2021

A CASE STUDY TO EXPLORE THE PERCEPTION OF A WOMAN PARTICIPANT IN DRUG COURT OF A COMMUNITY-BASED ARTS PROGRAM ON SUBSTANCE USE RECOVERY OUTCOMES

Catherine L. Troop
University of Kentucky, catherine.troop@uky.edu
Digital Object Identifier: https://doi.org/10.13023/etd.2021.065

STUDENT AGREEMENT:

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Catherine L. Troop, Student

Dr. Debra Harley, Major Professor

Dr. Melinda Ault, Director of Graduate Studies

A CASE STUDY TO EXPLORE THE PERCEPTION OF A WOMAN PARTICIPANT IN DRUG COURT OF A COMMUNITY-BASED ARTS PROGRAM ON SUBSTANCE USE RECOVERY OUTCOMES

DISSERTATION

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the College of Education at the University of Kentucky

By
Catherine L. Troop

Lexington, KY

Director: Dr. Debra Harley, Professor of Counselor Education

2021

Lexington, KY

ABSTRACT OF DISSERTATION

A CASE STUDY TO EXPLORE THE PERCEPTION OF A WOMAN PARTICIPANT IN DRUG COURT OF A COMMUNITY-BASED ARTS PROGRAM ON SUBSTANCE USE RECOVERY OUTCOMES

Addiction to drugs is a complex, chronic, and multi-faceted disease that often involves cycles of relapse and remission. The lifetime prevalence of alcohol and drug use disorders in women in the United States is 19.5 percent and 7.1 percent, respectively (McHugh, Wigderson, & Greenfield, 2014) yet there is a significant dearth of efficacious substance abuse treatment services tailored specifically to women. In addition, literature suggests that the third aspect of Bandura's Social Cognitive theory (self-efficacy) potentially plays a significant role in abstinence of drug use. The role of art interventions on recovery outcomes for a woman enrolled in the Franklin County, Kentucky drug court program was examined through the lens of self-efficacy using a case study method. Interviews were conducted with a female participant in drug court over a four-month period. In addition, a single one-hour interview was conducted with the judge who oversees this specialty court. The results of this study suggest art interventions can serve as an effective addiction recovery tool for women and can enhance self-efficacy, particularly when incorporated into a larger, more comprehensive program, as it provides an alternative way to process trauma and gives a setting to form relationships with other women in recovery. In addition, this study preliminarily showed that a woman's belief that she will be successful in maintaining sobriety is equally important to having access to recovery tools and resources. These results revealed potential weaknesses, which can be considered in the design of similar programs. Additionally, as these results are preliminary, the findings can be used to inform ongoing research in this area.

KEYWORDS: women, addiction, substance use disorder, drug court

Catherine L. Troop

May 4, 2021

A CASE STUDY TO EXPLORE THE PERCEPTION OF A WOMAN PARTICIPANT IN DRUG COURT OF A COMMUNITY-BASED ARTS PROGRAM ON SUBSTANCE USE RECOVERY OUTCOMES

By

Catherine L. Troop

Dr. Debra Harley
Director of Dissertation

Dr. Melinda Ault
Director of Graduate Studies

May 4, 2021
Date

For Cat and Lacey

ACKNOWLEDGEMENTS

I would like to thank Dr. Debra Harley for her intellect, insights, and common sense perspectives. You have been an unwavering supporter of my doctoral work and I was fortunate to work under your guidance. You truly embody the triad of academia: creative teaching, rigorous scholarship, and intellectual curiosity.

Thank you to my family for being exceedingly patient and encouraging—I love you all more than you will ever know. Lacey, thank you for helping me "win the contest"! Cat, you are correct that I should have finished my PhD before having children. However, I was lucky to have amazing children along with me for the ride. Peter, you are my best friend and were a voice of reason throughout this process—I am lucky to have you as a life partner. I would like to also give a big thank you to my parents and brother. Also, I would like to thank my dogs—both living and deceased—especially Zeus.

