomotor behavior, and interpersonal behavior. Short-term, or “acute,” intoxications may have different signs and symptoms than sustained, or “chronic,” intoxications. For example, moderate cocaine doses may initially produce gregariousness, but social withdrawal may develop if such doses are frequently repeated over days or weeks (O’Brien, 2011).

Criteria for substance withdrawal are included within the substance-specific sections of this chapter.
• The essential feature is the development of a substance-specific problematic behavioral change, with physiological and cognitive concomitants, that is due to the cessation of, or reduction in, heavy and prolonged substance use (Criterion A).

• The substance-specific syndrome causes clinically significant distress or impairment in social, occupational, or other important areas of functioning (Criterion B & C).

• The symptoms are not due to another medical condition and are not better explained by another mental disorder (Criterion D). Withdrawal is usually, but not always, associated with a substance use disorder. Most individuals with withdrawal have an urge to re-administer the substance to reduce the symptoms.
**Appendix B: Brief History of the Definition of Addiction (according to the DSM)**

In the first edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-I), published in 1952, alcoholism and drug addiction were grouped with “sociopathic personality disturbances (SPD)” alongside antisocial reaction, dissocial reaction, and sexual deviation (American Psychiatric Association & National Conference on Medical Nomenclature (U.S.), 1952). The creators of DSM-I grouped together under SPD four behaviors that society judged as the most morally corrupt during that time (Nathan et al., 2016). Signs and symptoms were not described but the idea that addiction came from an underlying brain syndrome or personality disorder was established. For a majority of mental disorders the second edition of the DSM (DSM-II) was very similar to the first DSM and published in conjunction with the World Health Organizations’ (WHO) International Classification of Diseases, 8th edition (ICD-8) in 1968. However, for alcoholism and drug addiction, subtypes and subcategories were added. For alcoholism, the added subtypes included: episodic excessive drinking, habitual excessive drinking, alcohol addiction and other (American Psychiatric Association, 1968). For drug addiction, specific drug classes and physiological signs of dependence (withdrawal and tolerance) were introduced.

The third edition of the DSM (DSM-III) introduced a number of important innovations, including explicit diagnostic criteria, a multi-axial diagnostic assessment system, and an approach that attempted to be neutral with respect to the causes of mental disorders. Work on DSM-III began in 1974 and was published in 1980 whereas the ICD-9 was published in 1975 and implemented in 1978 (Nathan et al., 2016). It wasn’t until this edition that substance use disorders were no longer listed under personality disorders instead they received their own section. Also clear distinctions between substance use, substance abuse, and substance dependence were identified. Substance abuse was defined as the presence of drug related problems in the absence of physiological symptoms whereas substance dependence required one or more signs of physiological dependence, either tolerance or withdrawal (or both) to be present (American Psychiatric Association, 1980). The DSM-III also introduced the idea of a public health model to explain addiction rather than the psychoanalytic theory and stigmatizing societal views on these disorders in DSM-I and DSM-II (Nathan et al., 2016).

Experience with DSM-III revealed inconsistencies in the system and unclear diagnostic criteria. APA appointed a work group to revise DSM-III which led to the publication of the revised version of the DSM-III (DSM-III-R) in 1987 (American Psychiatric Association, 1987). While the DSM-III-R reflected a growing concept that substance use disorders really involved a broader behavioral syndrome and was not only defined by physical symptomology, it essentially was a symptom count (Nathan et al., 2016). The abuse category remained for people who never met the dependence diagnosis, although abuse and dependence symptoms overlapped and were not distinct.
The fourth edition of the DSM (DSM-IV) was published in 1994 along with the ICD-10 in 1992 (American Psychiatric Association, 1994). DSM-IV was a culmination of a six-year effort that involved more than 1,000 individuals and numerous professional organizations (Nathan et al., 2016). Much of the effort involved conducting a comprehensive review of the literature to establish a firm empirical basis for making modifications. Numerous changes were made to the classification (e.g., disorders were added, deleted, and reorganized), to the diagnostic criteria sets, and to the descriptive text. Over 100 different substance related disorders for 12 different classes of drugs were identified. Also substance use dependence was now a “syndrome” involving compulsive use, tolerance and withdrawal (American Psychiatric Association, 1994).

In 2000 the APA released a text only revision (i.e., not a revision of the criteria) of the DSM-IV (DMS-IV-TR) (American Psychiatric Association, 2000). Due to new findings on the epidemiology, etiology and treatment of substance use disorders, the DSM-IV (and DMS-IV-TR) defined substance abuse as meeting any of the four criteria revolving around recurrent problems related to the substance. These four criteria were specific to abuse and did not overlap with dependence. Dependence required three or more of seven physiological or behavioral criteria (American Psychiatric Association, 2000; Nathan et al., 2016). This created problems in diagnosing as some individuals would meet none of the criteria for abuse and only one or two of the criteria for dependency and therefore would be “un-diagnosable.”

Beginning in 2000, work groups were formed to create a research agenda for the fifth major revision of the DSM (DSM-5) (American Psychiatric Association, 2013). These work groups generated hundreds of white papers, monographs, and journal articles, providing the field with a summary of the state of the science relevant to psychiatric diagnosis and letting it know where gaps existed in the current research, with hopes that more emphasis would be placed on research within those areas. In 2007, APA formed the DSM-5 Task Force to begin revising the manual as well as 13 work groups focusing on various disorder areas (American Psychiatric Association, 2014). DSM-5 was published in 2013. Factor analysis found that the abuse and dependence criteria actually loaded on a single factor and are interrelated with each other (Nathan et al., 2016). Therefore DSM-5 substitutes the term “substance use disorder” for addiction and introduces the diagnosis in the following way:

*The essential features of a substance use disorder are a cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues using the substance despite significant substance related problems. . . An important characteristic of substance use disorders is underlying changes in brain circuits that may persist beyond detoxification. . . Overall, the diagnosis of a substance use disorder is based on pathological patterns of behaviors related to use of the substance* (American Psychiatric Association, 2013).

Following this, four groupings of 11 criteria are proposed to assist with clinical diagnosis. The four groups and each of their identified criteria are as follows: Impaired control (criteria 1-4), social impairment (criteria 5-7), risky use (criteria 8-9) and pharmacological criteria (criteria 10-
11) (American Psychiatric Association, 2013). Substance use disorders occur in a broad range of severity, from mild to severe, with severity based on the number of symptom criteria endorsed.
Appendix C: Brief History of Addiction Treatment in the U.S.

The majority of the information presented in this subsection comes from two main texts unless otherwise noted. These texts include: *Slaying the Dragon: The History of Addiction Treatment and Recovery in American* (White, 2014) and *History of Treatment in The United States* from the *Encyclopedia of Drugs and Addictive Behavior* (Baumohl & Jaffe, 2001).

The Asylum Tradition

The growing Temperance Movement of the mid-19th century began experimenting with “rescue work” for those struggling with addiction. Initially it was believed that sobriety could be sustained by signing a pledge not to drink and attending temperance meetings. Temperance societies quickly learned this was not enough and began creating “inebriate homes” that supported the “moral model” of recovery and required immersion in sober fellowship. The first of these homes were the Washingtonian Homes opened in Boston in 1857 and Chicago in 1863. Stay at these homes was voluntary and often short. Upon leaving individuals were encouraged to regularly attend local recovery support groups. This is not unlike many of the recovery programs available today where individuals are taken out of their “normal” environment for a short period of time and then upon returning are encouraged to attend local AA/NA meetings.

Medically-directed “inebriate asylums” began to emerge after requests came for more specialized medical facilities. These asylums relied on legal coercion (multi-year legal commitments) and emphasized physical and psychological methods of treatment (drug therapies, hydrotherapy, hypnotherapy). The first of these facilities was the New York State Inebriate Asylum opened in 1864 under the leadership of Dr. Joseph Edward Turner.

In 1870, the leaders of several inebriate homes and asylums met in New York City. The result was the creation of the first professional association of addiction treatment providers entitled the American Association for the Cure of Inebriety. In 1876 the Association began publishing the *Quarterly Journal of Inebriety*, the first addiction-themed specialty journal edited solely by Dr. T.D. Crothers till its end in 1914.

As inebriate homes and asylums achieved greater visibility new competitors from the private, proprietary and medical sectors began popping up. The Keeley Institute is one of the most notable proprietary institutes founded in 1879 and later expanding to more than 120 franchises. The founder, Dr. Leslie Keeley proclaimed that “Drunkenness is a disease and I can cure it.” He did so by using his Double Bi-Chloride of Gold Cures of Drunkenness and the Opium and Tobacco Habits. Bottled home cures for the “alcohol, tobacco and drug habits” were aggressively promoted by the medical sector. They were soon removed from shelves however when an expose in 1905 revealed that most of these products contained high dosages of morphine, cocaine, alcohol and cannabis.
Around the same time religiously oriented rescue missions and urban city hospitals also began providing services for those struggling with addiction. Jerry McAuley, whose own religiously inspired recovery from alcoholism led him to opening the Water Street Mission in 1872. The Salvation Army later followed suit opening religiously oriented programs for alcoholics. It was urban city hospitals however who bore an increasing brunt of the responsibility for the care of chronic alcoholics. Bellevue Hospital in New York City opened an “inebriate ward” in 1879 and saw its alcoholism admissions increase from 4,190 in 1895 to more than 11,000 in 1910.

The U.S. was seeing a steady increase in addiction treatment programs in the late 1800s. It was clear individuals suffering with addiction were struggling to recover on their own and needed support. However, just as soon as these programs were created, they were shut down for a multitude of reasons: 1) unethical business and clinical practices, 2) differing ideological views within the field of addiction on the best way to treat addicts, 3) lack of scientific studies validating the effectiveness of treatment, 4) loss of leadership in the field of addiction due to aging and death, 5) economic downturns limiting funding, and 6) growing pessimism about the possibility of recovery from addiction. By 1920 almost all addiction treatment institutions were closed.

Due to the skepticism of therapeutic approaches for individuals already addicted, a new vision focused on prevention began to emerge. Prevention efforts would be focused on temperance education, the legal prohibition of alcohol and tobacco and legal control of the non-medical use of opiates and cocaine. Those currently addicted to alcohol and other drugs were left to their own devices, often ending up in aging state insane asylums and “foul wards” of urban community hospitals. These alcoholics and addicts were subjected to whatever prevailing techniques dominated the field of psychiatry, from chemical and electroconvulsive therapies, to psychosurgery, and to drug therapies that later proved to have significant potential for misuse, e.g., LSD, barbiturates, amphetamines and a wide variety of tranquilizing and anti-anxiety agents.

Medical vs. Criminal Traditions

The creation of a national network of community-based addiction treatment programs required two fundamental changes to occur: 1) a drastic change in public attitudes and policies towards addicts and addiction, and 2) development of credible and replicable treatment models. The Modern Alcoholism Movement (MAM) of the 1940s and 50s was effective in promoting change that supported new approaches to alcohol-related problems. The MAM consisted of many movements each aimed at changing how particular institutions (religion, law, business, medicine and the media) viewed alcoholism and the alcoholic. Five “kinetic” ideas were developed by Dwight Anderson and Marty Mann that accurately reflected the aims of the MAM. These include: 1) Alcoholism is a disease; 2) The alcoholic, therefore, is a sick person; 3) The alcoholic can be helped; 4) The alcoholic is worth helping; 5) Alcoholism is our No. 4 public health problem, and our public responsibility.
Success of the MAM was indicated by the increased percentage of American citizens who viewed alcoholism as a sickness, from 6% in 1947 to 66% in 1967, and the number of professional organizations making public pronouncements about alcoholism in the 1950s and 1960s. See Table 1 for examples of key policy statements on alcoholism between 1950 and 1970 that helped influence the public’s perception of alcoholism.

**Table 1. Key Policy Statements on Alcoholism (1950-1970)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Organization</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>American Hospital Association</td>
<td>Resolution on “Admission of Alcoholic Patients to the General Hospital” declares alcoholism a “serious health problem”</td>
</tr>
<tr>
<td>1952</td>
<td>American Medical Association</td>
<td>Defines alcoholism</td>
</tr>
<tr>
<td>1956</td>
<td>American Medical Association</td>
<td>Resolution calling on general hospital to admit the alcoholic as a “sick individual”</td>
</tr>
<tr>
<td>1957</td>
<td>American Hospital Association</td>
<td>Resolution urging local hospitals to develop programs for the treatment of alcoholism</td>
</tr>
<tr>
<td>1963</td>
<td>American Public Health Association</td>
<td>Resolution declaring alcoholism a treatable illness</td>
</tr>
<tr>
<td>1965</td>
<td>American Psychiatric Association</td>
<td>Publishes a statement recognizing alcoholism as a disease</td>
</tr>
<tr>
<td>1967</td>
<td>American Medical Association</td>
<td>Resolution that alcoholism is a “complex disease that merits the serious concern of all members of the health professions”</td>
</tr>
</tbody>
</table>

The shift in public attitude and professional policy was crystallized in the work of the Cooperative Commission on the Study of Alcoholism whose 1967 report called for a comprehensive, national approach to the prevention and treatment of alcohol problems as well as investments in alcoholism-related professional training and research. The Commission report provided a blueprint for the modern system of alcoholism treatment. The first state alcoholism commissions were organized in the 1940s and several alcoholism treatment modalities emerged between 1940 and 1965 including: (1) Hospital-based detoxification and brief (5 day) treatment models via Alcoholics Anonymous collaboration with hospitals in Akron, New York City, Cleveland, Philadelphia, Chicago; (2) an outpatient clinic model pioneered in Connecticut and Georgia; (3) a residential model (the “Minnesota Model of Chemical Dependency Treatment”) developed at Pioneer House, Hazelden and Willmar State Hospital; and (4) a halfway house movement of the 1950s that championed the need for post-treatment recovery support services.

Shifting the public’s opinion about alcoholism and treatment for alcohol addiction was much easier than addiction to other drugs due simply to the fact that alcohol was legal in the U.S. and all other drugs were illegal. While the growth of treatment programs for addiction to other drugs went through a similar process to alcohol, overcoming the “criminal model” was and continues
to be a struggle for illegal drug addiction. Throughout history there have been reform campaigns calling for the movement of addicts from systems of control and punishment to systems of medical and psychological care. The earliest of these efforts resulted in federal prison rehabilitation programs. Evaluation of these programs showed high rates of relapse upon the addicts return to their communities, signaling a need for local, community-based treatment alternatives. The work of the America Medical Association and the American Bar Association in the 1950s and 60s supported the shift from a criminal justice to a public health approach to the problem of addiction. Also, growing drug use by white youth in the 1960s tipped the scales toward a major investment in addiction treatment.

The creation of an addiction treatment system that included replicable models of intervention and post-treatment recovery support occurred in four stages. These included: (1) The founding of Narcotics Anonymous in 1953, (2) the birth of the therapeutic community via the founding of Synanon in 1958, (3) the development of methadone maintenance by Drs. Dole, Nyswander and Kreek in the mid-1960s, and (4) the emergence of a variety of drug-free outpatient therapies for youthful polydrug abuse during the late 1960s. These efforts came together in 1971 in an executive order by President Richard Nixon that created the Special Action Office of Drug Abuse Prevention and the passage of the Drug Abuse Treatment Act of 1972. This law created the National Institute of Drug Abuse (NIDA) to support development of a national network of addiction treatment programs. The number of such programs in the U.S. increased from less than 100 in 1970 to more than 1800 in 1975. The era of modern treatment had begun with about two thirds of the national drug control budget focused on demand reduction (prevention and treatment) through the Nixon, Ford, and Carter administrations.

**The Tradition of Science and Research**

The modern field of addiction treatment developed out of three main phases. The first phase (1970-1980) focused on the development of federal, state and local organizational infrastructures through which treatment services could be planned, delivered and evaluated. With the creation of NIAAA and NIDA, states were able to educate and professionalize addiction treatment personnel through specified training programs. Also resources were now available for research on addiction and treatment effectiveness. The founding of the National Association of Alcoholism Counselors and Trainers in 1972 (the precursor to NAADAC: The Association of Addiction Professionals) and other state counselor associations allowed addiction counseling to be seen as a “new profession.” The development of national accreditation and state licensure standards for treatment programs in the early 1970s and the highly controversial organizational integration of alcoholism and drug abuse treatment programs between 1975 and 1985 were two huge developmental milestones for the modern field of addiction treatment.

The second phase in the development of modern treatment was characterized by an explosive growth of addiction treatment driven by an increase in inpatient hospital and for profit residential treatment programs in the 1980s and early 1990s. This was due to a surge in health insurance
policies providing coverage for the treatment of addiction. This lead to what the Institute of Medicine (1990) described as a two-tiered system comprised of public and private sectors. Aggressive marketing of these new benefits caused an increase in demand that insurance companies quickly realized they were unable to meet. The private sector served 40 percent of the patients but garnered 60 percent of total treatment expenditures (Institute of Medicine, 1990). One way to cut cost of treatment was to challenge the practice of using several weeks of inpatient care as the initial phase of treatment. Instead treatment providers were told that inpatient treatment beyond a few days could not be justified and would not be paid for under the insurance policy. This ideology challenged the foundational concepts of addiction treatment, e.g., the disease concept of addiction.

As the field of addiction treatment entered the twenty-first century it started to mature. This was evident in the aging and beginning exit of its first and second generation leaders, the expansion of programs for special populations, interest in bridging the gap between research and front-line clinical practices, and the movement of treatment services into other social systems, e.g., the child welfare system, the criminal justice system, and public health agencies (particularly those involved in HIV/AIDS-related services). There was also a shift in thinking there is only one way to treat addiction to a growing recognition that substance use disorders spring from multiple etiological pathways, unfold in diverse patterns and needs, respond to a variety of treatments, and resolve themselves through multiple pathways and styles of long-term recovery. These new ideas about addiction highlight the need for research and services that are less focused on how and why people become addicted, and more focused on how and why people recover and/or transition out of addiction.
Appendix D: Study Sample Recruitment Materials

Prescription Pain Medication Study
A Scientific Research Study of People who have Overcome a Problem with Prescription Opioids without Treatment

Washington University in St. Louis
Brown School

If you have successfully quit misusing prescription pain medications (e.g., OxyContin, Vicodin, Morphine, etc.) and did so without treatment, we want to hear how you did it. The purpose of this study is to learn more about the resources people utilize to assist them in overcoming their problem with prescription pain meds in an effort to help others who may be struggling with similar problems.

All interviews will be kept confidential.

You may be eligible to participate if you:
- Are at least 18 years old
- Have had a problem with prescription pain meds in the past but have been problem-free for at least 1 year
- Have overcome a problem with prescription pain meds without seeking treatment
- Have overcome a problem with prescription pain meds and EITHER you have quit prescription pain meds altogether OR you still use prescription pain meds (abstinence from prescription pain-killers, alcohol or other drugs is NOT a requirement)

What will you be asked to do?
- Participate in an interview lasting approximately 2 hours (date, time and location of this interview will be determined during the initial phone call to determine eligibility)
- Discuss your experiences before, during and after your problem with prescription pain meds and the resources you utilized in overcoming this problem.

Compensation
- You will receive a $25 gift card for your participation in this study.

If you have any questions or are interested in participating, please contact:
Phone: 773-249-0670 or E-mail: cdrymon@wustl.edu
Hop on your Nimbus 2000 and head to AMC River East 21 this Saturday for a 'Harry Potter' marathon

Everything is on the line for Cubs and Javier Baez in final 5 games
PRESCRIPTION PAIN MEDICATION STUDY

*A Scientific Research Study of Women who have Overcome a Problem with Prescription Opioids without Treatment*

**STUDY INFORMATION**

If you are a woman who has successfully quit misusing prescription pain medications (e.g., OxyContin, Vicodin, Morphine, etc.) and did so without treatment, *we want to hear how you did it.* The purpose of this study is to learn more about the resources women utilize to assist them in overcoming their problem with prescription pain meds in an effort to help other women who may be struggling with similar problems.

_All interviews will be kept confidential._

You may be eligible to participate if you:

- Are a woman
- Are at least 18 years old
- Live in the United States
- Have had a problem with prescription pain meds in the past but have been problem-free for 1 year
- Have overcome a problem with prescription pain meds without seeking treatment
What will you be asked to do?

- Participate in an interview lasting approximately 2 hours (date and time of this interview will be determined during the initial phone call to determine eligibility)
- Discuss your experiences before, during and after your problem with prescription pain meds and the resources you utilized in overcoming this problem.

Compensation

- You will receive $25 for your participation in this study

If you have any questions or are interested in participating, please contact:

Phone: 773-249-0670 or E-mail: cdrymon@wustl.edu

~Or use the contact form below and we will respond as soon as possible~

**Name** *(required)*

**Email** *(required)*

**Comment** *(required)*

SUBMIT
Research Study on Overcoming a Drug Use Problem: Women Needed

A Scientific Research Study of Women who have Overcome a Drug Use Problem without Treatment

Affiliated with the Brown School of Social Work at Washington University in St. Louis

If you are a woman who has successfully overcome a drug use problem and did so without treatment, we want to hear how you did it. The purpose of this study is to learn more about the resources women utilize to assist them in overcoming their drug use problems without treatment, in an effort to help other women who may be struggling with similar problems.

All interviews will be kept confidential.

You may be eligible to participate if you:
• Are a woman
• Are at least 18 years old
• Have overcome a drug use problem without seeking treatment

What will you be asked to do?
• Participate in an interview via phone lasting approximately 2 hours (date and time of this interview will be determined during the initial phone call to determine eligibility)
• Discuss your experiences before, during and after your drug use problem and the resources you utilized in overcoming this problem

Compensation
• You will receive a $25 gift card for your participation in this study

If you have questions or are interested in participating, please contact:
Phone: 773-249-6070
E-mail: cdymom@wustl.edu

IRB ID#: 201808108
Approval Date: 07/30/19
Released Date: 07/31/19
Expiration Date: 07/28/20

* do NOT contact me with unsolicited services or offers
## Appendix E: Eligibility Screen

Subject number __________________________ Date called __/__/____

Name: ___________________________ Phone: ___________________________

How did you hear about the study? ___________________________

What is your gender? ___________________________

How old are you? ___________________________

Do you live in the Chicagoland area? YES_____ NO_______

What is your home zip code? ___________________________

MINI 7.0.2 Standard (SUD Section) PO’s ONLY
The next set of questions are about your use of prescription pain medications, regardless of whether or not they were prescribed for you or someone else. We are specifically interested in prescription opioids such as Hydrocodone, Vicodin, Oxycodeine, OxyConton, Percocet, Oxymorphone, Opana, Morphine, Kadian, Avinza, Codeine and Fentanyl. I am only asking about prescription pain medications, no other substances at this time.

### In your lifetime...

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1. Have you ever taken prescription pain medications more than once, to get high, to feel elated, to get “a buzz” or to change your mood?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J2a. Did you ever end up using more prescription pain meds than you planned when you started?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes: When was the last time?</td>
<td>Past 12 Mos</td>
<td>1-3 Yrs</td>
</tr>
<tr>
<td>J2b. Did you ever want to reduce or control your prescription pain med use? Did you try to cut down or control your prescription pain med use, but failed?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If YES to either, code J2b as YES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes: When was the last time?</td>
<td>Past 12 Mos</td>
<td>1-3 Yrs</td>
</tr>
<tr>
<td>J2c. Did you ever spend substantial time obtaining prescription pain meds, using them, or recovering from their effects?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If yes: When was the last time?</td>
<td>Past 12 Mos</td>
<td>1-3 Yrs</td>
</tr>
<tr>
<td>J2d. Did you ever crave or have a strong desire or urge to use prescription pain meds?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If yes: When was the last time?</td>
<td>Past 12 Mos</td>
<td>1-3 Yrs</td>
</tr>
<tr>
<td>J2e. Did you ever spend less time meeting your responsibilities at work, at school, or at home, because of your repeated prescription pain med use?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If yes: When was the last time?</td>
<td>Past 12 Mos</td>
<td>1-3 Yrs</td>
</tr>
<tr>
<td>J2f. Has your prescription pain med use ever caused problems with your family or other people, did you still keep on using them?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If yes: When was the last time?</td>
<td>Past 12 Mos</td>
<td>1-3 Yrs</td>
</tr>
<tr>
<td>J2g. Did you ever use prescription pain meds more than once in any situation where you or others were physically at risk, for example, driving a car, riding a motorbike, using machinery, boating, etc.?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If yes: When was the last time?</td>
<td>Past 12 Mos</td>
<td>1-3 Yrs</td>
</tr>
<tr>
<td>J2h. Did you ever continue to use prescription pain meds, even though it was clear that the prescription pain meds had caused or worsened psychological or physical problems?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Past 12 Mos</td>
<td>1-3 Yrs</td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td>J21. Did you ever reduce or give up important work, social or recreational activities because of your prescription pain med use?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>J2. Did you ever need to use prescription pain meds a lot more in order to get the same effect that you got when you first started using it or did you get much less effect with continued use of the same amount?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>J2K1. When you cut down on heavy or prolonged use of prescription pain meds did you have any of the following withdrawal symptoms:</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>1. Feeling depressed</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>2. Nausea or vomiting</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>3. Muscle aches</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>4. Runny nose or teary eyes</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>5. Dilated pupils, goose bumps or hair standing on end or sweating</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>6. Diarrhea</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>7. Yawning</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>8. Hot flashes</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>9. Trouble Sleeping</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>J2K2. In your lifetime, did you ever use prescription pain meds to reduce or avoid withdrawal symptoms?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>(INTERNAL USE) J2K Summary: If YES to J2K1 or J2K2 code YES</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

**SCORING (INTERNAL USE):**

Are 2 or more J2 answers from J2a through J2K Summary coded YES? (J2K1 and J2K2 together count as one among these choices.)

If YES: Prescription Opioid Use Disorder within __________ months / years.

**Specifiers for POUO:**

- MILD = 2-3 of the J2 symptoms
- MODERATE = 4-5 of the J2 symptoms
- SEVERE = 6 or more of the J2 symptoms
MINI 7.0.2 Standard (AUD) Alcohol Only
Now I am going to ask a similar set of questions, however, these questions are interested in your use of alcohol. Alcohol includes beer, wine, whiskey, gin, scotch, tequila, rum or mixed drinks.

In your lifetime . . . .

11. Have you had 3 or more alcoholic drinks, - within a 3-hour period, - on 3 or more occasions?  
   | YES | NO |

   If NO: Do not ask the follow-up questions – move to next subheading

   12a. During the times when you drank alcohol, did you end up drinking more than you planned when you started?  
   | YES | NO |

      If yes: When was the last time?  
      | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

   12b. Did you repeatedly want to reduce or control your alcohol use? Did you try to cut down or control your alcohol use, but failed?  
   | YES | NO |

      If YES to either, code 12b as YES

   12c. On the days that you drank, did you spend substantial time obtaining alcohol, drinking it, or recovering from the effects of alcohol?  
   | YES | NO |

      If yes: When was the last time?  
      | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

   12d. Did you crave or have a strong desire or urge to use alcohol?  
   | YES | NO |

      If yes: When was the last time?  
      | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

   12e. Did you spend less time meeting your responsibilities at work, at school, or at home, because of your repeated drinking?  
   | YES | NO |

      If yes: When was the last time?  
      | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

   12f. If your drinking caused problems with your family or other people, did you still keep on drinking?  
   | YES | NO |

      If yes: When was the last time?  
      | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

   12g. Were you intoxicated more than once in any situation where you or others were physically at risk, for example, driving a car, riding a motorbike, using machinery, boating, etc.?  
   | YES | NO |

      If yes: When was the last time?  
      | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

   12h. Did you continue to use alcohol, even though it was clear that the alcohol had caused or worsened psychological or physical problems?  
   | YES | NO |

      If yes: When was the last time?  
      | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

   12i. Did you reduce or give up important work, social or recreational activities because of your drinking?  
   | YES | NO |

      If yes: When was the last time?  
      | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

   12j. Did you need to drink a lot more in order to get the same effect that you got when you first started drinking or did you get much less effect with continued use of the same amount?  
   | YES | NO |

      If yes: When was the last time?  
      | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

   12k1. When you cut down on heavy or prolonged drinking did you have any of the following:

      If YES to 2 or more of the above 8, code 12k1 as YES

      1. Increased sweating or increased heart rate  
      2. Hand tremor or "the shakes"  
      3. Trouble sleeping  
      4. Nausea or vomiting  

      YES | NO
5. Hearing or seeing things other people could not see or hear or having sensations in your skin for no apparent reason

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Agitation</td>
<td></td>
</tr>
<tr>
<td>7. Anxiety</td>
<td></td>
</tr>
<tr>
<td>8. Seizures</td>
<td></td>
</tr>
</tbody>
</table>

If yes: When was the last time?

<table>
<thead>
<tr>
<th></th>
<th>Past 12 Mos</th>
<th>1-3 Yrs</th>
<th>3-5 Yrs</th>
<th>5+ Yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>J2K2</td>
<td>Did you drink alcohol to reduce or avoid withdrawal symptoms or to avoid being hungover?</td>
<td>YES</td>
<td>NO</td>
<td></td>
</tr>
</tbody>
</table>

If yes: When was the last time?

<table>
<thead>
<tr>
<th></th>
<th>Past 12 Mos</th>
<th>1-3 Yrs</th>
<th>3-5 Yrs</th>
<th>5+ Yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>(INTERNAL USE) J2K Summary: If YES to J2K1 or J2K2 code YES</td>
<td>YES</td>
<td>NO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SCORING (INTERNAL USE):**

Are 2 or more I2 answers from I2a through I2K Summary coded YES? (I2K1 and I2K2) together count as one among these choices.

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

If YES: Alcohol Use Disorder within ___________ months / years.

**Specifiers for AUD:**

- MILD = 2-3 of the I2 symptoms
- MODERATE = 4-5 of the I2 symptoms
- SEVERE = 6 or more of the I2 symptoms
MINI 7.0.2 Standard (SUD Section) Other Drugs, Not Including Alcohol or PO's
Now I am going to read you a list of street drugs or medicines.

In your lifetime . . .

<table>
<thead>
<tr>
<th>J1. Did you take any of these drugs more than once, to get high, to feel elated, to get “a buzz” or to change your mood?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

(Internal Use: Circle each drug taken)

**Stimulants:** amphetamines, “speed,” crystal meth, “crank”, Dexadrine, Ritalin, diet pills

**Cocaine:** snorting, IV, freebase, crack, “speedball”

**Non-Prescription Opiates:** heroin, codeine, methadone, opium

**Hallucinogens:** LSD (“acid”), mescaline, peyote, psilocybin, STP, “mushrooms,” “ecstasy,” MDA, MDMA

**Dissociative Drugs:** PCP (Phencyclidine, “Angel Dust”, “Peace Pill”, “Hog”), or Ketamine (“Special K”)

**Inhalants:** “glue”, ethyl chloride, “rush”, nitrous oxide (“laughing gas”), amyl or butyl nitrate (“poppers”)

**Cannabis:** marijuana, hashish (“hash”), THC, “pot”, “grass”, “weed”, “reefer”

**Sedatives, Hypnotics or Anxiolytics:** Quaalude, Seconal (“rods”), Valium, Xanax, Librium, Ativan, Dalmame, Halcion, barbiturates, Miltown, GHB, Roofirol, “Roofies”

**Miscellaneous:** Steroids, nonprescription sleep or diet pills. Cough medicine? Any others?

Which drug(s) cause the biggest problems? ____________________________________________

**IF YES** to any of the drugs listed above, ask the follow-up questions below for the drug class causing the biggest problems and the one most likely to meet criteria.

**IF NO** to any of the drugs listed above do not ask the follow-up questions – move to next subheading.

In your lifetime . . .

<table>
<thead>
<tr>
<th>J2a. During the times when you used the drug, did you ever end up using more (NAME OF DRUG) than you planned when you started?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If yes:</strong> When was the last time?</td>
<td>Past 12 Mos</td>
<td>1-3 Yrs</td>
</tr>
</tbody>
</table>

| J2b. Did you repeatedly want to reduce or control your (NAME OF DRUG) use? Did you try to cut down or control your (NAME OF DRUG) use, but failed? **IF YES** to other, code J2b as **YES** | YES | NO |
| **If yes:** When was the last time? | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

| J2c. On the days that you used more (NAME OF DRUG), did you spend substantial time obtaining (NAME OF DRUG), using it, or recovering from it’s effects? | YES | NO |
| **If yes:** When was the last time? | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

| J2d. Did you crave or have a strong desire or urge to use (NAME OF DRUG)? | YES | NO |
| **If yes:** When was the last time? | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

| J2e. Did you spend less time meeting your responsibilities at work, at school, or at home, because of your repeated (NAME OF DRUG) use? | YES | NO |
| **If yes:** When was the last time? | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |

| J2f. If your (NAME OF DRUG) use caused problems with your family or other people, did you still keep on using it? | YES | NO |
| **If yes:** When was the last time? | Past 12 Mos | 1-3 Yrs | 3-5 Yrs | 5+ Yrs |
J2g. Did you use the drug more than once in any situation where you or others were physically at risk, for example, driving a car, riding a motorbike, using machinery, boating, etc.?  

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

If yes: When was the last time?  

<table>
<thead>
<tr>
<th>Past 12 Mos</th>
<th>1-3 Yrs</th>
<th>3-5 Yrs</th>
<th>5+ Yrs</th>
</tr>
</thead>
</table>

J2h. Did you continue to use (NAME OF DRUG), even though it was clear that the (NAME OF DRUG) had caused or worsened psychological or physical problems?  

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

If yes: When was the last time?  

<table>
<thead>
<tr>
<th>Past 12 Mos</th>
<th>1-3 Yrs</th>
<th>3-5 Yrs</th>
<th>5+ Yrs</th>
</tr>
</thead>
</table>

J2i. Did you reduce or give up important work, social or recreational activities because of your (NAME OF DRUG) use?  

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

If yes: When was the last time?  

<table>
<thead>
<tr>
<th>Past 12 Mos</th>
<th>1-3 Yrs</th>
<th>3-5 Yrs</th>
<th>5+ Yrs</th>
</tr>
</thead>
</table>

J2j. Did you need to use (NAME OF DRUG) a lot more in order to get the same effect that you got when you first started using it or did you get much less effect with continued use of the same amount? (INTERNAL USE: This criterion is coded NO if the medication is prescribed and used under appropriate medical supervision)  

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

If yes: When was the last time?  

<table>
<thead>
<tr>
<th>Past 12 Mos</th>
<th>1-3 Yrs</th>
<th>3-5 Yrs</th>
<th>5+ Yrs</th>
</tr>
</thead>
</table>

J2k1. When you cut down on heavy or prolonged use of the drug did you have any of the following withdrawal symptoms:  

If YES to the required number of withdrawal symptoms for each class, code J2k1 as YES  

Sedatives, Hypnotics or Anxiolytics (2 or more withdrawal symptoms)  

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
</table>
1. Increased sweating or increased heart rate |   |   |   |
2. Hand tremor or "the shakes" |   |   |   |
3. Trouble sleeping |   |   |   |
4. Nausea or vomiting |   |   |   |
5. Hearing or seeing things other people could not see or hear or having sensations in your skin for no apparent reason |   |   |   |
6. Agitation |   |   |   |
7. Anxiety |   |   |   |
8. Seizures |   |   |   |

If yes: When was the last time?  

<table>
<thead>
<tr>
<th>Past 12 Mos</th>
<th>1-3 Yrs</th>
<th>3-5 Yrs</th>
<th>5+ Yrs</th>
</tr>
</thead>
</table>

Non-Prescription Opiates (3 or more withdrawal symptoms)  

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
1. Feeling depressed |   |   |   |
2. Nausea or vomiting |   |   |   |
3. Muscle aches |   |   |   |
4. Runny nose or teary eyes |   |   |   |
5. Dilated pupils, goose bumps or hair standing on end or sweating |   |   |   |
6. Diarrhea |   |   |   |
7. Yawning |   |   |   |
8. Hot flashes |   |   |   |
9. Trouble sleeping |   |   |   |

If yes: When was the last time?  

<table>
<thead>
<tr>
<th>Past 12 Mos</th>
<th>1-3 Yrs</th>
<th>3-5 Yrs</th>
<th>5+ Yrs</th>
</tr>
</thead>
</table>

Stimulants and Cocaine (2 or more withdrawal symptoms)  

<p>| | | | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
</table>
1. Fatigue |   |   |   |
2. Vivid or unpleasant dreams |   |   |   |
3. Difficulty sleeping or sleeping too much |   |   |   |
4. Increased appetite |   |   |   |
5. Feeling or looking physically or mentally slowed down |   |   |   |
<table>
<thead>
<tr>
<th><strong>Cannabis (3 or more withdrawal symptoms)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Irritability, anger or aggression</td>
</tr>
<tr>
<td>2. Nervousness or anxiety</td>
</tr>
<tr>
<td>3. Trouble sleeping</td>
</tr>
<tr>
<td>4. Appetite or weight loss</td>
</tr>
<tr>
<td>5. Restlessness</td>
</tr>
<tr>
<td>6. Feeling depressed</td>
</tr>
<tr>
<td>7. Significant discomfort from one of the following: “stomach pain”, tremors or “shakes”, sweating, hot flashes, chills, headaches</td>
</tr>
</tbody>
</table>

**If yes**: When was the last time?  
Past 12 Mos 1-3 Yrs 3-5 Yrs 5+ Yrs

**J2K2. Did you use (NAME OF DRUG) to reduce or avoid withdrawal symptoms?**  
YES NO

**If yes**: When was the last time?  
Past 12 Mos 1-3 Yrs 3-5 Yrs 5+ Yrs

*(INTERNAL USE)* J2K Summary: If YES to J2K1 or J2K2 code YES

**SCORING (INTERNAL USE):**
Are 2 or more J2 answers from J2a through J2K Summary coded YES? (J2K1 and J2K2 together count as one among these choices.)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If YES: Substance (__________) Use Disorder within ____________ months / years.

**Specifiers for SUD:**
- **MILD** = 2-3 of the J2 symptoms
- **MODERATE** = 4-5 of the J2 symptoms
- **SEVERE** = 6 or more of the J2 symptoms
Modified GAIN-Q3 (Substance Abuse Treatment Index)
The next set of questions are about your use of treatment for any drug use problems. This includes treatment for your alcohol, prescription pain medication or any other drugs use problems.

**In your lifetime, have you ever...**

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Been in a halfway house, residential, inpatient, or hospital program for your drug use problems?</td>
</tr>
<tr>
<td>b. Been in an intensive outpatient or day program for your drug use problems?</td>
</tr>
<tr>
<td>c. Attended a regular (1-8 hour per week) outpatient program for your drug use problems?</td>
</tr>
<tr>
<td>d. Been in a detoxification program to help you through withdrawal?</td>
</tr>
<tr>
<td>If yes: Please describe:</td>
</tr>
<tr>
<td>e. Taken medication like methadone or Antabuse to help with withdrawal or cravings?</td>
</tr>
<tr>
<td>If yes: Please describe:</td>
</tr>
<tr>
<td>f. Attended one or more self-help group meetings, such as Alcoholics Anonymous (AA), Narcotics Anonymous (NA), Cocaine Anonymous (CA) or Social Recovery for your drug use?</td>
</tr>
<tr>
<td>If yes: In your lifetime, how many of these meetings have you attended?</td>
</tr>
<tr>
<td>g. Been given a breathalyzer or urine test to check for your drug use?</td>
</tr>
<tr>
<td>h. Gone to an emergency room for your drug use problems?</td>
</tr>
<tr>
<td>i. Worked with some kind of case manager for your drug use problems?</td>
</tr>
<tr>
<td>j. Gone to any other kind of treatment program?</td>
</tr>
<tr>
<td>If yes: Please describe:</td>
</tr>
</tbody>
</table>

**SCORING (INTERNAL USE):**

| Are 1 or more answers from a through i coded YES? (excluding question f) | YES | NO |
| If NO: For question f, has the participant attended more than 3 self-help group meetings? | YES | NO |
MINI 7.0.2 Standard (Psychotic Disorders and Mood Disorders with Psychotic Features Section)

The last set of questions are unrelated to your drug use. These questions ask about unusual experiences that some people have.

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1. Do you believe that people are spying on you, or that someone is plotting against you, or trying to hurt you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If YES: Can you give me an example:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K2. Do you believe that someone is reading your mind or can hear your thoughts or that you can actually read someone’s mind or hear what another person is thinking?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If YES: Can you give me an example:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K3. Do you believe that someone or some force outside of yourself puts thoughts in your mind that are not your own, or makes you act in a way that is not your usual self? Or do you feel that you are possessed?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If YES: Can you give me an example:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K4. Do you believe that you are being sent special messages through the TV, radio, internet, newspapers, books or magazines or that a person you do not personally know is particularly interested in you?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If YES: Can you give me an example:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K5. Do your relatives or friends consider any of your beliefs odd or unusual?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If YES: Can you give me an example:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K6. Do you hear things other people can’t hear, such as voices?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If YES: Is the voice commenting on your thoughts or behavior or do you hear two or more voices talking to each other?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K7. Do you have visions when you are awake or do you see things other people can’t see?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If YES: Can you give me an example:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SCORING: (INTERNAL USE)

Are 1 or more answers from K1 to K7 coded YES | YES | NO

FINAL SCORE FOR ELIGIBILITY: (INTERNAL USE)

<table>
<thead>
<tr>
<th>Condition</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Female (yes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. 18 years of age or older (yes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Lives in the Chicagoland area (yes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Poud in Lifetime (yes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Poud in last 3-5 years (no)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. SUD problems in last 3-5 years (no)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Treatment received in Lifetime (no)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Current Psychotic Disorder (no)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If YES for Q1-4 and NO for Q5-6, please read script for eligible participants.
Appendix F: Participant Interview

Subject number __________________________ Date __/__/______
Start Time __________ End Time __________

“My goal during this interview is to have it be more like a conversation than me just asking you a whole bunch of questions. However, at times I will be reading the text on the page, just so that I am consistent in the words I am using with each participant. Also, I will be making notes and jotting things down as we move through the interview, just to help me remember things. If at any time you have questions about what I am reading or writing please don’t hesitate to ask.”