TABLE OF CONTENTS

Acknowledgements iii

Chapter one: Introduction
- Addiction 1
- Trends in Addiction 2
- Addiction and Women 6
- Models of Treatment for Women 8
- Factors Related to Women and Recovery 11
- Addiction and Drug Court Programs 13
- Study Objectives 14
- Significance of Study 15

Chapter Two: Review of Literature
- Unique Needs and Patterns of Women with SUDs 16
- Issues Faced by Women 17
- Trauma 19
- How Women Enter Treatment 23
- Treatment Settings and Mixed Gender Settings 23
- Effective Addiction Treatment for Women 25
- Issues and Treatment During Pregnancy 35
- Self-Efficacy, Substance Use, and Relapse Prevention 39
- Role of Art Therapy 51
- Relevance of Self-Efficacy and This Study 52
- Summary 53

Chapter Three: Design of the Study
- Research Question 54
- Research Design 54
- Data Collection 58
- Access and Selection of the Participant 62
- Participant 64
- Data Analysis 64
- Case Study Report 67
- Ethical Issues 68

Chapter Four: Results
- Introduction: The Study and the Researcher 70
- Description of the Participant 71
- Interviews 72
- Framework Analysis 73

Case Study Narrative 74
Summary 86

Chapter Five: Discussion, Conclusions, Limitations, and Recommendations
Summary of Findings 88
Discussion of Findings 88
Study Findings and Literature 92
Limitations 94
Future Clinical and Research Directions 99
Conclusions 103
References 104
Vita 121

Chapter One: Introduction

Addiction

Addiction to drugs is a complex, chronic, and multi-faceted disease that often involves cycles of relapse and remission. The American Society for Addiction Medicine (ASAM) defines addiction as a primary, chronic disease of reward, motivation, memory, and associated brain circuitry. Addiction is characterized by an inability to consistently abstain, impairment in behavioral control, cravings, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and dysfunctional emotional responses (Ries, Fiellin, Miller & Saitz, 2014). Without treatment or engagement in recovery activities, addiction is typically progressive and can result in disability or premature death. The risk for developing addiction to chemicals is influenced by a number of factors—genetic, environmental, and pharmacological (Bart, 2012).

It is important to first discuss the vernacular trends associated with addiction. The term "addiction" does not appear as a diagnosis in diagnostic nomenclature such as the *Diagnostic and Statistical Manual* (DSM-V) or the International Classification of Disease (ICD). Rather, when speaking in diagnostic terms, the term Substance Use Disorders (SUDs) is used in reference to this population for whom drug use has a pathological pattern. The DSM-V defines Substance Use Disorders as a "cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems" (APA, 2013, p. 483). A SUD is diagnosed and scaled (mild, moderate, and severe) based on endorsement of eleven criteria (highlighted below). A diagnosis of SUD can be applied to ten classes of drugs: alcohol, caffeine, cannabis, hallucinogens, inhalants, opioids, sedatives,

hypnotics, stimulants, and tobacco. In addition, it is worth noting that the terms "substance abuse" or "substance misuse" are often used both by lay people and professionals, however, these terms have no consensual clinical or diagnostic meaning.

Substance abuse negatively affects millions of Americans. In 2017 it is estimated that around 7% of Americans (age 12 and older) were diagnosed with a SUD (Substance Abuse and Mental Health Services Administration, 2018). The impact on population health is significant; for example, Hepatitis C and human immunodeficiency virus (HIV) rates have increased exponentially due to the increased use of drugs (Suryaprasad et al., 2014). In addition, health care costs are rising as a result of the increase in illicit drug use. Hospital emergency department visits and admissions related to overdoses have increased significantly. In Kentucky and across most parts of the United States, overdose death rates have spiked in recent years, and now cause more deaths in the state than motor vehicle accidents (Jones, Mack & Paulozzi, 2013). The rate of babies born with Neonatal Abstinence Syndrome (NAS) has risen considerably as evidenced by the almost four-fold increase in admissions to neonatal intensive care units for NAS from seven cases per 1000 in 2004 to 27 cases per 1000 admissions in 2012 (Tolia, Patrick, Bennett, Murthy, Sousa, Smith, Clark & Spitzer, 2015). With these sobering statistics, it is clear that effective addiction treatment is urgently needed.

Trends in Addiction

There is a movement within SUD treatment and research to view addiction through a medical model lens, rather than seeing addiction as a "moral weakness" or "character flaw" and that a person could stop using drugs "if they really wanted to" (Volkow, Koob & McLellan, 2016). There is a concept now that addiction is a disease associated with abnormalities in brain functioning. Brain abnormalities found in people with addiction contribute to the behaviors

associated with a person's drug use. The evolution of the brain disease model of addiction is important, as it has led to the development of more effective treatments and public policies (Volkow et al., 2016).

Research and attitudes around SUD services have shifted greatly in recent years. For example, there is a movement towards Evidence-Based Treatment (EBT)—treatment programs that have undergone rigorous scientific study and have shown to be effective—as the gold standard of care (Adams & Madson, 2006). In this model, evidence supporting these treatments must have been demonstrated in at least one study using an experimental or quasi-experimental design. An example of an EBT for a SUD population is Motivational Interviewing (MI). This counseling approach encourages and facilitates individuals to look at their own motivation to change their behaviors related to substance abuse, is rooted in empathy and guidance, and is supported by rigorous research (New York State Education Department, Adult Career and Continuing Education Services, 2011). Despite this movement, people with SUDs often do not receive services with objective evidence of efficacy. Partly due to this shortcoming, individuals with SUDs have high recurrence rates compared to other chronic disease patients (McIellan, O'Brien & Kleber, 2000).