DOMAIN 1: TIMELINE

“The first thing I would like to do is create a brief timeline of your prescription pain medication use. To do that we will use a timeline worksheet that has already been created. Just for your reference, we will plot your experiences related to the creation of your problem with prescription pain medication ABOVE the line and we will plot your experiences related to the resolution of your problem with prescription pain medication BELOW the line. Before we begin, I would also just like to mention that we will be discussing each of these time points in a bit more detail as we move through this interview, therefore, in this section I am just looking for specific dates.”

Note for Interviewer: Ensure the participant can view the timeline as you are writing down specific dates. Probe for each of the following, however, if the participant is unsure of the specific month or year, probe for age, year in school, season, etc. to get as specific as possible.

☐ First use of prescription pain meds

“To begin, let’s plot when you first started using prescription pain medications. Can you recall the approximate month and year when you first began using prescription pain medications?”

☐ Problematic use

“Great, so for our next timeline plot, when would you say your use of prescription pain meds became problematic? Can you recall the approximate month and year?”

☐ Realization of problematic use

“Often times, a person may develop a problem with substance use at one point in time, but they don’t fully realize that they have a problem until a later date, after they have been using at problematic levels for a while. Would you agree? When did you actually begin to realize that you had a problem with prescription pain meds?”

☐ Contemplation of resolving prescription pain med problem

“Similarly when people choose to resolve their problems with pain medications, they will often contemplate the idea before actually attempting to do so. When would you say you first contemplated resolving your problem with prescription pain meds?”

☐ First attempt at resolving problematic use

“When did you first attempt to resolve your problem with prescription pain meds?”

☐ Return to problematic use after first attempt

“After this first attempt, did you return to using prescription pain meds at problematic levels? If yes, “Approximately when did you begin using prescription pain meds again?”
Any significant attempts at resolving problematic use after first attempt

“Since that first attempt, how many attempts would you say you have made at resolving your prescription pain med problem?”

“Of those (total number of attempts) are there any that stand out or are significant to you? Are there any attempts at resolving your problem with prescription pain meds that feel qualitatively different than your first attempt? If so, let’s plot those as well.”

Note to Interviewer: If participant believes all attempts were significant, try to get them to narrow down to a handful that played a significant role in ultimately helping him to resolve his/her problem with prescription pain meds. Do not plot more than 5 attempts.

Return to problematic use after each attempt

Note to Interviewer: For each significant attempt at resolving problematic use, identify when participant returned to using prescription pain meds at problematic levels?

“After this attempt, did you return to using prescription pain meds at problematic levels?”

If yes, “Approximately when did you begin using prescription pain meds again?”

Final attempt at resolving problematic use prior to interview (should be 3-5 years prior)

“When was your final attempt at resolving your prescription pain med problem? Essentially this would be your last attempt prior to this interview?”

If the individual has utilized any form of treatment (from screener) ask to plot

“During the phone call, you noted that you had received (treatment). Can you recall the month and year when you received this (treatment)?

Other Substance Use

“I would just like to quickly plot your use of other substances. When was the first time you tried alcohol or drugs (illegal or legal) other than prescription pain medications?”

Do you feel that you ever had a problem with alcohol or drugs (illegal or legal) other than prescription pain medications?”

If yes, “What drugs specifically did you believe you had a problem with?

For each drug identified, “When did you ultimately resolve your problem with (drug identified above)?”

Anything else to include on timeline

“Great, so as I noted previously we will be discussing each of these points in a bit more detail as we move through this interview. However before we do that, is there anything else you would like to plot on this timeline related to either the creation or the resolution of your problem with prescription pain medications?”

IDENTIFICATION OF PREFERRED TERMS

“What I would like to do now is determine a few mutually agreed upon terms to use to describe three different phases of this timeline. I like to do this because everyone has a different perspective and experience and so I
want to ensure I am not using any terms that would be considered offensive or that you feel are not representative of your experience.”

**Note to Interviewer:** If participant is uncertain or cannot come up with a word, provide options and allow participant to choose, for instance, “Some people may use the term (addiction, substance abuse, substance disorder) to define their problematic use . . .(ask question again)”

“What term best describes how you define your prior prescription pain medications use? (e.g., addiction, substance abuse, substance disorder, etc.)”

“What term best describes how you define yourself now, with respect to your prior prescription pain med use? (e.g., recovery, remission, problem resolution, etc.)”

“What term best describes how you define your return to prescription pain med use after an attempt at (recovery)? (e.g., relapse, lapse, setback, slips, etc.)”
Note to Interviewer: throughout remainder of interview remember to use the following prompts when needed: “what makes you say that,” “can you tell me more;” “can you tell me more about that”

DOMAIN 2: MAINTENANCE FACTORS

“So now we will talk in a bit more detail about your (recovery) attempts noted on the timeline. We will start with the most recent successful attempt, the one prior to this interview (3-5 years ago). In this section I am interested in understanding more about the factors that have helped you to maintain your (recovery) for the last (3-5 years, refer to timeline).

Refer to the timeline: “Your most recent successful attempt at (recovery) from prescription pain medications was on (date). What led you to attempt (recovery) at that time?”

Note to Interviewer: Probe for motivations, thoughts, conscious decisions, unconscious decisions, life events

“In relation to your last attempt at (recovery) on (date) can you please describe what factors helped you to avoid a (relapse) or to avoid a return to having a problem with prescription pain meds. In other words, describe what helped you to remain problem-free from prescription pain meds?”

Note to Interviewer: Probe for specific maintenance factors (e.g., use of other substances, relationships, physical health, self-control, self-help materials, life-style changes, relocation in residence, change in employment, pride, sense of accomplishment, respect from others, financial changes)

“How did these factors change over time? Explain.”

Note to Interviewer: Probe for differences that may occur early on in recovery (first 3-6 months) vs. later in recovery by asking:

“Often times the resources individuals utilize in helping them maintain recovery can look very different in the first 3-6 months of (recovery) compared to later on in (recovery). How did the factors you utilized in helping you maintain your recovery change over time? Explain.”

TIME SPENT POST-OUD

Review Screener . . . “Often when someone has a problem with prescription pain meds, they can spend a significant amount of time acquiring the meds, using the meds and recovering from the meds. What did you do in replace of the time you would have spent acquiring, using and recovering from prescription pain meds? In other words, how did you spend your days after (date of last recovery attempt)?”
“How did your daily activities change over time? Explain.”

**Note to Interviewer:** Probe for differences that may occur early on in recovery (first 3-6 months) vs. later in recovery by asking:

“Often times the activities people engage in can look very different in the first 3-6 months of (recovery) compared to later on in (recovery), for instance, some people are stricter with their time in the beginning of (recovery) and become more lenient with their time later on in (recovery). How did your daily activities change over time? Explain.”

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**PLEASURABLE AND ENJOYABLE NON-PRESCRIPTION PAIN MED RELATED ACTIVITIES POST-LOUD**

Review Screener . . . “Often when someone has a problem with prescription pain meds they may give up important social, occupational, or recreational activities. During this time, their main source of pleasure may come from using prescription pain meds. Therefore, during (recovery) it can be important to find new sources of pleasure and enjoyment that do not involve prescription pain meds. What pleasurable or enjoyable activities did you find (engage in) since this most recent successful attempt at (recovery)?”

**Note to Interviewer:** Ask about specific activities (picnics, attending sporting events, participating in sports, dances, hot batch, choir, take classes, cook a meal, dinner with friends, read, movie, write)

---

“How have these activities changed over time? Explain.”

**Note to Interviewer:** Probe for differences that may occur early on in recovery (first 3-6 months) vs. later in recovery by asking:

“Often times what people find pleasure and enjoyment in is very different in the first 3-6 months of (recovery) compared to later on in (recovery). For instance, early on in (recovery), some people complain about being bored because it is difficult to find pleasure in things or they don’t know what do without using. How have your pleasurable and enjoyable activities changed over time? Explain.”

Ask about annual activities (birthdays, anniversaries and other significant holidays/events).
"How satisfied are you with the pleasurable and enjoyable activities you currently engage in? Why or why not?"

"Throughout your (recovery) have there ever been things that you worry about being able to do without using prescription pain meds? If so, what and why?"

**Note to Interviewer:** Probe for concerns about pain management by asking:

"Did you ever have concerns with how to manage pain without using prescription pain meds? If so, were their activities you could no longer engage in due to pain without using prescription pain meds?"
DOMAIN 3: COMPARISON OF PREVIOUS ATTEMPTS AT RECOVERY

IF MULTIPLE attempts at (recovery) prior to this last attempt, ask “What I would like to do now is talk a bit about the differences and similarities among your previous attempts at (recovery) in comparison to your most recent successful attempt. In other words, I would like to try and understand what made this most recent successful attempt at (recovery) different than previous attempts. On the flip side, I would also like to understand the ways in which this most recent successful attempt at (recovery) was similar to previous attempts. To do so, let’s begin by discussing the circumstances that surrounded the previous significant attempts at (recovery) you identified on the timeline.”

Refer to timeline: “You noted you first realized you had a problem with prescription pain meds on (date). What led to the realization that you had a problem at this time?”

Refer to timeline if first attempt at recovery was different from first realization: “You noted you first attempted (recovery) from prescription pain meds on (date). What led you to attempt (recovery) at that time?”

Note to Interviewer: Probe for motivations, thoughts, conscious decisions, unconscious decisions, life events

Refer to timeline: “After your first attempt at (recovery), you noted you (relapsed) on (date). Therefore you were able to remain problem free from prescription pain meds for (identified period of time). What factors helped you to remain problem free from prescription pain meds at that time?”

Note to Interviewer: Probe for specific maintenance factors (e.g., use of other substances, relationships, physical health, self-control, self-help materials, life-style changes, relocation in residence, change in employment, pride, sense of accomplishment, respect from others, financial changes)

Ask about daily, pleasurable and enjoyable activities (picnics, attending sporting events, participating in sports, dances, hot batch, choir, take classes, cook a meal, dinner with friends, read, movie, write)

“Ultimately what were the situations that led you to return to problematic prescription pain med use at that time? Explain”

“From your perspective, why were you unable to remain problem free prescription pain meds after this first attempt? Explain.”
1. Refer to timeline: "The next significant attempt at (recovery) you identified was on (date). What led you to attempt (recovery) at that time?"

Note to Interviewer: Probe for motivations, thoughts, conscious decisions, unconscious decisions, life events

2. Refer to timeline: "After this attempt at (recovery), you noted you (relapsed) on (date). Therefore you were able to remain problem free from prescription pain meds for (identified period of time). What factors helped you to remain problem free from prescription pain meds at that time?"

Note to Interviewer: Probe for specific maintenance factors (e.g., use of other substances, relationships, physical health, self-control, self-help materials, life-style changes, relocation in residence, change in employment, pride, sense of accomplishment, respect from others, financial changes)

Ask about daily, pleasurable and enjoyable activities (picnics, attending sporting events, participating in sports, dances, hot batch, choir, take classes, cook a meal, dinner with friends, read, movie, write)

3. "Ultimately what were the situations that led you to return to problematic prescription pain med use at that time? Explain"

4. "From your perspective, why were you unable to remain problem free prescription pain meds after this attempt? Explain."

Note to Interviewer: Ask the four questions above for each attempt at recovery on timeline

Attempt 3
Attempt 4
Attempt 5
Note to Interviewer: After reviewing all significant attempts at recovery ask . . .

“In thinking about each of the previous attempts at recovery we just discussed, how would you say they differ from your most recent successful attempt?”

“In what ways is your most recent successful attempt at recovery different from previous attempts?”

“Again, in thinking about each of the previous attempts at recovery we just discussed, how are they similar to your most recent successful attempt?

“In what ways is your most recent successful attempt at recovery similar to previous attempts?”
DOMAIN 4: ADVICE

“Ok we are to our last section of this interview. In this section I am interested in any advice or recommendations you might have for others struggling with a similar problem. Each question asks about the advice you would give to individuals who are at different stages of the recovery process.”

“What advice would you give to help another person who is contemplating (recovery)?”

“What advice would you give to help another person who recently attempted (recovery)?”

“What advice would you give to help another person maintain their (recovery) from a prescription pain med problem?”

Note to Interviewer: Follow up with “What would you recommend another person do to help them maintain their (recovery) from a prescription pain med problem?”

“What would you like others to know who are struggling with a similar prescription pain med problem?”
Appendix G: Informed Consent

Informed Consent – PARTICIPANT INTERVIEW

We invite you to participate in a research study being conducted by investigators from Washington University in St. Louis. You are being asked to participate in this research study because you have successfully recovered from a drug use problem. The purpose of the study is to learn more about the resources individuals utilize to assist them in overcoming their drug use problem in an effort to help others who may be struggling with similar problems. The Brown School of Social Work at Washington University in St. Louis is funding this research study.

If you agree to participate, we would like you to participate in an interview about your experiences before, during, and after your drug use problem and the resources you utilized in overcoming this problem. Once the interview has ended you will be asked to complete a few surveys/questionnaires about your demographics, prior drug use and the resources utilized to help you in overcoming your drug use problem. You are free to stop participating at any time or skip any questions that you prefer not to answer. Approximately 20 people will take part in this study across the United States.

You will be paid for being in this research study. You will be compensated with a $25 gift card for your time at the completion of the study.

The only risk from being in this study is a breach of confidentiality, and you will not benefit personally. However we hope that others may benefit in the future from what we learn as a result of this study.

We will keep the information you provide confidential by assigning you an identification code number. Your name will not be included on any documents that contain study data. A separate form with your name and matching identification code number will be kept in a locked filing cabinet accessible only to the Principle Investigator. However, federal regulatory agencies and Washington University, including the Washington University Institutional Review Board (a committee that reviews and approves research studies) and the Human Research Protection Office may inspect and copy records pertaining to this research. If we write a report about this study we will do so in such a way that you cannot be identified.

Your participation in this study is completely voluntary. You may choose not to take part at all. If you decide to participate in the study you may stop participating at any time. Any data that was collected as part of this study will remain as part of the study records and cannot be removed. If you decide not to take part in the study or if you stop participating at any time, you won’t be penalized or lose any benefits for which you otherwise qualify.

If you do not wish to participate in this study or want to end your participation in the study, please just tell the Principle Investigator that you would like to stop and return any survey materials you may have. You will not be penalized or lose any benefits for which you otherwise qualify.

We encourage you to ask questions. If you have any questions about the research study itself, please contact the Principle Investigator: Christina Drymon at 773-249-0670. If you feel you
have been harmed from being in the study, please contact: Kathleen Bucholz at 314-286-2284. If you have questions, concerns, or complaints about your rights as a research participant, please contact the Human Research Protection Office at 660 South Euclid Avenue, Campus Box 8089, St. Louis, MO 63110, 1-(800)-438-0445 or email hrpo@wustl.edu. General information about being a research participant can be found on the Human Research Protection Office web site, http://hrpo.wustl.edu. To offer input about your experiences as a research participant or to speak to someone other than the research staff, call the Human Research Protection Office at the number above.

Thank you very much for your consideration of this research study.
Appendix H: Self-Administered Assessments

Subject number ______________________ Date __/__/____

Start Time __________ End Time __________

DEMOGRAPHICS - CURRENT

1. What is your date of birth?
   __ __ __   __ __
   Month Day Year

2. What is your gender?
   a. Male
   b. Female
   c. Other (Please describe)
      i. ____________________________

3. What is your race or ethnic background?
   a. African American/Black
   b. American Indian
   c. Asian/Pacific Islander
   d. Mexican American (Hispanic Origin)
   e. Other Hispanic (Please describe)
      i. ____________________________
   f. Caucasian/White
   g. Other (Please describe)
      i. ____________________________

4. What is your highest level of education?
   a. Some high school or less
   b. High school graduate or GED
   c. Some college
   d. Vocational degree
   e. Bachelor’s degree
   f. Graduate degree

5. What is your current marital status?
   a. Married
   b. Remarried
   c. Living with someone as married
   d. Married but living apart
   e. Divorced
   f. Legally separated
   g. Widowed
   h. Never married and not living as married

6. Which one best describes your employment status?
   a. Employed Full-Time (30 or more hrs/week)
   b. Employed Part-Time (less than 30hrs/week)
   c. Unemployed
   d. Student
   e. Homemaker
   f. Retired
   g. Other (Please describe)
      i. ____________________________
7. What is your total annual household income?
   a. Less than $25,000
   b. $25,001 - $50,000
   c. $50,001 - $75,000
   d. $75,001 - $100,000
   e. $101,000 - $150,000
   f. More than $150,000

8. How important is religion in your life?
   a. Very important
   b. Somewhat important
   c. Not too important
   d. Not at all important

9. How important is spirituality in your life?
   a. Very important
   b. Somewhat important
   c. Not too important
   d. Not at all important

10. Aside from weddings and funerals, how often do you attend religious services?
    a. More than once a week
    b. Once a week
    c. Once or twice a month
    d. A few times a year
    e. Seldom
    f. Never

11. What is your current religion, if any?
    a. Protestant (Baptist, Methodist, Non-denominational, Lutheran, Presbyterian, Pentecostal, Episcopal, Reformed, Church of Christ, Jehovah’s Witness, etc.)
    b. Roman Catholic (Catholic)
    c. Mormon (Church of Jesus Christ of Latter-day Saints/LDS)
    d. Orthodox (Greek, Russian, or some other orthodox church)
    e. Jewish (Judaism)
    f. Muslim (Islam)
    g. Buddhist
    h. Hindu
    i. Atheist (do not believe in God)
    j. Agnostic (not sure if there is a God)
    k. Something else (Please describe)
       i. 
    l. Nothing in particular
DEMOGRAPHICS – PRIOR TO RECOVERY

These second set of questions are asking about your demographics prior to your last attempt at recovery (the last attempt prior to this interview).

1. What was your highest level of education?
   a. Some high school or less
   b. High school graduate or GED
   c. Some college
   d. Vocational degree
   e. Bachelor’s degree
   f. Graduate degree

2. What was your marital status?
   a. Married
   b. Remarried
   c. Living with someone as married
   d. Married but living apart
   e. Divorced
   f. Legally separated
   g. Widowed
   h. Never married and not living as married

3. Which one best describes your prior employment status?
   a. Employed Full-Time (30 or more hrs/week)
   b. Employed Part-Time (less than 30hrs/week)
   c. Unemployed
   d. Student
   e. Homemaker
   f. Retired
   g. Other (Please describe)
      i.  

4. What was your total annual household income?
   a. Less than $25,000
   b. $25,001 - $50,000
   c. $50,001 - $75,000
   d. $75,001 - $100,000
   e. $101,000 - $150,000
   f. More than $150,000

5. How important was religion in your life?
   a. Very important
   b. Somewhat important
   c. Not too important
   d. Not at all important

6. How important was spirituality in your life?
   a. Very important
   b. Somewhat important
   c. Not too important
   d. Not at all important
7. Aside from weddings and funerals, how often did you attend religious services?
   a. More than once a week
   b. Once a week
   c. Once or twice a month
   d. A few times a year
   e. Seldom
   f. Never

8. What was your religion, if any?
   a. Protestant (Baptist, Methodist, Non-denominational, Lutheran, Presbyterian, Pentecostal, Episcopal, Reformed, Church of Christ, Jehovah’s Witness, etc.)
   b. Roman Catholic (Catholic)
   c. Mormon (Church of Jesus Christ of Latter-day Saints/LDS)
   d. Orthodox (Greek, Russian, or some other orthodox church)
   e. Jewish (Judaism)
   f. Muslim (Islam)
   g. Buddhist
   h. Hindu
   i. Atheist (do not believe in God)
   j. Agnostic (not sure if there is a God)
   k. Something else (Please describe)
      i. 
   l. Nothing in particular
TCU DRUG SCREEN 5 – OPIOID SUPPLEMENT

IN YOUR LIFETIME:

1. What types of opioids have you used?
   a. Heroin ................................................................. ○ No ○ Yes
   b. Oxycodone (Oxycontin, Percoden, Percocet) ................................................... ○ No ○ Yes
   c. Hydrocodone (Vicodin, Lortab, Lorcet, Norco, Zohydro) ................................... ○ No ○ Yes
   d. Morphine (Kadian, Avinza, MS Contin) .......................................................... ○ No ○ Yes
   e. Fentanyl (Duragesic, Fentora) ........................................................................... ○ No ○ Yes
   f. Hydromorphone (Dilaudid, Exalgo) ................................................................. ○ No ○ Yes
   g. Methadone (Dolophine) .................................................................................. ○ No ○ Yes
   h. Oxymorphone (Opana) .................................................................................... ○ No ○ Yes
   i. Codeine (Tylenol/cough syrup with codeine) .................................................. ○ No ○ Yes

2. What types of opioids have you misused (i.e., used in a way other than prescribed, developed a problem with)?
   a. Heroin ................................................................. ○ No ○ Yes
   b. Oxycodone (Oxycontin, Percoden, Percocet) ................................................... ○ No ○ Yes
   c. Hydrocodone (Vicodin, Lortab, Lorcet, Norco, Zohydro) ................................... ○ No ○ Yes
   d. Morphine (Kadian, Avinza, MS Contin) .......................................................... ○ No ○ Yes
   e. Fentanyl (Duragesic, Fentora) ........................................................................... ○ No ○ Yes
   f. Hydromorphone (Dilaudid, Exalgo) ................................................................. ○ No ○ Yes
   g. Methadone (Dolophine) .................................................................................. ○ No ○ Yes
   h. Oxymorphone (Opana) .................................................................................... ○ No ○ Yes
   i. Codeine (Tylenol/cough syrup with codeine) .................................................. ○ No ○ Yes

3. Have you taken opioids for medical reasons (e.g., to treat pain)? ...................... ○ No ○ Yes*
   * IF YES, briefly described the reasons:

4. Have you taken other medications or illegal drugs for medical reasons
   (e.g., to treat pain)? ......................................................................................... ○ No ○ Yes*
   * IF YES, please list:
   
   Drug/Medication: ____________________________ Reasons for taking: ____________________________
   
   Drug/Medication: ____________________________ Reasons for taking: ____________________________

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5. Have you taken opioids for non-medical reasons? ........................................... ○ No ○ Yes*  
* IF YES, briefly described the reasons:

6. Has a doctor prescribed opioid medications for you? ..................................... ○ No ○ Yes*  
* IF YES, did you give or sell any of your medications to someone else? .......... ○ No ○ Yes

7. Have you ever taken an opioid that was not prescribed for you? .................... ○ No ○ Yes*  
* IF YES, from whom did you get the opioids you took?  
   a. Medical doctor / pharmacy? ................................................................. ○ No ○ Yes  
   b. Family member? .................................................................................. ○ No ○ Yes  
   c. Friend? ................................................................................................ ○ No ○ Yes  
   d. Someone else (e.g., “on the street”)? .................................................. ○ No ○ Yes

8. How many times have you EVER overdosed taking opioids?  
   ○ Never ○ Once* ○ Twice* ○ 3 times’ ○ 4 or more times*  
* IF MORE THAN “NEVER”:  
   a. Which of the following opioids where you using when the overdose(s) occurred?  
      i. Heroin ................................................................................................ ○ No ○ Yes  
      ii. Oxycodone (Oxycontin, Percoden, Percocet) .................................. ○ No ○ Yes  
      iii. Hydrocodone (Vicodin, Lortab, Loracet, Norco, Zohydro) ......... ○ No ○ Yes  
      iv. Morphine (Kadian, Avinza, MS Contin) ......................................... ○ No ○ Yes  
      v. Fentanyl (Duragesic, Fentora) ......................................................... ○ No ○ Yes  
      vi. Hydromorphone (Dilaudid, Exalgo) ................................................ ○ No ○ Yes  
      vii. Methadone (Dolophine) ................................................................... ○ No ○ Yes  
      viii. Oxymorphone (Opana) ................................................................... ○ No ○ Yes  
      ix. Codeine (Tylenol/cough syrup with codeine) ................................. ○ No ○ Yes

   b. How many times did you go to the hospital or emergency room  
      because of an overdose on opioids?  
      ○ Never ○ Once ○ Twice ○ 3 times ○ 4 or more times

   c. How many times were you given naloxone (Narcan) because of an overdose?  
      ○ Never ○ Once ○ Twice ○ 3 times ○ 4 or more times
d. Have you **received any follow-up treatment** after an overdose? ○ No ○ Yes

9. In your lifetime have you ever received Medication Assisted Treatment (MAT) ...... ○ No ○ Yes*
   * IF YES, what type?
   a. Methadone (Dolophine or Methadone) .................................................. ○ No ○ Yes
   b. Buprenorphine (Subutex, Suboxone) ...................................................... ○ No ○ Yes
   c. Oral Naltrexone (Depade, Revia) .......................................................... ○ No ○ Yes
   d. Depot naltrexone (Vivitrol) ................................................................. ○ No ○ Yes
   e. Other (please describe): ______________________________________________ ○ No ○ Yes

10. Have you **obtained** any of these medications **without a prescription**? .............. ○ No ○ Yes
11. Have you **taken more** of these medications **than were prescribed**? ................. ○ No ○ Yes
BARC-10

For the following statements, circle the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience:

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<th>Answer Scale</th>
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<td>1</td>
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<tr>
<td>Strongly Disagree</td>
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| 1 | There are more important things to me in life than using substances |
| 2 | In general I am happy with my life |
| 3 | I have enough energy to complete the tasks I set for myself |
| 4 | I am proud of the community I live in and feel a part of it |
| 5 | I get lots of support from friends |
| 6 | I regard my life as challenging and fulfilling without the need for using drugs or alcohol |
| 7 | My living space has helped to drive my recovery journey |
| 8 | I take full responsibility for my actions |
| 9 | I am happy dealing with a range of professional people |
| 10 | I am making good progress on my recovery journey |
MAINTENANCE FACTORS

For the following statements, circle the choice that best indicates the extent to which each factor helped/helps you to remain problem-free from prescription pain medications.

**Answer Scale**

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<th>No Help</th>
<th>Helped Very Little</th>
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### Appendix I: Representative Content from the Qualitative Data Analysis

**Table II** Representative Content from the Maintenance Factor Categories.

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<thead>
<tr>
<th>Category</th>
<th>Representative Content</th>
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| Social support / accountability | - “I didn't want my son to notice anything because he's really smart. He would notice. He hates people who drink. He was worried about me. I don't want him to worry.”  
- “My kids.”  
- “And it did make me a little crazy but my baby was more important to me. I had to weigh my options there. I want my child.”  
- “I know it sounds cliché, but it was love. I was in love with the guy. I thought he was a beautiful man. He helped me out of the funk. That's all. It was love.”  
- “I'd talk to my grandmother a lot. She's a very positive influence on me, and she encouraged me a lot.”  
- “Go to senior events.”  
- “Be around the positive people that I have in my life that has been through similar things.”  
- “Part of it was trusting [others] enough to believe that [they] had my best interest at heart.”  
- “I should've put her on there too, that she helped me. She helped me. She was like my guardian angel. I knew I couldn't sit up here and get high, or be nodding at her house, or be in the bathroom too long, like, "What you doing? What you doing?" Like I knew I couldn't get high. I knew I couldn't leave my baby on her because she had to work.”  
- “Because I have friends that go to church, go to the same church I go to, and they've been through similar things. They may have been recovered from something else, like heroin, or alcohol, but you still have the same reasons to stay clean.”  
- “I mean, the fear of not wanting ... I mean, I didn't want to have my, you know ... Like, I moved back to a small town. When you live in a big place it's like ... people remember everything you do in a small town. I mean, I didn't want to ... I mean, if I would have gone around and asked for ... trying to get drugs from somebody, people ... I mean, word would have got around.”  
- “I had gotten married ... I was trying to maintain good character.”  
- “I had a therapist that I talked to every week.”  
- “Surrounding myself with positive people that, "Hey, it's okay if it's summertime. Let's go have a hot cup of coffee. Let's go somewhere and talk about where we want to go, what do we want to do with our life."”  
- “My mother, she was there for me through my addiction and when I got clean, and I remember one time, my mother bought me this rose, and she told me, she said, "Rita, one day, you're going to be clean and sober. I can just see it." She said, "I hold on to this rose", and I still got it today.”  
- “I was nervous to go, and a place I wasn't used to, just having somebody with you, especially a family member, that helped a lot.” |
“My kids, they said mommy, please, please, they would come in my bedroom, they would sit on my bed, this is a lot, I am sorry what happened to grandma and granddad but please don’t drink. I told them I’m not going to drink, there won’t be no more drinking, no more smoking no weed, no more.”

“My parents, I was a mommy girl and daddy girl, they was my hero’s and I used to visit them every day [in the hospital], I wasn’t drinking . . . and she told me the last time I went to see her, she was talking like a week after the first stroke, but the second stroke damaged her and I remember she said to me, Marie, I want you to focus on Two Things, take care of my family and take care of my grandkids, I know you can do it. That was the last time I spoke to her . . . I know that I had to take care of my kids like my parents took care of me. I wanted to take care of them the same way my mother did me, which I did drink and smoked that weed, but my mother had never drank, I had never seen my mother drink and she never smoked, no kind of cigarettes. She was a stay at home mom, cook, clean, do laundry, that was my mom, I would be proud of her and the way she lived. I wanted to be a good mother like that.”

“My immediate family like my children and my boyfriend has really helped me out with that. I just see them and I really don't want them to look at me funny, especially my children. I have a 13 year old. He sort of understands when someone is not okay. That really was a smack in the face when I felt like that . . . He would say, "Mommy, you're not feeling well again, right?" Yeah, I was not feeling well not because of the pain, but because of the medicine.”

“Yeah, my boyfriend. He's also dealt with this, I guess, addiction. Different types of addiction. He was one of the main reasons why I stopped because he knew the signs better than me. Him reassuring me that it's not leading me nowhere was a big impact on my life. Because I know, I've seen what he's gone through because of his addictions, too.”

“Opening up, I think. Opening up to my friends. Like I said, my boyfriend at the moment was my friend at that time. Opening up to him, opening up to my best friend. I always kept it indoors. I never told anyone what I was going through. Opening up really gave me the strength, because I was hearing what my friends would say, that there are other options, you don't have to live like that. Before that I was, like I said, anti-social and quiet. I wouldn't speak to anyone about it, about my feelings.”

“Making the decision to not [use] and including my boyfriend in that, my parents in that.”

Religious/spiritual involvement

- “Church, going to church”
- “Part of it is, as I mentioned before, was getting into Kabbalah studies.”
- “It helped me to get back in church”
- “Just a lot of prayer, reading my Bible. I come from a very spiritual family, and I believe in God, the Lord, and I know that that's the only person that kept me in my madness because I went through a lot out there, and I'm still living. So, my faith . . . Mainly God and just believing”
- “It happened between one and three months, when I was waiting to get sent to prison, and I was just like, "God, help me." And it was like God was like, "I'm going to get you through this." I heard Him say it too. Like, "I'm going to get you through this but you can't go back. You're going to die."
“I started practicing Buddhism... I went and just been practicing... took it seriously because I wanted to come out of my funk. And it's just been a change of life for me.”

“The main tactics I would use for everything in my life to the day I leave here, a spiritual coach. I always been a spiritual person, grew up in church and things like that but, I kind of evolved into my own spiritual path away from the religion part of it but, more of a spiritual part of it.”

“And that's when I knew, Lord, I got to go to church. And I started praying because I was brought up in church, and that to me, He delivered me.”

“I don't know if you've ever been in, or if you are, the spiritual, holistic world kind of changes everything. Your whole perspective of everything. I mean, before you step into that world, it's like everything is what you see.”

“First and mostly I asked God to help remove the taste of alcohol... It sounds strange but I can't say without God... I asked for God's help to remove this thing that was killing me.”

“I had the church people and I was going to church with.”

“I had to keep putting God at the forefront because that's the higher power that they use in recovery. Have you ever heard the term higher power? Well, that's what they used. You turn to something greater than myself but I didn't go to recovery to get it.”

“Praying mostly.”

“For me, I started going to church, so I would do that three nights a week.”

“So every night, and every morning, I would get up and I had them pray. we would pray together, every night and every morning, ask God, my higher power, to give me the strength to just make it through the day, just today.”

“I got more into faith. I don't want to say religion because I don't have a set religion, but I did become more into praying and [spirituality].”

“Other situations in my life, like I said it before. I guess I would call them addictive behaviors. Sexual ones, whatever, like I said. I just refuse to let that continue.”

“I used to do positive affirmations. I used to put stuff on my mirror in my little room, and stuff, and just tell myself, 'You're beautiful. You're going to make it.”

“Yoga, meditation and things like that. Affirmations and things like that.”

“Going into yoga and meditation takes you to a whole other level of it.”

“Learning how to deal with disappointment.”

“Learning how to cope with certain things like having a man that cheat.”

“Parenting classes.”

“So, that flip of mentality, of course you have to change your mentality from what you were told to something else, to another octave of living. You know? So, that's what I did. You know? I just wanted to know more. I just got deeper into it. What's happening? You know, questioning everything. So, I went deep into it, like reading, everything.”
- “Just trying to learn my body, what it's really saying. Just trying to go the holistic way. It was hard at first, because now I'm dealing with the pain, it's still hurting. Like I said, at that point just taking more practices like meditations, acupuncture, stuff like that.”
- “I just kept a journal, I wrote a lot. Then I was able to compare because when I was using I still had ... I wrote too.”
- “Other than that, meditation. I have actually tried yoga too. It was suggested from my therapist to try that too. It works.”

**Stimulus control/avoidance**
- “Well, at first I kind of just isolated myself, and just gave up everything because I knew if I stepped out the door I'd want to go use, and all bets are off. So I pretty much stayed at my mom's house and did nothing. And it was not easy, because she was still using. She wouldn't do it in front of me, but I would know.”
- “See, my addiction, probably, is my lifestyle. That's what keeps me out there. That's what keeps me using, is just the people around me, and just... So once I actually surrendered and said, "I just don't want no more,"... Because I got beat up real bad when I was pregnant. Okay, this is what really was just it for me, and I got raped, and I got beat up pregnant.”
- “Just staying away from people, places, and things. The people that I used with, the areas I used in. ... I did a lot of prostituting, so I had to abstain from that.”
- “Not getting hurt or injured . . . Oh, boy. I tried to control it.”
- “I don't go back in that area. I don't go back. I changed my number.”
- “I don't want to be bothered. Just leave me alone. I'll cut my cell phone off.”

**Decreased time spent with users/increased time spent with non-users**
- “The issue would be the distracted world which means going out with my friends, it throws everything off. I have to be really focused on what I'm doing. If I'm trying to get off of this and stop this, I'm in a place and space where people probably live all type of ways, you know? That's distracting. I will wait till I get more stronger, so that's what I did. Solid, you know?”
- “Because I have friends that go to church, go to the same church I go to, and they've been through similar things. They may have been recovered from something else, like heroin, or alcohol, but you still have the same reasons to stay clean.”
- “A relationship with somebody who wasn't using drugs, I mean, they didn't even ... they just liked alcohol on the weekends, but they didn't like even smoking marijuana.”
- “I had a bad relationship when I was trying to get clean. I had to end that one because I couldn't have them using around me. That ended. That helped. Lifestyle changes and stuff it's just not being around the same people that I used to be around. That definitely helped me stay clean.”
- “The people who I used to hang around with, like drink with, get high with, I just deleted their number out of my phone, when I had one, and just ..."  

**Work/school involvement**
- “Going to school.”
- “It has been, in the past, getting very involved with the business.”
- “I stay busy working.”
- “I had gotten a job.”
- “I'm even thinking about going back to school.”

**Residence change**
- “I moved in with my mom.”
- “Relocation was key.”
- “I moved back to a small town.”
- “Well, when I was attempting to get clean, I think that was 2007/2008, I was living in an area in New Haven where it was a lot of drugs, and drug dealers all around and stuff, and my lease was about to end, and my mom told me that she knew of this apartment in Hamden that she thought would be best; she talked to me about it. At the time, I can see now why my mother wanted me to move from the area. I mean, right now, it wouldn't bother me, because I got clean time, but at the time, when I was trying to get clean living in an area where drug dealers all over the place, I see now why my mother wanted me to move, and that was a good thing, that I moved into Hamden from New Haven. That did help at the beginning of my recovery, because I was in a drug infested area.”
- “I moved out of Montrose on purpose, to get away from those type of people and my parents helped me with that.”

**Hobbies/distracting activities**
- “Going to festivals.”
- “A little gardening.”
- “I go to the theaters, go places.”
- “Doing different activities with my kids, that helped.”
- “Sometimes I would watch something about recovering ... There was a show that I used to like to watch. It was Intervention. I would watch that.”

**Exercise / diet**
- “I was going to some exercise classes.”
- “Yoga, meditation and things like that. Affirmations and things like that.”
- “Going into yoga and meditation takes you to a whole other level of it.”
- “You know, I started working out, I started eating right. I really just had that desire.”

**Treatment / self-help**
- Hypnotherapy, which is power of suggestion. "I am healthy. I am healed. I am happy." So, I went to doctors who were not only MDs, but they were MDs who specialized in hypnotherapy.”
- “Music, I learned about sound waves and how listening to certain music can help your certain cells to regenerate while you sleep. So, it was a ... it just became one thing after the next. I became like a mad scientist because I'm in the house, I can't move. So, the only thing I can do is be on the computer and do research. Why am I in pain?”
- “Making the decision to not [use] and including my pain needs, a doctor, in that is a big one, and try to find other ways [to manage pain] and finally finding a doctor that could give me an epidural... and then also doing other drugs to manage it.”
- “Actually, looking for a better doctor. Looking for somebody who's more open minded and, besides referring to narcotics, referring to other options for pain relief. That's really been a big difference. I thought, "Oh, because this
person did my surgery, I have to stick by you and follow your orders.” Which was not the case. I didn't not have to do that, at first I thought I had to.”

| Helping others | “Helping out at the [animal] shelter.” |
|               | “I just did what was right in front of me, the right, positive things, and helping others helped me a lot too.” |

<p>| Miscellaneous (i.e., self-actualization) | “It's easy to get lost when you don't know yourself. So, since I was already on a path to knowing myself, I knew something was wrong. I don't know, being in past experiences where if I know, just something don't feel right. Because at some point you're going to have to ask yourself what's important to you with basically everything. So, I don't know, I got this pain, but at the same time, I was already in a relationship with trying to find out who I am. I built a relationship with my own self. So, that just was more important to me than I was dealing with some pain.” |</p>
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<th>Category</th>
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<tr>
<td>Work/School Involvement</td>
<td>- “Being very involved with the business.”</td>
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<td>- &quot;I've started back working, and I just started back doing constructive things, babysitting.”</td>
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<td>- “Just working, staying busy. Volunteering, working, staying busy.”</td>
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<td>- “Working. You work to distract yourself. Mm-hmm (affirmative). You have to have a consistent something that is giving you interest. The kids, and getting the hugs, and the joy from those children was like, &quot;Okay,&quot; some days I had forgot I was in pain just because it was for them. I can't be in pain in front of them and you will forget until they leave the room. So, that was the part that . . . Yeah, it was really . . . I mean, I don't have children. So, that's probably the part that I was missing, that nourishment of just a little hug from all of them. And they call me now. My phone rings off the hook so, I enjoy that feeling.”</td>
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<td>- “I started a cleaning business and I've been doing it for 11 years now so, I mean that was something I could do for me, just work.”</td>
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<td>- “I had to get a job, go back, you know . . . I had to get a job and more education.”</td>
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<td>- “I went back to school. That's how I got my Bachelor's.”</td>
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<td>Reality / Life / Staying Busy</td>
<td>- “Slowly I went back into just back into reality, and just I don't know, started hanging out. You know? Just kind of getting back to what I was used to doing.”</td>
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<td>- “I started just going back to doing what I used to love to do.”</td>
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<td>- “I started going back slowly into what I used to do before the alcohol took the time.”</td>
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<td>- “Yeah. I'm just taking care of business as I should.”</td>
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<td>- “I started back being a wife and a mother.”</td>
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<td>- “And I started back doing things for myself . . . Going to the nail shop. Going back shopping. Just doing positive things.”</td>
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<td>- “Just staying busy, you know. Doing what I got to do. Keeping a scheduled life where I don't have time wandering around. I always know what I'm going to do. I don't go outside and not have a plan. I really don't. I really don't have time to not have a plan anyways, so I just... I still go do fun things all the time, things I've never done before.”</td>
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<td>- “I changed my house a lot. My house is like it was in the beginning. So I noticed, oh no I don't like that. Some of the old stuff I threw out and bought new stuff. I even started painting. I painted my whole house. One room one week, another room next week. I threw out the old kitchen table and bought a new kitchen table. I changed everything. Threw out the old pot I used to cook in get a whole set of new pots. I changed up everything. I had to change out. I had to get rid of all the old stuff. Threw out all the old stuff, brought in all new stuff. I kept busy, kept busy. I was washing more clothes, cooking more which I had stopped. I started cooking all the time.”</td>
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<td>- “I don't have a job right now, but I do have animals that keep me very busy, and so that's a daily, hourly, you know, um, job in itself. But I've had other pets, I had a corgi and a cat for awhile, you know, I'm an animal person.”</td>
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- “That's what helped me. Me being in New York helps a lot. If I was down South and I was just trying to get clean I don't know how because I don't drive yet. I couldn't just go here and there. I would be stuck with my thoughts. You know? Definitely being in a metropolitan city and I could just hop on the train and say, "You know what? Let me just get out of here and let me enjoy this” and then we go here and then we go there and by the time whatever I was thinking about it passes by the time I get home because I'm too tired.”
- “Just working, staying busy. Volunteering, working, staying busy.”