Opioid use disorder (OUD) is an example of a SUD for which evidence-based interventions have increasingly gained acceptance and use, largely in reaction to the high rate of fatal overdoses this country has seen in the last few years. According to the *Diagnostic and Statistical Manual of Mental Disorders,* OUD is defined as the maladaptive use of opioids (prescribed or illicit) resulting in two or more criteria that reflect impaired health or function over a 12-month period, and is scaled according to severity (mild, moderate, or severe). Criteria include:

- Opioids are taken in larger amounts or over a longer period of time than intended;
- There is a persistent desire or unsuccessful efforts to cut down or control opioid use;
- A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects;
- Cravings for opioids;
- Recurrent opioid use resulting in failure to fulfill role obligations;
- Continued opioid use despite recurrent social or interpersonal problems;
- Important social, occupational or recreational activities given up or reduced because of opioid use;
- Recurrent opioid use in situations in which it is physically hazardous;
- Continued use despite knowledge or having persistent or recurrent physical or psychological problems that is likely to have been caused by opioids;
- Tolerance marked by either a need for increased amount for the desired effect or a diminished effect with continued use of same opioid;
- Withdrawal (APA, 2013).

Medication Assisted Treatment (MAT) is an evidence-based approach to OUD that involves prescribing medications to a person who is opiate dependent with the goal of diminishing craving and preventing withdrawal symptoms (Bart, 2012). In addition, it allows the individual to be stabilized and engaged in therapeutic services such as individual and group therapies focused on relapse prevention, Peer and Family Support, and 12 Step recovery programs. All medications for the treatment of OUD ideally are prescribed as part of a

comprehensive individualized treatment plan that includes counseling and social support programs (Bart, 2012)

In addition, there is push within addiction treatment to place individuals with SUDs in a setting that is most appropriate to the stage of addiction based on symptom severity, level of dependence, and various diagnostic criteria. The American Society of Addiction Medicine (ASAM) has set criteria for treatment placement and continued stay and transfer/discharge of patients with addiction (Ries et al., 2014). For example, planning for patient treatment spans across six dimensions: Acute Intoxication and/or Withdrawal Potential; Biomedical Conditions or Complications; Emotional, Behavioral, or Cognitive Conditions and Complications; Readiness to Change; Relapse, Continued Use, or Continued Problem Potential; and Recovery/Living Environment (Ries et al., 2014). Examples of potential settings in which a provider could place an individual include settings such as a medical detoxification center and intensive outpatient settings. From this perspective, treatment providers must consider a range of care possibilities when treating addiction that reflects patients' treatment needs, strengths, and support network.

Addiction recovery is an individualized process of change that develops along a continuum. Recovery is not simply remission of symptoms; rather, it encompasses a move towards perceiving one's life as purposeful and increased engagement in healthful endeavors (O'Connell, Tondora, Croog, Evans & Davidson, 2005). The meaning of recovery is ideally related not only to the illness itself but also to personal perspectives such as self-confidence, connectedness to others, and self-determination (Piat, Sabetti, Couture, Sylvestre, Provencher, Botschner & Stayner, 2009). The operational definition of recovery that will be used for this project is based on the Substance Abuse and Mental Health Services Administration's

(SAMHSA) conceptualization of recovery from a mental or substance use disorder: “A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential” (SAMHSA, 2014).

Addiction and Women

The lifetime prevalence of alcohol and drug use disorders in women in the United States is 19.5 percent and 7.1 percent, respectively (McHugh, Wigderson, & Greenfield, 2014). 7.6 million women ages twelve and older in the U.S. were estimated to suffer from a SUD. Despite this high number, it is estimated that only 20 percent of women who need addiction treatment receive it in any given year, a rate that is considerably lower than men. It is believed this rate is due to a number of factors, some of which will be discussed below. As women age, the prevalence of substance abuse is lower (Grant, Dawson, Stinson, Chou, Dufour & Pickering, 2006). It is estimated that 15.7 percent of women ages 18-25 abused alcohol and illicit drugs compared to 1.5 percent of women ages 50 or older (Substance Abuse Treatment: Addressing the Specific Needs of Women, 2009). Despite this, it is important to remember that women are vulnerable to substance abuse across their life spans, particularly when experiencing significant life stress, for example, death of a partner.