Social Support
- “Just hanging out with my boyfriend.”
- “A social life that didn't... you know, family life that you could now be around people where you couldn't before, finding new people in your social life, getting a family, yeah.”
- “Simple but I love coffee so I would go meet some of my friends to Starbucks and we would just sit and chill and just drink coffee or walk.”
- “Being very involved with, first, taking care of [child], now the grandchildren.”
- “I went to... positive things. I did positive things. Like, spent time with people that weren't using, recovering people.”
- “Instead of going to church just on Sunday, I'm going to start going on Tuesday to bible study, and then I'll go on Thursday, just to be with the women who are... Know more about the bible, and I started hanging around them. You know, could we go out for coffee, talk to a couple of the ladies, or once a month, we have a women day at church, I try to make that with my sister-in-law and my youngest sister. I just started getting more active, doing positive things.”

Hobbies
- “Take my dog out [for walks].”
- “I also try to do hobbies like journaling or scrapbooking.”
- “I got into a lot of activities at school, like clubs. I got into the Alpha Club. I got into a few other clubs.”
- “Going out to the movies. I hadn't been to the movies since The Lion and the Witch...”
- “I started going to the movies every once in a while.”
- “I started going out to Central Park, having picnics.”
- “Oh. I read a lot. I read a lot. I love to read, and I write. I write, also. I write poetry.”
- “I used to love to go to read, I used to love to read books.”
- “That's one of my biggest things, too, to help me get though. I write about what I've been through and everything. I'm actually looking at publishing... I'm trying to publish a book... And I love it. It helps other people too because they're like, "Wow. I've lived through that." You know?”

Self-Help / Treatment
- “Alternative stuff, like natural stuff. It's all drugs, see? So, there's something called kratom. I don't know if you've heard of kratom? Kratom is like an opioid-ish, but it is a form of a... I wouldn't say heroine, but it's natural. . . I don't know what it is, but I'm telling you. It's a wean off, non-addictive form. And so, I've been looking for things. So, to answer your questions, that's what I do. Like, okay, I don't want to take these other things. I did want children at one point, and I didn't want to have a toxic body. So, it was like I had to find something to get me off of this stuff. I'm on an
injectable now called Enbrel, but that's for the actual pain. It's not a ... it's immunologic. So, it kind of pulls back that, but it's not an actual pain reliever itself, if you will. So, I look for alternatives with that. And that's what I do.”
- “I'm doing other drugs sometimes now”
- “Oh, well, now I've really gotten into doing yoga and meditation.”
- “I spend a lot of time in solitude because I had to. Like I said the mind will continually bring you back to a space and a place. It was a continual thing of reprogramming it. We going this way not that way so, I spent a lot of time in solitude. A lot of time from everyone else and just with myself. That's kind of with anything. A drug, if it's cocaine or anything else you see people spending time in solitude and that space of getting rid of what you're used to. That moment of letting it go. Yeah.”

**TV / Internet / Games**
- “I watched a lot of TV. That was one of my big things too because I still had to feel like I needed to find something to escape. Like when I didn't go outside, and I wasn't in school, and I wasn't using.”
- “I lay in bed and watch TV.”
- “But actually watching TV, you know, always got to find time for that... before I didn't watch TV I was always getting high. But now I like to watch certain shows.”
- “I utilized internet and played games. That was another good thing because I can get lost into Candy Crush, Toy Blast and all that. I can get lost... Yeah, playing games, internet or app games.”

**Religious / Spiritual Involvement**
- “Going to church.”
- “I would go to church.”

**Helping Others**
- “I started doing a lot of volunteering. I don't do that anymore, but ... maybe during the holidays. So at that time I was volunteering a lot.”
- “Just working, staying busy. Volunteering, working, staying busy.”

**Exercise**
- “My boyfriend at the time, he used to be athletic, like to work out and stuff like that, because we spent a lot of time working out. I would go for my walk, me and him would work-out in the house, like lift weights and be on the treadmill and stuff, in my early recovery.”
- “Well, now I've really gotten into doing yoga and meditation.”
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| Hobbies       | - “I do a little knitting, a little coloring in magazines, in books and stuff, because someone told me that, my friend Charlotte told me coloring, I know a lot of people think, oh, that's for kids . . . I got a spiritual book and it got pictures, and it got, you can write your own stuff, and you can color stuff in. Yeah, someone had told me about that, and I enjoy doing that too.”
  - “I like to go to the movies.”
  - “I go to the movies.”
  - “I'm very happy on my spiritual journey but, every now and then I probably watch movies. I watch Lifetime. I watch movies but, I'm really focused on that. Like I said, I call this the distracted world so, I'm very choice-y when it comes to what I do as far as things like because some of them are pointless to me.”
  - “Music is a thing for me. I'm a vocalist. I started doing shows. Writing music.”
  - “I would say the reading . . . I love to read. I mean, I can take a book and I can be sitting and I'm content.”
  - “I enjoy reading, I love to read the bible, I have books I read, clean up, I try to stay as busy as possible. Trying to find things to do.”
  - “I like going to secondhand stores and, like, finding things.”
  - “I started going shopping more often. My wardrobe wasn't the same. The clothes I used to wear were sweatpants, sweatshirt, slippers. I wouldn't dress with the heals, stockings, blouse or nice skirt all of that changed. All of those things that I used to have in my closet when I used to go out and drink, I started getting rid of all of those and I bought all new stuff to go in my closet.”
  - “In the summer, we went to a lot of theater.”
  - “I like to write.”
  - “We went to a few outdoor movies or the outdoor little events they had. We would go to that. I have two friends who don't really drink so I would go with them to these outdoor events. Then my other three that I have friends that would do these outdoor events, they drink but not a whole lot so did a lot of that.”
  - “I like walking around downtown. I really want to go to the Shedd Aquarium. There's just things I do that makes me happy. Visits with my son, taking him to the park”
  - “Just outside, like adventure activities.”
  - “Musical events. Like, I love concerts”
  - “I did make a concert. Come to think of it I went to see two weeks ago the '70s Old Jam ... It was a concert but I did go. I went to that one. That's helping me. Free concerts or something if I feel like I want to do ... I haven't been able to take a vacation. That's my heart's desire.”
  - “Picnics, I go to every once in a while, they do them at my church over the summer. Go to picnics.”
  - “I love festivals.”

- “Plants. I got really into plants. So, my house is filled with plants. And I found out that everything around me is a reflection of me. So, when a plant is dying or is not nourished, and that's me too. So, and when it's dying, it's like, "Okay, go talk to the plant, clip the ends, nourish it." And that became something.”

- Going to the parks. I took my daughter, this was like maybe three weeks ago, she went bike riding. She rode the bike, I walked. And my other daughter, she was at the church event. She went to Great America, so I had the little five year old. After a while she said, "Mom, but it was your idea that I bring the bike out because I had changed my mind." I said, "I don't remember that, I don't recall that." So now we like, I'm walking the bike to McDonald's down the street though, but I'm like walking the bike. I was like, "But could you ride ... She said, "No."

- “Definitely we go a lot more to the park. We do spend a lot more time with the kids at the park and their activities, like their dancing or their baseball game. Which we didn't do much before.”

- “I go to Navy Pier, Millennium Park.”

- “Visits with my son, taking him to the park,”

- “I used to start going shopping myself in the beginning then go to the park and just sit down so I could get relaxed and think. I enjoyed doing that again.”

Social Support

- “I found enjoyment in connecting with other people who was also in [recovery]”

- “I have two grandchildren so I want to go see them.”

- “I have a few friends, a few female friends I go out with. We go out for coffee, or we go shopping together. My immediate family, my two sister, my mom, my brother, my sister-in-law, we have family . . . When someone birthday in the family, we go out to eat, or a couple of times a month, we go places and do things.”

- “I was going out with my friends from school, I met a lot of friends in my college, which before that I was just in a relationship and I haven't friends like that. Mainly that, hanging out with new friends, making friends.”

- “Primarily the family”

- “I like spending time with my family.”

- “Visits with my son, taking him to the park.”

- “Going to the senior events, a lot of senior events.”

- “I was thinking just the regular, like, sex and enjoyment. Stuff like that. So, yeah. Just relationships. And it really is about loving and touch. Because if you're not being touched for a long amount of time, like even the kids that come in just needing a hug. And I figured out I needed the hug just like they needed it. So, not being touched for months and years on end to me just feels like it will take me back in relapse mode. Even a held hand. I feel so sappy talking about it, but it's just the hug and the hand holding and all other stuff, just sitting and talking, it does help.”

Cooking / Eating

- “I go out to eat.”
- “Fast food restaurants I used to go back in the day with them, but I stopped going, now I started going back. I have a soda or fries, I don’t eat no burger or nothing like that just a soda and fries. So I started enjoying that again.”

- “Cooking, I cook a lot. We were just talking about that yesterday, like my daughter and them was telling me that they was in my godkids' house and they was like, "Well look, my godson's from Vegas. He's there with his sisters and everything, "We going over Lanita house for Thanksgiving." And my daughter said, "No y'all ain't because my mama going to be at work," but I found out I don't have to work on Thanksgiving so I'm cooking so everybody's coming over there and that's how we're going to do that.”

- “Even cooking my own food, ... making my own food. I know it sounds odd but putting my own force of love into my own preparation and staying off the street eating all the time. And I was doing that for years, eating in the streets. And so, just sitting down. Like, yesterday, I sat down and ate my meal. Put a candle there and I just ate my own meal with my own stuff.”

- “I do a lot of cooking for my family. . . . Sometime on Sunday, I'll do a dinner for the family, or for my niece, she's seven, my sister's daughter, sometime I make her her own little meal, and I bake a cake for the family, and let everybody come over to my house, or to my sister's. Yeah, I love to cook, especially for others, I really love to cook.”

- “Cook for family or friends”

- “Well, we eat a lot more now. We do go out eating more. Let's try a new restaurant. I've also noticed that we are eating a lot more healthier than before. We weren't really ... I mean it was in the back of our heads. We weren't really pursuing eating healthy. And now we're more leaning towards being a little bit more healthier and whatever we've damaged we want to fix.”

Exercise

- “Little exercises here and there.”

- “Yoga is just beautiful. Yoga is just amazing. I've done yoga only at home on videos. I've never gone to a club. I do everything with the video and stick with it for like 30 days or so, and it is amazing what it does for the mind and body.”

- “I had a physical therapist. So, I went through a 90 day training where it was just like go hard. Like, 3 days a week, abs, walking around the block, doing core work. And that was really empowering. That keeps the drug use totally, not away, but you don't think about the drugs. Like, "I feel strong. I don't know why." Like, I didn't do my injectable for like ... I'm supposed to take it every week. One time, I forgot for three weeks.”

- “I did yoga, trying to stretch my body, just do other things for my body. You know? You know what, my body was never used to things like that, I had to get used to things like that.”

- “Yoga, I liked yoga, and stuff like that.”

- “I like bike riding.”

- “I work-out”
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| Self-Help / Treatment | - “I have to tell you, my thought when I think of this stuff because I think about everything, people, the littlest thing they don't think that they're entertaining themselves but, you are entertaining yourself with. A lot of things that you do. Replacing things that you should be doing, you know? I just can't do that. I just can't. A lot of people go around and place themselves, "Oh, I want to cook. I want to do everything for my family and everything and this and that.” But, you're still replacing that because there's something in you still. I want to please other people because there's something in you that's not being pleased yourself. I know this. That's why I'm very vague with the entertainment.”  
- “Even though I'm not in treatment, I still utilize the cliches that I've heard throughout my times in the rooms, all the different things, because those things do still make sense. For example, just for today, my recovery must come first. One day at a time. Have patience. Let go and let God. It's just little words that I use throughout my day. I definitely say the Serenity Prayer all the time because it's... and just thanking God, just not for things that He's done, or asking Him for things you need, just for whatever it is at that time that you already have. I just do.”  
- “Just doing personal care stuff, like getting your nails done and shopping.”  
- “I go get my nails done. I've never done this, I don't know. I'm analyzing my hair. I get myself together.”  
- “Loving myself. I'm very pleased by that. That's it. That's my drive, that's my focus. Every day, all day. That's what leads to things like this because you don't love yourself. That's the main purpose. Everyone is going through a lot of things right now. The underlying issue, they don't love themselves. They don't know what it is. Making sure every day, every moment, every conversation, every interaction, every though, every feeling is in that vibration of love. That's every day. That's a lot of work because there's a lot of things that flow through you. There's a lot of things you're tested on. There's a lot of things with me so, that's a big job every day. So, that's what I do.”  
- “That's how you know you made it. When you feel great, naturally. I go just walk outside and just be. I'm really little on entertainment. I like to entertain myself.”  
- “So, I had to walk away from technology for a while, too. I just got tired of being on the computer. Just the screen or radiation, all of it. Just I want to just touch a flower, I want to just go walk and sit in a park. And so using my senses and being able to appreciate what those senses can, you know what I mean, bring to you. Because if you're using substances, it's all numbed. So, even if you were to be touched or whatever, right? You probably wouldn't have even really felt it.” |
| Goal-Oriented     | - “I always had goals. I always had a goal that I was working for. You know what I mean? Okay, it was to get married, to get stable, then it was to have the children, then it was to get a better job, then it was to get the master's degree, then it was to get the house redone, then it was to buy some land out in the country. It was always a goal.”  
- “Like my therapists. I meet both of them once a week for an hour, and just taking suggestions from them. Sometimes I do feel overwhelmed. Take an hour to yourself, read a book, you know? Focus on you for the day. Just for today I'll do this, make a list of goals for that day, and I try to do that.” |
| Helping Others    | - “I was really actively involved at the [animal] shelter, doing all that.” |
| **Religious / Spiritual Involvement** | - “I'm doing this volunteer thing for Journey Care, which is a hospice . . . because I just enjoy being around other people.”  
- “Then now I think a year and a half or two years ago, I started going to a new church. A Christian church, Bible Based. That's what keeps me busy. I'll even go to Bible study on Saturday afternoon. Then I go every Sunday. Then we had a huge conference at the hotel. That took up a lot of my time because it was five meetings, twice each day. One, two, three, four, and one, one day. That's kept me busy. Reading, just reading.”  
- “I found pleasure in realizing life beyond just what I see. Everything created can take you somewhere. So, I mean, whatever, but I chose that approach, because I knew it was something that could take me . . . not away from my reality, but above it. That's the difference for me.” |
| **TV / Internet / Games** | - “I enjoy watching certain TV shows”  
- “I love Facebook. I've never had a Facebook page until July this year. I've never had one, so that's something.” |
| **Work** | - “Working for the family business, that was enjoyable.”  
- “Just being around the kids. I still kind of maintain relationships with them. That's very important to me, being around them.” |
<p>| <strong>Drugs Weren’t Pleasure</strong> | - “Well taking that medicine was not my pleasure. I would have to say for me, never having had any drugs in my system ever probably played the biggest factor. I think that people who take things like that as pleasures, because they already have those . . . in their system, those triggers of, okay . . . because, those things seem like they . . . drugs take you somewhere else. I mean when you see somebody, I know people drink, and smoke marijuana and stuff, and it's like they become somebody else. So, I think a lot of people . . . that's probably why I think it's easier to get addicted, because it takes you from the reality you don't want to even be in. It was never my pleasure. So, I think that reason played a big factor, because it's like, what is? No way.” |
| <strong>Other Addictive Behaviors</strong> | - “I had started gambling. Now, see, we say you drop one thing and you pick up another. That was my excitement for a while. The first six months I was calling myself the number . . . I would play for 50 cents but it still was gambling. I picked that up and I was excited but I wasn't really winning that much. I was actually losing more. That was a source of excitement the first couple of months early on in recovery for me.” |</p>
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| Social Support / Interaction with Others | - “I don't isolate anymore. I'm definitely out in the world all day, every day. I am out there moving, doing things that I need to do. Going to appointments, doctor's appointments, having my visits with my son, signing up for my internship. Trying to get some kind of... I'm trying to establish stability within my life. I'm trying to make a life for myself, and I can't do that hiding in four walls. If I'm going to in-prison myself in a room I might as well in-prison myself out in the lifestyle. I need to do things, I need to do something different.”  
  - “Spending more time with my family and my children, where I didn't. At first, I tried to do it by myself, but I didn't want to be around nobody or nothing. Now, I need them to maintain this sobriety. [In the beginning] I was isolating. Thinking that that would make me well quicker, but it didn't.”  
  - “My girlfriend, her aunt... I call her my aunt, too. She lives out on the West Side so I, you know, back and forth. The West Side wasn't my area but I still see people I know and it doesn't bother me anymore. I have no cravings, no urges, so.”  
  - “Initially moving made a big difference because I needed to be away from some of those temptations, or triggers, but now it won't bother me as much because I've got clean time.”  
  - “So, in the beginning, it's real good, but as you go on, if you don't practice it and be around other people, it's almost like support groups and people who understand. Because I don't think a lot of people understand.”  
  - “It's people that I know that take pills that I don't deal with.”  
  - “They pretty much still the same. I'm pretty much keeping everything basic.” |
| Acceptance / Gratitude            | - “. . . So, after that, they put me in the disabled category. So, I got a lot of passes that helped me, but my ego didn't want to accept it. Like, I don't want to be able to put my paper in late. I should have my paper in with the rest of the kids. So, but me accepting help has been another part of my life that I had to accept at all levels. Like, accept help because the world is full of people who can help you. So, yeah.”  
  - “They said life is going to be a new meaning, it's just I'm just grateful now. I'm just grateful and want to help the next person; I don't need a whole lot of stuff now to be happy, because I'm happy within.”  
  - “At the beginning, I would do little things just to get by, to get some clean time. When I had three months, I was clean, but how I go those clean months back then was I would celebrate. Like every time I would get a month, I would go to the restaurant and buy me something special. Like buy me a nice thing to each back then, I can see, you know, it ain’t the perfect thing to do now, but I was like them little things meant a lot to me back then, if your used to not having money or food, then once you do save up a little, and then when you get one or two months [clean], and you just buy yourself a little something, you start saying, "Yeah, thank you God." You know, for everything, and just to have that little stuff. Now since I got years, as I got years clean, I started seeing things more clearly, and I don't feel the need to celebrate the same way.”  
  - “They pretty much still the same. I'm pretty much keeping everything basic.” |

Table I4 Representative Content from the Maintenance Factors Change Over Time Categories
| Cognitive / Behavioral Strategies | “In the past, probably ... because, I was just trying [meditation]. I don't know, maybe once a week, or something. It's every day now. Two or three times a day. I go to sleep to it, or any time I feel energy is off anywhere, I'll put it on.”  
- “Now I guess I have a stronger balance between my emotions, my mind, and my body. It's like a stronger connection between all of me. That's the difference between then and now.”  
- “As time grew it just got more stronger in my approach. I learned other things about myself as well, trying to accomplish this because the majority of the time you listen to your body and I had to really ask myself is it really that or is it just my mind used to saying that, repeating that over and over and over again. It just really helped me expand my own knowledge of myself and who I am, you know? This body I'm in. So, in the beginning it was definitely more of "let's control what's going on with my behaviors" and then over time it became, “let's start to learn more about myself and why this is happening and what needs to change in the future.”” |
| Religious / Spiritual Involvement | “Okay, like now I still go to church. Now I may not do as much as I did [initially]. In the beginning I had to do whatever it took to just stay out of my own head, I had to. I had to do something different. I had to stay busy for real, for real. My day had to be full, no time, no space in between. But now it's like, shoot, I just want to do nothing but go to work, come home. . . Real life stuff, stuff I should’ve been doing in the beginning anyways, you know?”  
- “Not only do I still read my Bible ... Well, I'm kind of slacking on reading my Bible. I'm going to be honest. In the beginning, I was much more strict about it, so, that's changed.”  
- “The only difference between then and now is that I'm way more deeper into the spiritual, and holistic approach.” |
| Self-control / Willpower | “So, just managing it, number one. The change is the management of it. Like, if I'm going to ... like, I have a cannabis card I have to get things legal because I'm a teacher. But I had to learn how to do it. I would have to inhale or maybe do it in a tea two hours in the morning before I got to school so that I'm not going to school high in front of my children. You know what I mean? Learning how to take the pain pill in middle of the day during my break so that I could be able to get through the rest of the day. So, what the difference is is that now I'm seeing it's not ... I'm not a drug addict teacher who's looking like a Rastafarian who don't handle herself. I mean, it's true. Some people who do certain things you look like the drug.”  
- “I would say, and when you start anything new, you go in and it's real good in the beginning, and then you just fall off. You have to make a conscious effort to stay on top and to remember how good it felt in the beginning.” |
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| Distracted / Busy | - “Everything is basically the same, because I don’t have time once I go to work and come home, I’m tired, and I got to cook . . . so I don’t have the time. I don’t have no time.”  
- “I think I’m still pretty strict with my time. I try to plan my days ahead. And it does become, I don't want to say an obsession, but it does become part of my night routine. Let me plan tomorrow’s day, and how I'm going to go about tomorrow. Or ”What am I going to do? Do I have appointments? Have this?”  
- “So yeah, I'm still pretty strict.”  
- “I'm more laid back now, like I can get up in the morning, go check my blood sugar, take me a cup of coffee, watch the news, and that's my day, like, ”Come on y'all, come join me,” my girlfriend says, ”You old.” She want to still go to work. She able to go to work and still go out with her friends. I'm like, ”Look, I don't want to go nowhere,” you know? And then too, a lot, she's not in recovery and she ain't been through what I been through, like I ran the streets, and I got high, and I stayed up for days, and I did this, I ran. Now I don't want to do that stuff no more. So you go ahead and do it because I did it already, you know, that's how I feel.”  
- “At the time, I didn't know why he had me doing all that stuff, but now, I know what it was all about. He told me in your early recovery you have to stay busy. A devil in your mind, your mind. You got to stay mobile, you got to move, or you got to stay moving; I didn't understand it at the time. Like wow, we doing all this stuff, but you got to think about it, when I'm using, when people using, they spend hours trying to cop drugs, hours. I mean I was using, so you got to replace that time with something positive.”  
- “I mean, now, since I have 11 years . . When I first got clean, I noticed when I first got clean, I was more active doing things. Now, I'm not complacent, but I have slowed down a little bit more.”  
- “At the beginning, you got to stay really busy doing things, because idle minds are the devil's playground.”  
- “Now I don't overwork myself. In the first 30 days and really the first year, it’s the hardest. But as it goes on it gets easier and easier. Once in a while I still get the urge, okay, my belly flip, but then it goes away, just got to wait it out.”  
- “With the volunteering, I just got lazy with it. At that time I was like, ”I don't want to do this anymore, I'll stay at home and watch TV.’”  
- “I be tired most of the time, so I try to get my rest in. Just do a lot of reading and writing.”  
- “So, you go from one thing to the next. And then, when you're in the house by yourself, you have to find something to do. So, if you're not working, that's even worse, in my opinion. I wasn't working. So, I was like you've got to get into something. You get on the phone, start getting in people's business just so you can have activity or watching a movie, watching a whole series for two days on Amazon. Which is okay. It's okay to chill, but it goes into something has to distract me full time or I just eat. I need to eat, eat, eat or candy. Like, I'm just eating candy for days. So, it goes into some. Boredom is really real, especially when you're hyperactive and need something all the time.”  
- “At first I was going to church every Sunday. Sometimes three times a week. Now, not as much.”  
- “Now we only go to church once, every Sunday.” |
- “I started going out to Central Park, having picnics, going to the movies. Those are things that I didn't do before that I used to love to do. I used to love to read a good book. That's what I started slowly to take the time and, like I said, mind you it was summertime so that's when everybody has a beer when they have a cook out. I had to find other things and that's what I started doing, just going out into the city.”
- “Mm-hmm (affirmative), because now, instead of chasing the high and trying to get high, I go to school, I'm in a job training program.”