Understanding that all these factors play a role in drug use patterns, treatment initiation, and treatment engagement is essential to the development of efficacious addiction treatment programs for women. It is noteworthy that some ethnic groups are more resistant to entering treatment. For example, while Asian and Pacific-American women make up nearly 4% of the United States population, they represent less than 1% of women in treatment (Substance Abuse Treatment: Addressing the Specific Needs of Women, 2009). Addiction professionals must be aware of the cultural-gender intersection when providing treatment to women.

The need for efficacious substance abuse treatment services tailored to women is significant in terms of general medical outcomes. For example, compared to men, women are at increased risk of illicit drug use and drug-related health risks, such as Hepatitis C and HIV (Substance Abuse Treatment: Addressing the Specific Needs of Women, 2009). In addition, there is a multitude of other issues facing women with SUDs, including exposure to violence and trauma, psychiatric comorbidity, and lack of positive and supportive relationships.

Diagnostic and Treatment Challenges with Women

Women are more likely than men to have co-occurring drug use and mental disorders, which can complicate both diagnosis and treatment. In addition, women are more likely to have multiple co-morbidity (three or more psychiatric diagnoses, in addition to substance use disorder) than are men, with anxiety and major depressive disorders being the most common diagnoses (Agrawal, Gardner, Prescott & Kendler, 2005). Eating disorders and post-traumatic stress disorder (PTSD), a common reaction following exposure to violence and trauma, also often co-occur in women with drug use disorders. Research on co-occurring disorders suggests that women who use drugs may use them to self-medicate distressing affect (Agrawal et al., 2005).

In addition to the mental health issues that women often face in addition to SUDs, there are many psychosocial issues that often complicate entry to treatment and engagement in treatment, and that should be used to inform the type of treatment a woman receives. For example, exposure to violence and trauma, generational drug use, lack of formal education, lack of job acquisition and maintenance skills, dealing with gender inequality and male-focused society, and legal involvement are all issues that women with SUDs experience.

Next, the dimension of gender-specific stages of use will be discussed. Telescoping is a term used to describe the accelerated progression of women from substance use initiation to dependence and to treatment (Zakiniqeiz & Potenza, 2018). It is thought that while women may engage in drug abuse behaviors later than men, they progress faster to disordered use patterns. It is also noteworthy that the medical, psychosocial, and vocational implications of drug addiction is greater for women than for men. It is also widely acknowledged that biological and sociocultural factors affect individuals with regard to drug withdrawal, physiological experiences with drugs, and treatment responses to drugs. However, program development is often not guided with gender-related factors in mind, for example, disproportionate co-morbidities such as anxiety and depression, and trauma history. A greater understanding of these differences is essential to the development of effective treatment programs for women rather than to take a "one size fits all" approach.

Models of Treatment for Women

On a national level, there is a considerable dearth of tailored treatment programs for women with SUDs. Women's initiation, use patterns, progression of disease, and help-seeking patterns differ from men and these differences must be incorporated in the formation of programs (Greenfield, Back, Lawson, & Brady, 2010). As it stands, treatment programs have traditionally been designed with males in mind, with little consideration of gender differences. In addition to the differences mentioned above, women also frequently have different co-morbidity issues that should be treated in tandem with addiction, such as PTSD, anxiety, and mood disorders. Lifetime rates of these conditions are significantly higher for women than for men (Greenfield et al., 2010). In addition, addiction treatment programs often do not consider or accommodate

childcare, pregnancy, or issues of domestic violence. Below, I will briefly discuss some of the treatments that have been found to be effective with women in addiction treatment settings.

Case management (CM) can help address some of the unique issues that women face. The ongoing support services that case management provides are considered a crucial part of preventing relapse and assisting female clients in building a foundation for long-term sobriety (Brindis & Theiden, 1997). Case management is tailored, goal-oriented, and is widely used with a variety of populations, including individuals with mental illness, the homeless, and pregnant women. There are three models of case management: medical, social, and a combination of both. The model will vary depending on the setting in which a woman is engaged in addiction treatment. For example, a woman with a SUD who has a co-occurring medical condition such as hepatitis C, will require case management that is tailored to both social and medical needs.

In the case of women identified with a SUD, case managers can identify and help remove barriers that may prevent their clients from initiating treatment or being able to stay engaged in a treatment program. This contributes to coordinated care and provides a comprehensive response to a client's needs. For example, the role of a case manager may include linking the client to appropriate services and providing them with knowledge of available resources. This involves assessment to determine the client's social, physical, and psychological functioning in order to design an appropriate plan to meet the client's needs. In the context of women in addiction treatment, this may involve linking the client with appropriate peer-based support services such as Narcotics Anonymous when it is determined that the client has limited social support. In addition, a case manager may serve as a link to community resources. For example, if a client has barriers to engaging in addiction treatment due to childcare issues, a case manager may help the client find agencies that provide this care.

Cognitive Behavioral Therapy (CBT) is another example of an evidence-based treatment that is often used in addiction treatment settings. CBT addresses the learning process that support problem behaviors and helps patients learn how to anticipate possible problem scenarios and develop and utilize positive coping strategies (Carroll & Onken, 2005). Treatment usually focuses on reducing symptoms by modifying troublesome thoughts and maladaptive behaviors. CBT has consistently been found to be an effective treatment across many different mental health disorders and populations. Specifically, CBT has shown high rates of efficaciousness with women across various settings, including outpatient, residential, and within correctional facilities (Sacks, McKendrick & Hamilton, 2012).

Complementary and alternative medicine (CAM) is a treatment that is considered "non-mainstream" and is used in addition to conventional SUD treatments (Aletraris, Paino, Edmond, Roman & Bride, 2014). Art therapy falls under this rubric along with treatments such as acupuncture, music therapy, and herbal treatments. While there has been suggestion that the arts can serve as a therapeutic tool in women's addiction treatment, as this modality is often used in mental health settings, there is limited literature related to this topic. It is widely believed that art and other similar modalities can serve an important role in addiction treatment programs, however, they have not gained the research attention that EBTs have.

The tenet of art therapy is that an individual can express themself through non-verbal and creative means. Many art therapists have created curricula to decrease defenses and facilitate a client's acceptance of the first step of the 12-step process, which is "I admit that I am powerless over addiction and that my life has become unmanageable" (Holt & Kaiser, 2009). Examples of some art prompts that may be used in therapeutic settings include, "Complete a bridge depicting where you have been, where you are now, and where you would like to be in your recovery",

"Depict the crisis that brought you to treatment", and "Make a collage exploring the costs and benefits of staying the same, and the costs and benefits of changing". It is believed that women are more often than men open to art therapy activities and that prompts such as these can help a client explore her recovery processes and explore her readiness for change (Holt & Kaiser, 2009).

As many other addiction treatment components frequently do not take into account the gender-specific needs of women, art therapy can provide an outlet for self-expression, reduce shame (which is often found in relation to trauma), and facilitate positive images of recovery (Brady & Ashley, 2005). In addition, it has been found that when art therapy is used as an adjunctive therapy with an EBT such as Motivational Enhancement Therapy or a 12-step program, client motivation and engagement is improved, and overall outcomes are more positive (Holt & Kaiser, 2009).

Factors Related to Women and Recovery

While there are many factors that contribute to long-term sobriety, there are certain aspects of the process that have been found to be more highly correlated with the stability of an individual's recovery. Particularly in women-focused addiction treatment, literature suggests that overarching aims should be to help participants' coping skills, provide tools to help the individual gain a sense of self, and help instill a sense of self-worth through positive interactions and connection with others (Center for Substance Abuse Treatment, 2009). An effective addiction treatment model for women accounts for a disease process and a recovery journey that is physical, emotional, spiritual, and considers the environmental and sociopolitical aspects of women's lives. Literature also suggests there should be an emphasis on fostering social relationships and enabling women to gain an understanding of the negative impact social

disconnection has on their recovery. It has also been found that strong support networks are good indicators of long-term recovery, particularly in women (Hser, 2007).

Self-efficacy is another factor that literature suggests is strongly related to successful, long-term recovery. Self-efficacy is a psychological construct that plays an important role in understanding human behavior and has empirical significance (Kelly & Green, 2014). This concept was first introduced by Albert Bandura who defined self-efficacy as "the belief in one's capabilities to organize and execute courses of action required to produce given attainments" (Bandura, 1997, p. 2). In contrast to more overly generalized concepts such as self-esteem, self-efficacy is measured in terms of more specific abilities or beliefs.

Self-efficacy plays a central role in many health behavior change models, including weight loss and physical activity. In addition, this construct is often used in predicting treatment outcomes in addiction (Kelly & Greene, 2014). It has been posited that by addressing psychological problems and increasing self-efficacy, it greatly improves the chances of maintaining long-term recovery from addiction and can be viewed as a major protective factor in sobriety (Hser, 2007). As the theoretical importance of self-efficacy is widely accepted within the addiction treatment field, there have been a number of self-efficacy measures developed to predict treatment outcomes (Kelly & Greene, 2014). An example of one of these measures is the Drug Avoidance Self-Efficacy Scale (DASES), which is a 16-item instrument that asks participants to imagine themselves in a particular situation related to potential drug use and rate their level of self-confidence (self-efficacy) to resist drug use in that situation (Martin, Wilkinson & Poulos, 1995).