Isolated / Self-reflection
- “When I first started I was very strict, very solitude. I eventually, gradually start to hang out, talk to people. Just doing the regular routine. Like going out with friends, you know.”
- “I felt that I could handle whatever I was around at that point versus when I first started I just felt like I needed to be by myself.”
- “In the beginning, I was focused on myself, I needed to be, but now that I’ve had some time, my main purpose is to help other girls, and guys, to my best ability; to help them stay clean, or if I see someone homeless, because I do see a lot of young kids where I live at, they homeless, stuff like that, give them a couple dollars now that I have it. That's one of my main things, is helping others, because they always say you can't keep this if you don't give it away, you don't get clean. I said, "Well, I'm clean", and you know . . .”
- “I recently just stopped going to stuff, if I don’t want to go, I don’t go, where before I’d go out of obligation and it would cause stress being around family, and so if they're the problem and I’m just trying to deal with it because I want to show that I love people, and I don’t want to lose my relationships with people who I know are in my life, and they’ve known me since I was born. But the problem that happened from that is what made me want to use drugs. My mother, I love her dearly but she was a . . . just being a round her sometimes causes me to want to use drugs. Like, okay, that’s enough. I love you dearly, but I have to go. So now I don’t go if I don’t want to, or if they come in the room or somebody’s there who makes me feel uncomfortable, I leave. And those are decisions I made just on the journey of knowing what triggers me.”
- “I’m not just hanging with you because of who you are to me, that would be crazy. My motivation now in life is to move with love in myself and just that way. You have to be the same way. You’ve seen things that people who was not your blood were better than people that weren’t your blood so, I know that’s not true. I saw it, I experienced it. That’s why my energy, connecting that way and heart-centered connections, That’s just how I roll.”
- “Now I go ... I guess it's more instead of me having to be cautious, I'm not as cautious. I just freely do whatever.”

Pain Management
- “Somewhat, yeah, yeah, somewhat, but I got this pain going out here in my back and my neck. That's why certain jobs, I can't stand too long or even if I sit too long, even a hard chair will aggravate it. I'm like, "Ah, I'm not going to take nothing. I'm not going to ask the doctor for anything.”
- “Yeah, [early on] I had to worry about my pain, certain things I can do, certain things I can't do.”

Accountability
- “In the beginning, like I said, you kind of stick with it. Like, the new program, the 21 days makes a habit. Sounds good. It works if you really do it, but it's consistency, again. And some people to accountability. If there's no
accountability, I'm just like any other person. When the cat's away, the mouse will play. I want to have fun and enjoy life. And you have a relapse. And you have to have somebody tell you, "Why are your eyes dark? Why aren't you doing your hair?" You know what I'm saying? "Why are you just letting the house go to shambles?" Like, a third person. But if you're in your own world, nobody can see that."
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| Bored / Little Enjoyment | - “At first, I thought I would not be able to enjoy life, have a good time, without being high. But now I don't. I don't feel that way because I know it's so good on this side, being clean, and actually, I found that to be not true, untrue. You can have fun without the use of drugs. I've found out that I can actually have fun without using drugs because I have been having fun, you know? I don't need to put anything in my body to have fun.”  
- “Yeah, I did go through a period. Especially right after retirement of being bored to death.”  
- “In large part, I think I just had to endure it. Like, when I would go to college and I would come home, which wouldn't be very often, my mother used to say, you know, I would be so used to the fast life in college that when I came home it was just, I couldn't hardly stand it, everything was so slow. But if you stay long enough, you get accustomed to it. So it's like you have to wait it out. You just have to ... I mean, there's a lot of things you just have to endure. You have to ... just like when your mind is ... your body doesn't want to kick in and pain-kill for you. You just have to endure. I mean, I think that endurance is, like, a very big part of getting off of drugs and being really headstrong about it and enduring ... you have to be able to endure boredom. And, in a way, I think women are better able to endure boredom than men are. Because my ... I remember my husband used to sit around and say, "I'm bored. I need ... "  
- “I remember when I first got clean, the first three years on my birthday was really hard. I mean, I was happy it was my birthday, but it seemed awkward when I first got clean. I'm like it's my birthday, and when you used to your birthday, you go to the bar, you get free drinks. It's like all that excitement and stuff, and my first three years on my birthday, I was happy because it was my birthday, but deep inside, I'm like, this is different, this is ...I even remember telling my boyfriend and my mom, "This is different. I'm happy you guys are here", and I was feeling my birthday, but it feels totally different. And my mom, she gave me a little suggestion, but my boyfriend say, "This too is going to pass. You going to see that after years pass, months pass, you going to enjoy on a deeper level, it's going to change."  
- “Well, for me, it's like even though I got 11 years, sometimes I still don't know exactly what ...You know, sometimes it does seem like the day is really long, and I live alone, but I just ...When I first got clean, it was like I just had that drive, and just kept more busy. Now, I don't know, I just go for walks a lot, especially around this time of year. I go for a lot of walks. I try to get my family to do certain things with, try to get them to go places with me, especially my sister, to let her know that when you in recovery, it's fun too. I mean, you don't have to be using to have fun. I know this now, that you can have fun just in the littlest things. I have ... I find joy in the littlest thing now; it don't have to be something big. It can be the smallest thing.”  
| Relief / Excitement   | - “I was just very ... It was like a relief. You know? Everything was exciting to me. Just getting up in the morning. Just having a cup of coffee, I was just excited and happy. Just smelling the fresh air, looking up at the clouds. Even today, it's still the same.”  
- “No, that was not an issue for me because I didn't find enjoyment in nothing when I was using so, you know, nothing. I didn't want to do nothing. I didn't want to do none of that.” |
- “I actually have more of a peace of mind. I'm not worried about, "Okay, if I go out today am I going to want to get high if I'm around these people?" No. I'm just going to go out today and I'm just going to have a good time, and I don't have to worry anymore about... I do have a struggle with money, like needing money for things. I don't have urges to want to use... Now, with me being sober and having my way back, and me doing things for myself, different kinds of men come at me, men that I've slept with in my life who were clients of mine, and being able to just say, "No," has been a struggle because I know how quick I could get that money. But I'm not willing to sacrifice anything that I've done already for it. I'll go broke before I sacrifice anything. And I could say it, that I have not had any transactions since the day I stopped using, and I'm not going to say, though, that it doesn't come to me, like, "Man, it'd be so easy to get that money," but that's something that I battle with. But I definitely have more peace of mind when I go out”

**Shifted Focus**

- “Yeah. I mean, I do feel like I've been doing it [going to the park, spending time with the kids at their activities] less lately just because I started to do like more different things and then like the weather's changing, and my kids are in school, so I had to switch like, instead of like, when my kids got out of school, I got to plan out the days revolving around them. And now not as much I can, during the day, focus on myself.”
- “I became more involved with the kids. We always kept it very structured kind of after school activity.”
- “I became more involved with the business.”

**Social Support**

- I would say in the beginning I was kind of reluctant to go reach out for help. Now I'm more open too it. Before if somebody say, "You want to do something?" I'll be like, "Nah, I'd just rather stay in the house" or something. Now I'll be like, "Yeah, sure. Just give me a heads up and we can do this” instead of before I would be like, "I don't think I want to just reach out. I just want to stay to myself.”
- “I still had that mentality of didn't know what to do with myself to be honest. I was so used to having the drink and that was my normal routine for so many years. I didn't know how to interact with others with a normal ... I was afraid. That's what it was. I didn't know how to have a friend or I don't think I had a best friend since grade school. It was very difficult. I didn't want people to take advantage of my frail ... I was very weak.”

**Acceptance / Mourning**

- “But it was just really a healing time for me, that I had to do within the first three, four months. It was really hard, too, because the first two months I stopped using I was pregnant, and I pretty much knew what was coming. I had hope that they wouldn't take my child and they would give me a chance, but that's not what happened. So the next two months was really the acceptance phase for my life. And after that, after I just accepted that now there's things I have to do. I have to get busy and do whatever it is that they need from me, that's where I was at within the first four months. But after the first four months I've been able to get busy, and been motivated, and know what I have to do to stay clean for him, for myself. My recovery has to come first for me because without it I'm nothing to him.”
- “Oh yeah, absolutely. Well, right. Yeah, absolutely, because I didn't know just what to do with myself anymore because my whole life was surrounded with this one thing, that I needed time to pretty much mourn that life. Kiss it goodbye, mourn it, and then get busy. And that's really what I did, in that order. The person I was, I buried her. She
doesn't exist anymore. She's gone. So just being able to let everything that came with her go, and finding new things to do, a new lifestyle for me."
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| Religious / Spiritual Involvement     | - “Going to church, and just renewing my mind with positive things, and positive thoughts, like reading positive books.”  
- “I would pray to God, just for today, don't matter what come up, no matter if it's good or bad, I'm not going to drink, and I'm not going to get high, and it worked for a few months; it worked for a few months until I started getting that thinking in my head. Oh, I can substitute this for this, and nothing's going to happen, and it always turn out the same way.”  
- “From time to time, I would go to a meeting, I would go to church, and I would just focus on positive things.”  
- “Again, just being very devout with religious study, with self-help at that time.”  
- “Going back again to the spiritual journey. I started going to the classes on Wednesdays and sitting with elders, we call them, to kind of get you through the hump. Why is this happening? What is the universe? What is your body made of? What are the kidneys and the temple . . It's called metaphysics, at that point, and then I kind of transitioned into it. So, I kind of dipped into a lot of the modalities because I just found them to be interesting. I'm a person that just enjoys all of that. So, I would go into the Baja Temple, I'll go up there and sit.” |
| Stimulus control/avoidance            | - “Okay, just for today, I would just tell myself when I had them months, just for today, I'm not going to use.”  
- “Like I was saying, being real desperate, to really want to stop.”  
- “I stayed in the hospital like two, three days. And when I got out, I didn't use anything. I was weak, but I didn't need to ... Like, "I need to have one right now!" At that point, it was a wake up call for me, and I was kind of scared. I waited for about a week and then I popped a pill, and I was just sneaking, just slowly sneaking, until I got right back where I was.” |
| Social Support                        | - “Having my family.”  
- “My mom had came around. I had a lot of support, lot of help, and I attempted to try. I tried, you know what I mean? But I was still sneaking and dipping and dabbing, you know what I'm saying? It didn't really work out. In the end, it just blew up in my face.”  
- “My brother was already clean, he had a year's clean.” |
| Treatment / self-help                  | - “I think the meetings, the outpatient program.”  
- “That was in jail.”  
- “I don't really remember but I just didn't use and I think I probably went to meetings and stuff . . “ |
| Decreased time spent with users/increased time spent with non-users | - “Starting to think differently. Changing, like that, little by little, being around positive people. When I got clean, it wasn't like ...Because some people get clean, and they still hangout with people they used to use with. I had to stop all the people I used to use with, I just couldn't be around people that were drinking or getting high; I couldn't do it. All the drug dealers, I erased their number, it was hard to do, but at that time, I had to, I just had to erase all the numbers. I said I don't need nothing to do with alcohol or drugs, I can't have it in my life.”  
- “I hung around people that was clean.” |
**Seeing Other Substance Users**

- “Well, the last time that I did was, I was with a friend of mine who had a similar accident like me, who has a problem with the pills. I was hanging out with her and I saw the way that she was and I was like, "Oh my gosh, like I really hope I'm not like this." And she sort of opened my eyes like, okay, you need to let this go. I don't want to become like that. Her accident was a few months prior to mine. Mine was in December and hers was in October. So we were like back to back and I kind of took that as a sign like, "Okay, we had similar surgeries, similar accidents. I don't want to have a similar life as her" and just like I need to stop it." And that's when I stopped, I had gone prior to that to the doctor and he had suggested to do it every week. I mean every other day that really wasn't working. But that incident with her, that really made me look at myself. Yeah. That made me look at myself and say maybe you don't want to be like that.

- “I was at Haymarket, then I got into it with my roommate. I didn't steal nothing of her. I had just got on disability and she said that I had stole her bus card. I had money. We start fighting and I got put out and I still stayed clean though. But to find out that the girl was using, but I stayed clean, I stayed clean 23 months.”

**Hobbies**

- “Going to the library, getting out a little bit, going for walks. It's like I renewed everything.”

**Health**

- “Okay. Mm. Well, when I did get it, when I did sober up, I did think a lot about my health. I'm only 31 years old. I don't want to deteriorate my body more than it already is and I want to be here for my children. Right. Mentally and physically that, that's sort of been my number, one's already into my health. Right. Because I was not taking care of myself.”

**Work/School Involvement**

- “And I was making means, and actually I had got my CNA license, and yeah.”
Table 18 Representative Content from the Similarities Across All Recovery Attempts Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Representative Content</th>
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<tbody>
<tr>
<td>No Similarities</td>
<td>“No, not at all.”</td>
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<td></td>
<td>“No, I don’t think so. All my other attempts were very brief and I was always on some form of... what’s the word? Like methadone or Suboxone. I’ve only done Suboxone...”</td>
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<tr>
<td></td>
<td>“Those times I didn’t have no choice so it didn’t matter.”</td>
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<td></td>
<td>“No similarities, because it couldn’t compare. The first two times I wasn't ready and this time I was. The two times it was like, &quot;Okay, whatever. I'm just going to go so they can stop telling me about my addiction. I don't want to hear it. I just want him to be quiet. I'll just go.&quot; Then this other second time was I just need to get away from the chaos that I created. Then this time was, &quot;This is it.&quot; I'm just one drink away from total death. That's how bad. I was like a binge drinker. I wouldn't drink every day like some people drink every day. I would drink... When I did drink I didn't stop until a week later. That was the difference with me. It was still all the same... Alcohol is a drug. It was my addiction.”</td>
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<tr>
<td>Initial Intentions</td>
<td>“We could say they started off the same. I've wanted to get clean. I've tried to get clean. That's the only way they're similar, but this time I actually... This is the longest period I've ever been clean, and I know I got it. I don't think, I don't guess, I know I got it.”</td>
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<td>“I would say they're similar because it starts off really, really good and then you have to maintain not relapsing. That's all. You start off really good and it seems like, &quot;Oh, I can do this,&quot; and then you'll have something that comes at you and then, you just snap back. But now I snap back faster, but the thing is that something comes all the time. So, in previous attempts similar to this most recent one, you initially always have sort of this eagerness or willingness to make a change and you start to do that, but then when these life events happen that causes stress or disruption, how you deal with those is different in this most recent one. And once you remove chaos and you know that chaos is really a state of mind, I brought the chaos to me because I was born into a chaotic life. My childhood was a whole bunch of stuff, too. So, you're so used to this constant drama that you almost bring drama around. And now that you're away from the drama, you're like, &quot;Oh, it wasn't even there. I brought it to me.&quot; So, now my... that drama doesn't exist as much because I'm laughing stuff off like, &quot;Oh, that's nothing. Oh, if you turn the gas off or your turn the lights off, I'll just put up a candle and I'll just wait until I get the money to put...&quot; like, I don't... my mindset is different. So, it's not the same at all.”</td>
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<td>“I mean, similarities? I would say the only similarity is what made me eventually try to do this was for my kids. Most of the time that I was brought to treatment I always wanted to be around my kids. That's really the only similarity. Other than that there is really no similarities.”</td>
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<tr>
<td>Access Control</td>
<td>“Having someone to help control my access to the medication”</td>
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<tr>
<td>Resources</td>
<td>“Turning to some of the same resources in terms of study, in terms of the business.”</td>
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Table 19 Representative Content from the Differences Across All Recovery Attempts Categories

<table>
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<th>Category</th>
<th>Representative Content</th>
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- “I started talking to my own self, like one time me and my girlfriend got into a really big fight ... I wanted to drink, I wanted to drink, I said, "I refuse to do that because once I take the drink I'm going to have to take the drugs, and then I'm a have to, you know, then I'm going to lose the apartment, then the kids going to leave, just all that, going to lose my job and I've been at my job a whole year, like, no, like, no, no, my family, no." I feel like I got a lot to lose and I do. A lot of people trust me. A lot of people call me for advice. People depend on me, like my little godkids, you know? And they save me too. Even my little baby godkids. I used to still keep them and I'd be high. They see me like this now and they call me for advice and they, yeah.”
- “I'm older and wiser. It comes with age. I really just hate to be that person. The gray hair comes so much more now. It’s all covered up in this dye, but it's really about wisdom and practice and wanting to be, wanting to come out. See? There's a difference because I don't ... I'm very fortunate from where I used to be because people saw me, even when I came out of the dark, people didn't know who I was. It was kind of strange. They're like, "We haven't seen you. You look different," because you transition. I wanted to get well. My thing was, and I told God and the universe, everything that exists, "Heal me or kill me. I'm about tired of it." It's already, like, "Give me the drug. I'll go to sleep, and come back as a bird," or just get me through this. And so, one thing led to the next. And so, for me, the difference is just wisdom, age, and now knowing that it will get better. If I put the work in. But if I don't make the work or put the effort in, I could go back into a serious relapse and it'll be fatal.”