Addiction and Drug Court Programs

Drug Court programs are specially designed criminal dockets that provide extensive supervision, urine drug screens, case management services, and therapeutic services to non-violent offenders in lieu of criminal prosecution or incarceration (Marlowe, Festinger, Lee, Dugosh & Benasutti, 2006). Participants typically enter a guilty plea prior to entering the program, which is held in abeyance until the participant graduates or is terminated from the program (Marlowe et al., 2006). Failure to complete the program results in the guilty plea leading to a conviction, while successful completion of the program results in the charges being dropped. The length of programs vary, but typically run for at least three months and often extend to a year.

A defining component of this model is judicial status hearings, an element that is not found in other judicial interventions for offenders involved with drugs. In the drug court model, a judge is seen as a treatment team leader, evaluates participants' performance, imposes sanctions and rewards, determines remedial interventions, and regulates participants' progress through the program. In the legal community, it is widely believed that this ongoing judicial supervision communicates to participants that an authority figure cares about them and wants them to succeed (Marlowe et al., 2006). Drug courts were created to help individuals with compliance of court-ordered substance abuse treatment, and there is a degree of program adaptiveness that often takes place. Many court systems align the clinical needs of an individual with services in order to promote compliance and responsiveness. For example, an individual with a trauma history may be matched with a therapeutic track that can address these treatment issues.

Drug court programs exist in court systems across the United States. Within Kentucky, a large majority of the 120 county court systems have a drug court program. The Franklin County

Kentucky drug court program was established in 2009 within the Circuit Courts and there are four phases in the program: phase one is 60 days, phase two is six months, phase three is four months, and phase four (often referred to as "aftercare") is six months (A. Wilson, personal correspondence, December 29, 2020). While not one of the first of its kind in the state in terms of this type of judicial diversion program, it is viewed within the state's judicial system as "progressive" and "effective" (P. Shepherd, personal correspondence, November 24, 2020). For example, unlike some drug courts in Kentucky, it accepts participants on MAT.

There is a notable role that substance abuse plays in the criminal justice system. It is estimated that nearly 80% of offenders in the United States meet the definition of drug involvement, while an estimated 50% of offenders meet criteria for substance abuse or dependence (Marlowe, Festinger, Dugosh, Benasutti, Fox & Craft, 2012). Substance abuse also plays a significant role in recidivism, as it is estimated an individual is two to four times more likely to reoffend if they continue with drug involvement.

Study Objectives

Yes Arts is a community-based arts group that targets addiction. Its mission is to mobilize the power of community and the therapeutic aspects of the arts to disrupt the cycle of addiction. This project will focus on one component of the organization, Yes Arts Recovery, which guides women in Franklin County Drug Court through a variety of arts activities (writing, drama, music, sculpture, and visual arts) to enhance self-expression, connection, and social support. According to addiction literature, these factors are integral to successful, long-term recovery.

This study will examine the impact of a community art project on women in a drug court treatment program, through the lens of self-efficacy and addiction recovery. The purpose of the

study is to analyze program effects from the perspective of a client who is participating in these services.

- *Does the Yes Arts Recovery Program promote self-efficacy and recovery of a woman who participates in the program as a part of the Franklin County Drug Court?*

Significance of Study

There are significant gaps in literature related to women and addiction treatment. In particular, little is known about the potential impact of integrating art into addiction treatment, regardless of gender. Moreover, given the known impact of art therapy on self-efficacy, it is important to explore the role of women's self-efficacy and the role it can play in sustaining long-term recovery for this population. Several studies have shown that self-efficacy is an important mediator of treatment effects (Shadel, Martino, Setodji, Cervone & Witkiewitz, 2017; Ames, Heckman, Grothe & Clark, 2012; Warner, Schüz, Wolff, Parschau, Wurm & Schwarzer, 2014), however, these studies are not specific to women in addiction treatment.

Providing insight into the therapeutic effects that a community-based arts program has on women enrolled in drug court in terms of self-efficacy and recovery could facilitate the improvement and dissemination of this type of program. As community arts programs incorporate many of the features outlined above that are integral to women and recovery, these types of arts programs could bolster recovery capital and increase the likelihood of long-term, successful outcomes. Simply stated, the arts could serve as an important therapeutic tool for women in recovery.

Chapter Two: Review of Literature

Unique Needs and Patterns of Women with Substance Use Disorders (SUDs)

Literature has found that women differ from men with regard to drug use (Brady, Beck & Greenfield, 2009). Women differ in their reasons for use, how they obtain drugs, how they initiate drug use, and where they use drugs. As mentioned earlier, telescoping is the term used to describe the unique pattern of drug use and initiation frequently found in women. Specifically, women are more likely to be initiated into drug use by a significant other, and drug abuse patterns of women are largely impacted by significant relationships in comparison to men. Adding another layer of complexity, factors such as women's socioeconomic status and experiences with gender-based discrimination play significant roles in women's patterns of drug use and in treatment seeking. Most relevant from the perspective of this project, women *recover* from SUDs differently from men. Literature suggests other unique aspects of women and SUDs based on life phase (fertility, pregnancy, breastfeeding, menopause, and aging) and these factors should inform what type of substance abuse treatment and programming they are offered (Brady et al., 2009). Finally, women often encounter a disproportionate number of barriers to entering treatment, such as financial issues and family responsibilities, based on gender.

Rates of alcohol and drug use over the past few decades indicate that the gender gap is narrowing. Surveys in the early 1980s estimated the male/female ratio of alcohol use disorders as five to one in contrast to more recent surveys that report a ratio of approximately three to one (Grucza, Norberg, Bucholz & Bierut, 2008). Younger women are more likely than older women to display patterns of alcohol and illicit drug use similar to the patterns displayed by men. Drug-dependent women are more likely than drug-dependent men to have partners who use drugs, which can reinforce drug use and relapse (Amaro & Hardy-Fanta, 1995). One hypothesis for that

difference is that some women continue using alcohol and illicit drugs to have an activity in common with their partners or to maintain the relationships. It is noteworthy, that although alcohol and marijuana use often begins with same-gender peer pressure during adolescence, women are likely to be introduced to cocaine and heroin by men (Amara & Hardy-Fanta, 1995).

As intravenous drug use is a public health threat and increases an individual's risk of medical complication, it is worth discussing gender specific patterns associated with injection. While women are less likely to inject drugs than men, they typically begin injecting sooner and at an earlier age (Bryant & Treloar, 2007). Women who inject drugs for the first time are more likely to be introduced to injecting by a sexual partner, as opposed to a platonic relation or unknown person. Women are also more likely to share needles and other relevant drug equipment with their sexual partner (Frajzyngier, Neaigus, Gyarmathy, Miller & Friedman, 2006).

Issues Faced by Women

Women with SUDs face many issues that disrupt and hinder entry to addiction treatment and negatively impact treatment outcomes. As discussed earlier, women with SUDs often have been exposed to violence and trauma, generational drug use, lack of formal education, lack of job acquisition and maintenance skills, issues related to gender inequality and existing in a male-focused society, and legal involvement. Below the author will discuss some of the psychological and psychosocial factors that play a significant role in addiction treatment initiation and engagement of women with SUDs.

As mentioned in chapter one, women are more likely than men to have "dual diagnosis" of drug use and mental disorders. These co-occurring factors should be considered when implementing addiction treatment (Zilberman, Tavares, Andrade & El-Guebaly, 2003).

Depression is estimated to co-occur in adults with opioid use disorder (OUD) at a rate of 15 percent to 30 percent (Pilowsky, Wu, Burchett, Blazer & Ling, 2011). This rate is even higher in women, particularly women with prescription OUD. Also noteworthy is there is a higher rate of injection drug use found in co-occurring OUD and depression. Adults with co-occurring OUD and depression are more likely to suffer more severe social and economic problems than individuals with OUD without depression. Moreover, lack of a treatment response is more likely for women with those co-morbidities (Chen, Strain, Crum & Mojtabai, 2013).

In addition to the mental health issues that women often face in the context of SUDs, there are psychosocial issues that can complicate entry to and engagement with treatment. For example, a woman's partner may prevent her from entering and remaining in treatment (Tuten & Jones, 2003). One reason cited for this lack of acceptance is often concern for the woman not being able to manage the home and care for the children. It is thought that in addition to household concerns there are a number of other reasons that men do not actively support their female partners in treatment. These include the man's own substance abuse issues, fear of stigma, and desire to maintain the status quo (Substance Abuse and Mental Health Services Administration, 2009a). These factors inform and limit the type of treatment available to women.

Exposure to violence and trauma also plays a role in the formation of SUDs in women. Najavits et al. (1997) reported a lifetime history of trauma (to be discussed in greater detail below) in 55-99 percent of women who used drugs, compared with population-based rates of 36-51 percent. History of traumatic events, including sexual and physical assaults, childhood sexual and physical abuse, and domestic violence has been found to predict both initiation of drug use and development of substance use disorders in women (Brady & Ashley, 2005). It is believed

that drug use is an individual's attempt to regulate mood and improve poor self-esteem related to abuse (Hawke, Jainchill & De Leon, 2000).