Desire
- “I really had no desire to go back to using it. The emotional became more intense, so the concentration was more on trying to get the emotional under control. It kind of flipped in terms of where my concentration was. At that time, I was beginning to have more resources.”
- “I wasn't ready to stop using. I liked to get high. I felt like I got myself together a little bit where I can handle it, and I had another run in me, where I could go until I just couldn't go no more. And that's pretty much what I always did. It was like it was calling me. I wanted to feel like that again. I wanted that feeling again, and it was never a time when I came out of jail where I didn't immediately get high or it was just a couple days where I immediately ran and got some pills, or I knew someone who had them somewhere. "Now that I've been gone so long, there's someone who's got them somewhere. I would say... I mean, I really don't know. I just always wanted to use. I just always wanted to have that feeling that it gave me. I wasn't ready to give it up yet. I wasn't ready to stop. No matter what, one more, one more. It just was always in the back of my mind. Even when I was clean, and I was locked up, or I was in treatment, I always had a reservation and it's, "Man, as soon as I walk out these doors, man, I'm going." And it was just always calling me. I never wanted to stop, no matter how bad it got. No matter if I didn't see my kids for years, I still wanted to be out there. I still wanted to do what I did. But this time right here just... I just really wanted it this time. None of these other times did I ever want it. Everything is different. I'm listening, and I never listened before. I was never up to taking suggestions.”
- “Because I wasn't ready. I still had reservations. I don't think I was ready. I think I wanted to stop. When I first knew I had a problem, I think in my heart, I wanted to stop; I didn't like the way my life was going and everything, and everybody turning against me and stuff, but I didn't really have the desire in me at that time that I really wanted to stop.”
- The other time was, "My life is in shambles and I needed to get away."
- "The second time was because my life was in shambles. It wasn't really because I wanted to stop. I just wanted a reprieve."
- "I just wanted to stop. I want it. I want a better life. I could not go back to prison. I could not go back to jail. I can't imagine doing that again. You know? It was horrible this time. It was horrible, a very horrible experience. Just to know that I'm leaving my babies, my daughter. She's been watching me do this her whole eight years of her life. She was born in jail, you know? I'm just tired."
- "What made me start using, once I had the clean time up to that six months, it was my mind; it was the thoughts that was going on in my head. Coming home, you know, coming from places, certain neighborhoods, going through certain neighborhoods would trigger me back then. I mean, the craving used to be very strong at the beginning, the cravings are stronger, when you craving drugs and alcohol, and I just couldn't resist back then. When I had the six months, I did good, you know, convinced myself I did do good, but I had reservations in the back of my mind as I think about it now, because thinking that I can substitute one drug for another, that's just insane thoughts, because it's not going to happen that way."

**Willpower**

- "My willpower wasn't as strong. It was just too much on my plate. I had this new baby, I got problems at home, worried about where to stay. Just too much. Give me a fucking pill, you know? I need more, you know? Just stress, worry, and not enough willpower."
- "Because I didn't have the willpower. I didn't. I wasn't tired. I just didn't care. I just thought I could go on like that forever."
- "It's more successful. Like, I've weaned off. Like, as much as I feel I managed it well. Like, I managed the amount. The amount is different. I'm not taking it daily at all. So, that's a major difference. And they said the hydrocodone is something that sits in the cabinet and expires now. And if I've taken them maybe, I can't even count. Maybe one time this year? One time in 2018? Where, it used to be like every other day or something."
- "I mean, once they [my parents] passed away, I noticed I am drinking too much, I’m drinking too much. Because I used to have a lemon when I first stopped. Like a couple of glasses on ice with orange juice, then it started going to umm, pint class, ice, orange juice, and then when I hit like, almost maybe 44, like I could hear my mother, Marie, you promised me you gonna be good and take care of my grandkids. Like I hear her all the time, every time I go and get a glass, I could hear that voice in my head, then I started cutting down, from 7 maybe to 5 one week, and then from 5 maybe to 3 the next week and I keep hearing that same voice, over and over and over. I couldn't understand it the more I would drink it was getting worse and the less I drink, it was like it was fading away. This is not me. I’m being like my other sisters and brothers, I have to change, I have to stop. And I prayed for my heavenly father to give me the strength to stop. On my 45th birthday, my kids said, mom we want to have a cake made. They know I always love cake. So they did bake a cake, and a lot of family was over and they know I used to drink and they had alcohol and I told everybody, all the alcohol has to go..."
| Doing it for Oneself Not Others | “The difference would be that I wasn't trying for myself, I was only doing it to please somebody else.”
|                               | The other two times it was, "Okay, I'm going because you said I should go"
|                               | But I never listen, really, to anybody. It was always by force that I attempted to get clean. |
| Social Support | “I think I had more support. When I stopped drinking, I had way more support from peers. Like I said, I had met a lot of friends in school and now this time around I'm not really close to any friends like that. Only like, a couple of friends. And then the fact that I was still in a toxic relationship was a huge difference. I have found this a lot easier now, I don't know if it makes a difference because it's a drug or an obstacle, but I found it a lot easier. I don't have as much stress, even though I have physical stress, I don't have much doubts with my relationship at the moment. It actually seemed a little bit easier this time, even though it's a harder substance.”
|                               | “Okay, so for this last attempt I'd been running for four years, and what really had me out here for these four years was when I gave my son up. That was enough, I can't take care of him, I'm not going to even put him through what I put my last one through, because he got taken when he was three. So I honestly thought I wasn't going to have any more kids, and I don't know how I got pregnant with this child because I wasn't even getting my period, I was so bad of out there. I hadn't had my period for years, and that's why when they brought me to Haymarket and they told me I was pregnant I was just like, "I'm leaving here." So it was the facts of never being able to be a mother again, because I have other children who don't even know me. They're not confused. They know I'm a drug addict and I just didn't want to die out there in the streets.”
|                               | “Because I felt alone. I felt not just alone, I felt like I didn't belong. I don't know what it was but I felt like I didn’t belong in this world, like I was missing something. I still striving to be better emotionally, and mentally, and spiritually but then I wasn't there. At least now I can pinpoint it. I can say, "Look," I can write down a couple things, “This is what I need to work on,” or “This is where I'm falling short in this area, I can do something about this. I can pray this way,” but I didn't know that, like mentally I didn't know, "Man, maybe if I do this I'll feel better," or what I can do to make my life better than therapy and talking to other people that's just like me because there's got to be somebody out there just like me, feel just like I do. Like today I don't feel like I felt then. This is more like, "Oh, I need to fix my credit," or, you know. Then, I wasn't even working, I wasn't doing nothing, I felt like I had no purpose, no nothing. I felt like I got purpose now, like I got purpose, yeah. My kids, right. Like my daughter come home, "Ma," I love this kind of life. I'm able to sit down with my kids…” |
| Access                     | “It was always there. You know? It was easy to get. I don't wanna say it was always there. It was easy to get. You might have to do a few tricks or something, but…”
|                           | “I couldn't stop because I was surrounded by it.”
<p>|                           | “Then the environment that I was around, not trying to judge anybody, it's just I didn't have the support network down there. Everybody drunk. That was the norm but they didn't take it to the extremes that I did. All my support network was... I didn't remove myself from that environment. I went right back to the environment without a support network.” |</p>
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| Physically Debilitating      | “Then this last time that I stopped was because I had to. It was killing me. I couldn't do it no more. My body was not able to withstand the fast heartbeats, the sweats, the tremors, the shakes. It just was bad.”  
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“Then this last time that I stopped was because I had to. It was killing me. I couldn't do it no more. My body was not able to withstand the fast heartbeats, the sweats, the tremors, the shakes. It just was bad.” |
| Religious / Spiritual Involvement | “I really had a spiritual awakening this time. I can't explain it no other way but a spiritual awakening. God delivered me, anointed, because all the times I tried to stop, I couldn't. I don't know no other way to say it.  
“I would say my higher power, which is God, that I got somebody to lean on now. In a spiritual way, I'm not alone, because a lot of time I felt lonely when I was getting high and drinking. I felt lonely a lot. I felt like the way I grew up and drinking and stuff, and getting high, and living alone and stuff, I don't know, I just always felt lonely and I know I was loved, but in a lot of ways, it felt like it wasn't no love. But when I read the bible this time, and study the word, and go to church, and really be happy for what I am, and who I am, and accept things the way it really is, and not things the way I would like it to be, I don't know, things just started changing. My life just started changing. For the better.”  
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| Coping Strategies             | “My first thought now when something happens is different from previously; previously, when something happened, especially when something happened bad, I would want to drink. Now, when something happened, I can pray. I can do meditation, I can color in my book, I can make a phone call to call up somebody. My first reaction is not to numb myself with alcohol and drugs. What is different is that I have found different ways to cope with difficult situations.”  
“Like, we've used the word relapse. That's all. Just pure ... anything that happens, it just would create ... just life. I mean, I couldn't just pinpoint it. Just changed life. My reaction to drama or to stuff was not good. Like, if a bill came in, I would get upset. If I couldn't pay the bill, because I used to be a person who I had A1 credit, I owned real estate, I was a business owner at one point. All that failed because of pain. I couldn't move my neck for a year at my job, when I worked for the police department. So, all of my finances got to a point where now I am in a survival mode and have sheriffs coming to my house, the lights were going to be turned off, my gas got turned off. Those things would trigger me. So, it just, that's it.”  
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| Misc.                         | “I don't know I just finally go it.”  
“They ain't different, I mean, they different. This most recent one is more stronger.”  
“I don't know I just finally go it.”  
“They ain't different, I mean, they different. This most recent one is more stronger.” |
### Table I10 Representative Content from the Preferred Terms Categories

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| Addiction      | - “Addiction. Because that’s what it was. I mean, before I knew it was addiction I think, “I just got a little problem.” I’m ok with addiction, recovery, all that. It doesn’t bother me. None of that is what I am today though, well, the recovery part but addiction, I don’t have an addiction today.”  
- “Probably consistent is the most... I think looking back, it was substance abuse. What I didn't mention, was that my Master's Degree is in substance abuse counseling. I was a functional abuser, which was pretty much what my mom was too, because my mom was a psychiatric social worker for the school system. She would sign kids into treatment while she was abusing herself.”  
- “Addict. It’s true, because I was addicted to it. I couldn’t live without it. That’s what I thought. Addicted to it, just like a gambler addicted to slots.”  
- “Abuse the medication, I abused it. Misuse, yea, misuse.”  
- “Dangerous. Addicted, because I was addicted. I ain’t in denial today”  
- “Uncontrollable. I was an addict, yeah.”  
- “I would say dependency, dependent.”  
- “I guess addictive. Addictive. I just felt addictive.”  
- “Addiction. Yeah. Yeah, it certainly was. Even thoug...”  
- “Overusing, overuse, that’s just it. That’s just what it was to me. I understand those terms [addiction, substance use, substances abuse] but I wouldn’t call that my level. I call those higher levels of intensity of it.”  
- “Definitely alcoholic. Yeah, I was definitely addicted. That doesn’t bother me at all.”  
- “I would say addict.”  
- “Addiction or alcoholic don’t really apply to me, because I wasn’t to that extent. I have seen others who were addicted firsthand, family, that wasn’t me. My use was problematic, it was a problem for me”  
- “The thing is that, I know I was addicted but there’s a difference between you being physically addicted to something and mentally addicted. For a long time, I’m addicted, I am physically addicted, and I was. And there were times that I wasn’t mentally addicted and there was times that I was. I mean, I was you know, between pain medications and other things, being addicted, to me it’s like people can say junky or whatever, but to me, and maybe this is L.A. but you’re on a ... oh! Benders. Like I would go on a two week bender on crack or whatever like a bender. A one-off would be like if I do it every month or once every couple months. And that's not pills though. I was trying to think of the phrases I knew...”  
- “Smoke out, smoked out. Hit rock bottom. I’m not to far removed [from addiction]. Any day I could go back. I just stay away from people, places and things, that’s it. Right now I’m just a recovering addict, you know.”  |
- “I don’t know. Yeah, I would say like, “lost,” because I did feel very lost at those times. Yeah, definitely [addiction or disorder].”

Recovery
- “Recovery. I’m on constant recovery, doing something, if it’s to help somebody else, going to church, praying.”
- “Pretty much substance free. [Feels comfortable with term recovery]”
- “Recovering addict.”
- “Overcame it. Overcame the need. I don’t know. I’m not going to say "recovery" because it's not like I was a hardcore drug addict. I can't use that term because I wasn't a hardcore drug addict. Recover, to me, is like you're going to AA or NA trying to stay clean. You're in recovery.”
- “Over . . . Survivor. [Ok with the term recovery]”
- “I don’t know. Would motivated be a . . . Motivated to change? I don’t know. I think that would be . . . I’m entering, I’m ready, I’m recovering.”
- “Recovery, I would like that.”
- “Healed.”
- “A ‘former addict,’ an ‘ex-addict,’ or whatever. I don’t use that word [recovery], because you know, I don’t use it. I know that that’s . . . because people in treatment use that word, and I didn’t go to treatment. I’m not a recovering addict. I was an addict, and I’m not an addict anymore, because I choose not to be an addict. I choose not to be an addict. But I could be an addict, maybe, if I did it again. Maybe.”
- “I guess an overcomer, or something like that. Like I said, I understand those terms, but I’m very big on words. So, I want it precisely directed to what I feel that it is, and those things are like, I went into a world of drugs, and I had to battle with it. I feel like it was a battle to me. So, that’s probably . . . If I had a battle, I would think it’s recovery, or something. Like, I’m recovering from something. Recovery is like you’re in the hospital and you’re recovering from a sickness or something. I don’t see it like that.”
- “I would say formerly addicted, I’m a former . . . yeah. I would say if I was doing my 12 step and I had a sponsor and everything like that, because that would be my recovery but I would just say I’m a former alcoholic. Recovery would mean, to me, going through the steps with a sponsor, going to meetings, and I didn’t get clean that way. I would just say I was a former alcoholic because I used to drink. That was my drug of choice first.”
- “A grateful addict. Recovery, I don't ... Recovery is a good ...I mean, I can use the word recovery too, because addiction is ... A lot of people think, when you say I'm an addict, or alcoholic, they think that it's just the drug or the alcohol that's the problem, but if you really think about the whole thing, I'm addicted to a lot of things, more than just alcohol and drugs right now. Right now, I will say I'm a recovery, blessed addict. It's [recovery] like a label. When people say I'm a ...I don't know, it's just like they labeling they self or whatever. When you believe in God, and when you living day-by-day and you growing, I don't want to have a label—“
- “I’m happy. I’m excited. [Re: recovery] I would say yes and no, I know I was drinking too much, I know I tried marijuana one time, but to me, I still don’t feel myself to be, how do I explain this . . . A recovery, I wouldn’t consider myself to be in recovery, maybe I am, but I look at it in a different way. I don’t think I was a recovering addict.”
- “Having a word is hard. Well, I mean because I know theoretically if you know you’re an addict, then you’re an addict. But if I was in pain management on pills I know I would be fucking addicting and getting out of control. But I know that I can also like if I need it to treat something briefly, like I can take some. And so it’s, I’m not like addicted like that. Does that make sense? I don’t know. I mean I’m kind of smart with it I think. I’ve been smart with certain things with drugs my whole life. Like if I was shooting up I would never do it myself. I don’t want to learn how because I’m not stupid. I’m stupid, but you know, things like that. I’ve been smart with certain things. I’ve been careful, preventative. I’ve always had, I would say, a double life. I’ve always said that. [Re: recovery] No. I mean because when I think of recovery I think you’re in a program.”
- “Yeah I am recovered now. I’m still an addict just a recovered addict”
- “I guess a little struggle. [Re: recovery] I feel ok with that.”
- “Relapse. A slip.”
- “Well, relapse, and it’s partially because of my, training. I was going to say, that's part of the problem with the treatment facilities, is it becomes a revolving door. In most cases, the treatment is not long enough, or does not meet the needs enough, that we would see the cycle of people going through the 30 day recovery, 30 to 60 days later, they'd be back in the treatment facility. They don't combine enough of the emotional into it. Right, there is a real disconnect. One of the workshops that I taught in college was teaching special education teachers to recognize the signs of substance abuse, and teaching abuse counselors to recognize the signs that the person had a disability, a learning disability.”
- “Pain problem. If something happened to me, break another bone or something, then I know I'm going to have to take painkillers again. None of those [relapse, lapse, setback, or slip] would fit, no. Not a relapse because, to me, a relapse is when you're on medications, and you get off your medications. You stop using it and then you go back to it. Oh, I relapsed. I'm not hardcore drug addict. I'm not going to... I wouldn't call it "relapse." Return to misuse. Yeah, return to misuse. Then I'm like, "Ugh."”
- “Insane. Insanity. [Re: relapse or lapse or slip-up] Yeah that too, you can put that.”
- “Insanity. I'm a chronic relaper. Very much so. Yeah, lapse, setbacks, slips. I'm ok with that.”
- “I would say trauma or yeah, or something to basically dealing with something happening you can’t control. Distractions, trauma, life situations. So, yeah, trauma. [Re: relapse, lapse or setback] Yeah.
- “Relapse or something.”
- “Just, I don't know choosing to go back to addiction. Because I knew I was going to be addicted again. It's not a slip. It's not a relapse to me. You know what you're doing. It's a return to addiction. I don't know how to say it. I mean, I couldn't tell myself that, "I'm just going to do this once." I couldn't. I mean, I knew I was going to do it again and again. People say, "Oh, I made a mistake." No, you didn't make a mistake. It was a choice. You did it. My husband used to say that: "Oh, it was a mistake." I said, "It wasn't a mistake, it was a choice." Yeah. But that's a term people use when they don't want to take responsibility.”
- “I didn't. That's what I'm saying, now you're going to battles with it, because it's a, whose going to win, you or me? So, I hardly use those words. Remission, and things like that. It wasn't a battle, no.”
- “Oh, okay. I would say a relapse. If I went back that would be the term of recovery since I relapsed. It would be a relapse or a slip. Mostly what they call it would be a relapse.”
- “Well, if you just use for one or two days, there might be a slip, but if you continue to use maybe over two/three weeks, and continue to use, it might be like a relapse. That'd be a relapse, but if you just made a mistake one or two days, it's more of like just a little slip.”
- “The only word that I can think of that applies to that was, because I did it a lot, I just keep thinking my higher power. I keep thinking that’s what I used to do a lot, asking him to give me the strength and the courage to stop this mess, this is not me. I got these kids and I don’t want DCSF to step in and take my kids away. I always used to promise them, I'll always be here to the end. And I used to pray a lot. It's a slip, it’s a slip.”
- “Well, I would've killed myself without a something. I had to go back. I didn't want to do it. I don't know how to word a return. I mean I was at the threshold. I would fucking fool myself that I could go back because I had, at times, could cut back and okay fine. It wasn't successful. I would have gotten off, though. [Re: relapse or slip] I would say it doesn't apply to me. That’s more for someone who has had a problem with a substance and, once they do it, that’s it. They have relapsed and it's out of control. I don't know, I've always been able to manage mine. I can manage myself. Except I guess, I can't, because I've never stopped everything completely, but I've always been responsible, I felt. Unless I'm with someone else and that's when it gets out of control, but I only get out of control, it's got to be a certain situation. All right, can't be working and I'm with a guy. I guess I'm codependent, I guess. I don't know. Or I like to have fun, but then it doesn't go the way I want. If it's there, I'm going to do it. That's the way it is. And I mean that's the phrase I use. You talk about phrases, if it's there I'm going to do it.”
- “A mistake. Ooh, I don't even want to think about that. And now I'm at an older age. It would really affect me different. And see when you, when you stop, wherever you stop using drugs, when you start back up, it just picks up where you left off and it gets worse. You know I wanted to go and be a substance abuse counselor, so I studied on a lot of that stuff but it's just right now my knees are saying no, no. Oh, that's what it is. I said that, relapse, you relapsed. Even if I wasn't okay with it, that's what it is.”
- “I don't know. Maybe lost. Like a loss. Not lost, maybe I lost control. [Re: relapse or slip] Yeah, I’m fine with that.”
### Table II1 Representative Content from the Contemplation, Action and Maintenance Advice Categories

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<th>Category</th>
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| Contemplation             | - "Love and touch is the key. Because if you're not being loved effectively, it's just a waste of time. Like, you're not being loved. Like, it could be a relationship, but is it a holistic relationship? Is it really loving? Or am I with you because you pay the bills?"
  - "I would say they have to get into an area where they're around people that are not using and that are going to support them. They need to decide whether or not they want somebody to kind of be their warden, somebody who's really going to be accountable to. They need to get in a position where they don't have to maybe go to work all the time, they can be able to take some time off or call in or whatever, because sometimes you just have to use something just to keep on doing what you need to be doing. Like, people would say, "Oh, but I've got to work and I can't work without this," and blah, blah, blah."
  - "Get a strong support system, get a good support network around you."
  - "Talk to somebody else."
  - "Just talk to people."
  - "Definitely talk to someone that they can trust and just go over the options."
  - "I would definitely suggest that they talk to someone, maybe get a close family member that they trust, talk to them, let them have an open discussion with all the pros and the cons, where you're at now and where you're trying to go, if that's the best option. Get a therapist, if they can afford to get a therapist. Talk to a therapist because you can talk about anything and it stays there."
  - "I would say first of all to just talk about it with someone"
  - "I would say ask for help. Talk to somebody."
| Cognitive strategies      | - "My daughter's goddaddy still using and he go from job to job or he hide behind jobs, "Stop hiding, stop hiding." You got to get out there and you just got to make that decision, and once you make that decision you got pull on it, with all your might and all your soul. You just got to give yourself a chance. And then when you get through giving yourself a chance give your chance a chance because life is just too short, it is. It's sad, it's sad. It's sad all these years I wasted, wasted years. I didn't go to high school. I went two weeks, first week I ditched, second week I got suspended. I didn't go to school. I just wasted ... Yes, they need to just ... You know, it'll be all worthwhile, and in the beginning you're going to struggle. Like, in the beginning I don't think I just woke up one morning and said, "Yeah, I'm not going to use," no, it didn't happen like that for me."
  - "Never stop contemplating. To just ... I don't know. That's just what I would say. At least at first, the first thing, don't stop contemplating. Yeah. Just don't stop, because you could contemplate it, like you said, you don't have to go along with it. That's why that would be my first thing. Don't stop contemplating it"
- “See what are the pros and cons that's in your life now. What are the pros if you get clean? If you think about getting clean is your life where you want it now because you're using or where you want to see your life going if you choose not to use.. “I would definitely say give it a lot of thought.”
- “Think about your family. Think about your kids. You can't be selfish. You got to be strong. Think about your health down the road. Think about your staying alive and healthy for your loved ones, or if you have kids, or for your job, if you're working.”
- “I would tell them to think about their life, think about their family, and do they want to live? Think about the way they're living. Ask yourself, is this the way that you wanna live? Take a look at everything. The struggle, the things that you actually have to do in order to keep these shenanigans going. Is it worth it?”
- “Give yourself a chance. Weigh out your options. I mean, what is good about... How do I say this? Like your pros and cons. Why is it important for you to get clean, or why is it important for you to keep using? And which one is better?”
- “I think that's a good idea, the pros and cons, weighing those out, especially if someone's just contemplating the idea.

Take action
- “I would tell him or her that recovery is possible. For me, it worked, it's a one day at a time thing. To give it a shot. Just give recovery a shot, because it will better your life, your life will become better if you give it a shot, because you don't have nothing to lose, just give it a shot. It worked for me, I just take it one day at a time, and find a higher power, once, you know, get your foot in the door.”
- “Give yourself the chance. Don't think about it. Just do it. Do it. Take your time, and be open to what other people have to say. Try something different.”
- “Not to wait to follow their heart. If it's calling for a change, then it means they need change.”
- “Definitely don't be afraid to act on it, that small thought.”

Religious/spiritual involvement
- “And then, of course, finding whatever spirit within. So, if you're a Jewish person, go into your faith. If you are a Catholic, go into that faith. Or make your own faith. I'm big on that. If you just want to sit in a corner with a candle, that should be your faith. Do that. Read a novel, but stick to it to get away. It's like your silent time and quiet time is important to get to know yourself. I couldn't imagine a woman who has children and a husband to have to take care of all that and then try to manage the pain. Bless her. But for me, being just me, I learned that that quiet time is important and what I call devotion, spending time with me, even if it's at a park and having love. something that nourishes you is important.”
- “Well, everybody's not into spiritual stuff, I understand that. So, that approach, I would probably tell them to look deeper to gain a relationship with yourself and see. Write down why you feel you need them. What's the deeper issue of you needing anything? I would just say that if you're not into spirituality, just go that route. Sit with yourself. Get the relationship with yourself and see what is it that is the different undermining issue.”
| Stimulus control/avoidance | - “Number two, I think it has to be removing yourself from the environment for a while. Because I believe treatment centers are very, very necessary. I looked for them, but none of them would take me because they don't consider what I was going through a drug problem. It's like, "Oh, you just need to stop doing it," or, "You just have this issue that needs to be pain-managed, but it's not a place." I even looked ... I was trying to go to the cancer treatment center. I found a place in Florida. All these places wouldn't take any type of Medicare without some type of major referral. I had to almost be like a crack addict or something really big or having cancer to get anyone to say, "Hey, can I just get three days in the hospital where I'm just getting fed? I may have a psychologist one day and you just let me drink fresh juices and just sit and get away." So, I think the getting away for a while to reflect is imperative.” |
| Treatment / self-help | - “I think doing reading. The self help books offer a lot, because I think a lot of the reason that people go into the abuse, is because of self medication. There's been a lot of my experience with students, and with people that I've known. Finding other ways to regain the self respect to regain the feeling that you have, having control over your life is a real important part of moving from the contemplation to really attempting.” |
| Desire | - “I would say, step one, desire. Know if you really want it. If you don't, then just ... I'm really just belligerent about it. Because I have children who have parents who are like that. I think it's destructive. So, if you don't have the desire to get well, then disappear. That's number one.” |
| Action | Social Support | - “Be open-minded to suggestions, I would say. I would definitely say that. Try to have a network of people who are in place, like social support around you. Don't leave yourself open to vulnerable, you know? Because if you keep being around those things... You keep going to the barbershop, you're going to get a haircut.”
- “Maybe try and find a support group. Try and find a support group for... I didn't but maybe, depends how bad off they are. They need to focus their surroundings, who they hang with. They're hanging with people who drink a lot or party. Keep yourself busy doing other things with other people.”
- “I would suggest that if you're willing to go and get your support group, a good support group, make a meeting, do something that will encourage you to go further.”
- “Finding as many social outlets as possible, that are in non-using environments, community involvements Right now, there's a lot of resources out there for people of different ages. There weren't a lot of activities for seniors when I was growing up, or even when I first started. Back in my 50s, there weren't a lot of social outlets. There are now, from both the city and different community organizations, so reaching out to have some social outlets with people your own age.”
- “Hurry up and find a support group” |
"If there's some sort of a living arrangement where they can go to where other people are going through it and where they can be ... I mean, a confined ... I mean, if they want to put themselves in a confined area or a supportive living arrangement to get away from ... Because even the people that you're around that are not using are still triggers to you in some ways. I mean, I think that people need to get away and get into a ... I mean, it's treatment in a way. But around other people. I mean, and I would tell people now that they need to get ... and people have been through it and they've made it, and there's other people that are farther along than you are. But, I mean, I went through that and I didn't do that. But I think that people ... I mean, I don't know how I made it, but.

"I'd say find a group or somebody. There has to be some type of accountability partner. If you're not a person who discipline on your own and you have to go get ... my dad just so happened to be a military guy. So, it's almost embarrassing to have an addiction in his mind. Like, you don't do it, we don't have addictions. So, part of that. But if you don't, I still need people to talk to. I don't have three people who could understand the pain. So, every blue moon I do, but I'm also conscious to not hang around people who are negative talkers too long. Like, when they're always talk about the pain when you get on the phone it's all about the pain. I won't do that. So, I think to find a person who is just as optimistic and wanting to come out of the dark just like you or somebody who's already been there and who's out of the dark and who can just kind of make you accountable for you staying out of the dark."

"I'd just tell them, for me, what I did at the beginning of my recovery was I went to meetings. If you don't find that helpful, you might can do something else, but just go to meetings, and not be alone, and know that it's just a one day at a time thing. Just try your best to go to meetings."

**Motivation / Willpower**

- "Keep going, stay motivated, stay determined, keep a positive attitude, yeah, that would be my advice."
- "To not give up, to stay strong. I guess, because everybody's different. You know? That's why those are you are, my basic initial advice, because dependent on what people have ... because, we're talking, but really it goes way deeper. As you see, you're talking to me, and my whole life experience of stuff that I went through before that, that made me actually do it, you know? The reason why somebody will stay on it is because of things that happened in their past, and if feels a better place. So, that's what I'm saying, everybody's different. That's just my initial advice, just stay strong, and don't give up. Stay strong and don't give up, because you have to talk to people, and know where they're coming from. What one person comes from, another person don't come from."
- "I would say to go for it. Don't be afraid of the failure that you might relapse because it's all a part of the process. If you make a little slip nobody is going to beat you up about it. It's the trying to move forward would be the best option if they decide they want to go. Don't be afraid."
- "Just stay positive. Don't let the little things get to you. As cliché as that sounds, even little things will drag you down very heavy. Don't listen to others' negativity either. A lot of people give out negativity."
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<tr>
<th>Hobbies</th>
<th>- “Find different hobbies. Do different hobbies.”</th>
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<tr>
<td>Religious/Spiritual</td>
<td>- “Just, if you're thinking about it, then obviously you want it, so just continue to try. Pray, ask God to deliver you, to take the taste from your mouth.”</td>
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<tr>
<td>Involvement</td>
<td>- “… I mean, this is my own bias, I would tell them they need to get into a Christian place where people will pray for you”</td>
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<td></td>
<td>- “Go to church, that's a way I found that helped me to stay sober and stuff. Maybe they can do that.”</td>
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<td>- “Pray”</td>
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<td>Cognitive Strategies</td>
<td>- “I would probably say don't give in to what they're used to. Continue to push forward to something new, something better because when you attempt and you get the urges to go back remember that it's only something that you're used to calling you back. Something that doesn't want you to rise, calling you back. So, which one you want to do, rise or fall? You got to choose so be the motivator. Every step awareness. You need awareness and that's why you can't do it. That's why. You want to do it and think it's going to be done for you. No, this is work. This is work.”</td>
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<td>- “I would say get the mindset ... First, the mindset has to be ... You have to say, &quot;Am I really going to do this?”</td>
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<td>Work/School Involvement</td>
<td>- “Get a job because that always helps because it will keep you busy.”</td>
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<td>Maintenance</td>
<td>- “Establish a lifestyle. Start getting stability within yourself. Start being more responsible, doing things outside your comfort zone. Be open to... You can accomplish anything if you put your mind to it. Your story, that don't have to be your story. That don't have to be where your story ends. For me, my story is just beginning. I don't know what's happening in my next chapter, so I'm always optimistic on things.”</td>
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<td>Renew</td>
<td>- “The word comes to mind is &quot;renew&quot; because things get old. That's just it. And so, I think relationships should be renewed, I think vows should be renewed, I think that jobs should be renewed. Everything you do, renew. And so, don't think that because you started something for four or five months that that's going to work in the fifth and sixth month. No, you might have to say, &quot;Okay, I did the yoga for six months. I'm bored. I need to find another thing. I may have to do classical stretch. I may have to do stretching.” So, find something to renew yourself until you leave this planet. Don't ever just ... some people can stay with the same thing. I'm not that person because, to me, drug use has a certain personality that comes with it. You know what I mean? Almost hyperactive, all over the place, having fun. So, if you're that person, then you can't do the same thing for a year. You might have to switch it up. Every six months, you go back, you go forth, you back. So, renew.”</td>
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|                         | - “Not ever to get themselves fooled to the place where they think that this isn't going to bother them or this isn't going to hurt them. Because I know so many people, I mean, they used to drink, they used to drink, but, "Oh, I can just drink at a wedding, or I can do this, or I can drink on New Year's Eve.” I mean, you have to
in a way become an outcast of how society views things, because everybody drinks. And everybody sometimes uses even marijuana or other things. I mean, there's a lot of places I don't go or I can't go because I'm like an oddball there. You know? I used to say for years when I wasn't drinking, "Oh, I've got a ... " I used to say, "Well, I've got a medical problem. I have this liver problem and it's hard to drink." But people think you're disrespecting them in a way. So you have to find a new community to go to. I mean, there's even church communities that are like ... that drink and whatever. So you really have to get used to being different."

- "Yeah, find something you like. It don't even have to be a job. It could be volunteer. It could be something, something you like to do. Find you a hobby."

Keep Steady

- "That's a hard ... just keep doing what you're doing. If this worked so far, it's going to keep working."
- "I'd tell them whatever you was doing to get the amount of time you have, keep doing that, and add positive stuff to it, whatever the positive might be, and stay busy. At the beginning, you got to stay really busy doing things, because idle minds are the devil's playground."
- "Continue to do what you did when you first came. The same work you put in when you first started, the same work. You got to put even more work in. You got to continue like your recovery process. You got to continue to get better, because it was like phases, like you say, it was phases. That's another thing, people, places, things, and situations.

Social Support

- "I think based upon my own recent experience, it would be to try to diversify your sources of support. What if something falls apart there? You have nothing."
- "Yeah. I would say get a strong support network. Either get a group of women, somebody that you can trust, keep you connected in ways of recovery, whether it's ... Some people might want to make a meeting, get a sponsor. I mean, whatever might work for them. Meetings help people, some of them. They could get a sponsor, reach out to get a sponsor, and you're new, you're fresh in recovery, to keep you going. Maybe they could have suggestions like doing your step work to stay clean. You know, stuff like that to keep you in that mindset. Definitely reach out to people that have clean time that are like you. They have so many meetings and stuff. I would suggest that because people might not take my thing I said with God. Prayer and a strong church network. Women in recovery, they don't just necessarily have to go into the meetings. They have women in recovery just for women. If you're not comfortable with that find options that you are comfortable with. The main thing is not to ever push an addict because if you push them too much then they get overwhelmed. It's like they take little suggestions from here and there. Definitely have a strong network, like someone you can call and say, "Hey, I'm bored. I don't know what to do. I'm all prayed out. I need you to come over or come pick me up." You know, something like that or somewhere you can go."
| Religious/Spiritual Involvement | - “Stay away from people that you used with, places that you used at. Get you a good support network, people that are supportive of you, people that are willing to help you, that are willing to listen to you. Have someone you can call on standby or speed dial. |
| Cognitive Strategies | - “Keep God first. Meditate. Get you some me time everyday. I don't care if it's 10 or 15 minutes. Keep God first, you second, and try not to let yourself get overwhelmed. And things can just boggle down on you when you feel like you should be at a certain place in your life, but you so busy popping pills. At first, I seen a lot of my so-called associates... not so-called but I've seen some people that, I'm not a hater, but I've seen some people that didn't have a problem with pain pills. And in their life, they're constantly growing, and I started my growth. I was on the right path too, but I stunt my growth that episode I had and now material-wise, I may not have as much as they have. And at first, I was feeling overwhelmed but I had to get a grip on that.” |
| Cognitive Strategies | - “Pray. Whatever your Higher Power is, talk to them. Believe. Read your Bible. Just keep faith.” |
| Anything Else                                                                 | - “Just keep coming back, just keep trying, just for real, just keep trying, don't give up, don't give up.”
|                                                                            | - “That it is possible to get away from them. Right now, pain medication, it's a lot more difficult to get it. What I found interesting, because I was actually getting the codeine cough medicine for Rocky, because I had such easy access to it. Her construction work, because of her age and stuff, she needed the pain medication. I could get the prescription so easily from my doctor. Interesting enough, the last time that I tried to get it from the doctor who was giving it to me at the drop of a hat, well she demanded a blood test. I figured if I went in and tested negative, that I'd be able to get the prescription. The fact that I tested negative appears to have convinced her that I was selling the medication. It's important to investigate if there are emotional components.”
|                                                                            | - “Get some help as soon as possible because I was blessed to never ODed in my life, and I'm grateful to be here. Just because I didn't, don't mean that you won't. It's easy to do. When you start taking the pills, you take a certain amount. The longer you take them, you takin more. Before you know it, you and took five or six pills. And honestly, it don't even take maybe eight... five, six, seven, eight, for you to overdose. Because the pills and then the other people, they might drink with the pills. That's another thing. Alcohol and prescription meds is the quickest way to check out of here. It will stop your breathing. So, stop as soon as possible. You build up a tolerance. That's what I'm trying to say.”
|                                                                            | - “That everyone's struggle is different, but you are not alone, and there is help available. Trust God and just love yourself, learn to love yourself, because when you start to love yourself ... Like, when I started to love myself, I wanted better for myself. We've got to understand who we are first. We have to look into ourselves, look into our souls, and see who we are. Most of the time ... I think the reason for me using is my childhood was very shortened. I had problems in the home. I wasn't molested, or anything like that, but attention wasn't there, a lot of stuff that I'm seeking, that I didn't get. And I had a very hard teenage ... Coming up, because my mom was addicted to heroin when I was growing up. I think it all starts when you're very young. Whatever the help that they may need, or whatever they think they need, that they need to seek it, whether it's a therapist, mental health issues, we have to deal with those hand-on because that has a lot to do with our addiction.”
|                                                                            | - “I would like to just do outreach, community outreach. I would like to go out and tell my story. I really think my story can help a lot of people, especially letting them know where I came from, what I've been through, where I'm at now. Even the HIV piece, just letting them know, ... That I'm living with this, and my drug usage is the cause of it because ... And not dealing with what was going with me at a young age. I didn't seek help. I sought help through drugs. Yeah. That is something that I would really like to do, and I'm also looking into that also, seeing how I can ... Even if it's just volunteering.”
|                                                                            | - “If you are motivated to change you, you can stop using. It doesn't have to be your life. There are other ways to be happy in the world. That's not where people's happiness has to lie. There are things that you could do to be happy. You don't have to just... What's the word? I can't think of the word. Settle. You don't have to settle for accepting this life. Believe you me, there are better things out there, because I never got this peace feeling from being out there using. I never got the, like I'm striving every day to be better. I'm not accepting good no more. There's always room for improvement in my life, so you don't have to settle for that. That don't have to be where your life is restricted to.” |
- “I say that don't be hard on yourself because drugs are beautiful when managed properly. I feel that way. Every drug comes from some plant that they probably put to a high potency, and I just feel like it's a beautiful thing if you really know how to manage it. It's just like eating a really good cheesecake every week that your own grandma cooks, or my grandma used to cook these same cakes every week. And there was nothing wrong with me eating the whole cake. Then, if you know how to manage a drug appropriately and you're grown and you're not putting harm to your children and your family, I say manage it and enjoy it instead of beating yourself up about it. Because that's what ... it just makes it better.”
- “I would like them to know that every time that they take a pill they're taking in something that's not them. Every day you take it's every day you take away who you are. If that's what you want to do than just continue to take away who you are and become what it makes you.”
- “I mean, you just have to get used to the idea that this is going to be a boring, hard road. And it'll get better, and it's worth it. And why would you want to go backwards? Why would you want to go back? And that's the reason I think there's a lot of problems, is people ... See, I could never maintain. I wasn't a ... I couldn't maintain. I mean, I totally wrecked my life. But there's people that maintain. I mean, I used to run across them all the time. I used to run across children that had their parents, and they were drug addicts, but they maintained jobs and they were able to do it. We used to have people that would come into, when we had this Christian rehab home, and they would come in and they'd say, “You know, but I've wrecked everything. This is that.” I go, “Thank goodness. Because if you were able to maintain it, you would still be doing it, and then you don't know at what point maybe it might come to that.” But there's so many people that maintain it.”
- “It's so much easier said, than done, but if you just refuse to be powerless, if you need something to feel better, feel power. Then you aren't powerless, the thing you are using is the power. It shows power. You're only as good as that thing.”
- “That you're not alone. We're not alone and you're not alone in your struggle. It can be done. There is many of our brothers and sisters that have died in their efforts to try to get clean. It's like we have a second chance but definitely for them to know that they are not alone. There is hope. There is a solution and it is possible to achieve sobriety if we want it. The main thing an addict needs to know is that they are not alone because that's what causes the isolation. That's what keeps people into their addiction by not going and sharing because of the shame or whatever, stigma, things like that but definitely for them to know that they are not alone, there is help, there is hope.”
- “I would just say, for myself, it's like if I had to talk to someone, especially if I had to give a story or a testimony, I would tell them, for myself, I was the type of alcohol that would drink every day, just about all day, and then I started doing cocaine, and I was a very ... I got really depressed and violent. If I can stay sober with being an everyday drinker, drinking all day, every day, for years, and started doing drugs, if I can do it, you got a shot at doing it, because I never thought that I can get one day, and years went by one day at a time, and now I got a little over 11 years. It's possible. It definitely is possible. We all are miracles, you get one day, you're a miracle. Because the disease of addiction wants to kill us, and is in our heads, so if you can get one day, you already a miracle; you just got to keep going, and if you fall, get back up again.”
- “If you are someone who is in a situation, because of legitimate pain problems, there's other ways to address pain than just pills. Everyone knows that. Just to be honest. If you can't be honest with anyone else, at least just be honest with yourself, because you
can't change anything unless you acknowledge it, you know? It's true. Once you make the decision, you to to enroll your community in that. I'm going to find a different way and don't let me do otherwise. It's just like realizing you're in a crossroad. Use that opportunity You have to do whatever. You're the one who makes the decision at the end of the day. It feels like stupid detox, but you got to do it sooner or later or you're going to die. You die, or, you know what I mean? You have to one way or another, so why not do it now?"

- “I'm going to stay with people. Everything works differently for each one. Yeah. Lead to what works for you. Stay with people, places, things that aren't triggers for you for use. Try not to overwork yourself. Do what works for you. People are not going to stop until their sick and tired cause they hit rock bottom. But everybody has a different rock bottom. Once you hit rock bottom, come to your senses, you'd be like, okay, now it's time to do something else.”

- “Seek help. There is a lot of help directly, indirectly. Like I said before, internet, books, a lot of information out here. I think that's what it really comes down to, a lot of people don't know ... they're not educated on the subject. I felt like the more I educated myself, the more I was leaning towards being healthy. I'm glad I didn't have to hit rock bottom, but I know many people who have and hopefully nobody gets to that point, because there are so many resources out there. Like I said, knowledge is actually key. If you start researching ... Google will show you the signs of becoming an addict. It will show you. Yeah, that really opened up my eyes. I might have got a little too deep into research sometimes. Learn things that I didn't want to learn. And like I said earlier, spirituality too. When I was in the hospital, many religious people came and would pray over me, and it would be like a really weird feeling of sense of good. A good feeling. I always look back into that, when I'm in a bad mood or something, I always look back to those memories of those people praying over me and the warm feeling that I got in my body when they were doing that. I always look back to that. Yeah, absolutely. I don't know which religion I want to follow, but you know, I download apps and I've bought books, I've watched videos. I've actually gone to a few conferences and just hopping around like a grasshopper.”