There is a strong familial link in substance abuse and it is thought that both men and women are equally susceptible to this genetic component (Merikangas & Stevens, 1998). For example, a woman is 10-50 times more likely to have alcohol dependence if they had a parent who abused either drugs or alcohol (Johnson & Leff, 1999). It is noteworthy, however, that a person's environment works interrelatedly with genetic vulnerabilities to determine an individual's outcome. This indicates that an individual's environment can potentially mitigate the susceptibility from a genetic link with substance abuse.

Women with SUDs are more likely to have lower incomes, be less educated, and are less likely to be employed. This is noteworthy as employment status is a factor associated with substance abuse, while in turn, substance abuse tends to be higher among women who are unemployed (Substance Abuse and Mental Health Services Administration, 2009a). For example, around 12 percent of women ages 18-49 who are unemployed reported substance abuse while only around 8 percent of employed women reported abusing drugs (Substance Abuse and Mental Health Services Administration, 2013).

Trauma

Trauma exposure is a significant SUD risk factor for women and there is a substantial body of literature that demonstrates how women with trauma histories are over-represented in substance abuse samples (Center for Substance Abuse Treatment, 2009). To explore the impact that trauma has on women with SUDs, the author will first examine the definition of trauma more broadly.

Trauma can be defined as resulting from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being (Substance Abuse and Mental Health Services Administration, 2013)**.** Events and circumstances may include the actual or extreme threat of physical or psychological harm or the withholding of material or relational resources essential to healthy development. These events and circumstances may occur as a single occurrence or repeatedly over time. The individual's experience of these events or circumstances helps to determine whether it is a traumatic event. A particular event may be experienced as traumatic for one individual and not for another. In many situations, a sense of humiliation, betrayal, or silencing often shapes the experience of the event. How the event is experienced at the time of occurrence or in retrospect may be linked to a range of factors including the individual's cultural beliefs, availability of social supports, and the developmental stage of the individual (Substance Abuse and Mental Health Services Administration, 2009a).

Trauma can have long-lasting adverse effects. These include an individual's reduced ability to cope with the normal stresses and strains of daily living, loss of trust in relationships, and reduced ability to manage emotions, impaired memory and attention (Tolin & Foa, 2008). Traumatic experiences can lead to a constant state of arousal which eventually causes fatigue and disrupted sleep.

Given these gender-based differences, treatment for women should be trauma-informed and recognize that trauma often serves as a trigger for addiction or relapse. Substance Abuse and Mental Health Services Administration (SAMHSA) cites six important factors of trauma-informed care: safety; trustworthiness and transparency; peer support; collaboration and

mutuality; empowerment; voice and choice (Substance Abuse and Mental Health Services Administration, 2014). These principles may be generalizable across multiple types of settings, although terminology and application may be setting specific.

Trauma-informed services incorporate the enduring stress related to trauma and the effect this has on an individual's thoughts, feeling, and behaviors and provides individuals with trauma-informed education. Psychoeducation might cover topics such as the potential impact a trauma history has on maladaptive behaviors (Center for Substance Abuse Treatment, 2009). In addition, some women-only treatment settings are based on the notion of reducing the risk of retraumatization specifically in terms of male relationships and encounters. For example, as women with SUDs most frequently encounter physical and sexual abuse at the hands of men, the presence of men in addiction treatment settings may hinder therapeutic processes for women (Center for Substance Abuse Treatment, 2009).

Post-Traumatic Stress Disorder (PTSD)

As discussed earlier, there are multiple mental health disorders that can co-occur with SUDs. As women are at high risk of experiencing traumatic events, symptoms of PTSD often occur in women with SUDs. The prevalence of PTSD is considerably higher (2 to 5 times) among individuals with SUDs (Greenfield et al., 2010).

PTSD is defined as the development of characteristic symptoms following exposure to one or more traumatic events (American Psychiatric Association, 2013). Examples of these symptoms include recurrent and intrusive memories of the event, psychological distress related to events or stimuli that resemble aspects of the traumatic event, reckless or destructive behavior, and sleep disturbances. The diagnosis of PTSD is relevant when discussing SUDs, as it is believed that these individuals have higher rates of substance abuse (Najavits & Schmitz, 2012).

There are gender disparities in prevalence of PTSD. For example, the lifetime risk for PTSD in women is estimated to be twice as high as is in men (Christiansen & Hansen, 2015). Type of trauma, rather than level of exposure, is thought to contribute to the higher prevalence of PTSD in women (Olff, Langeland, Draijer & Gersons, 2007). For example, women are more likely to be exposed to sexual violence. In addition, it is thought that other psychosocial factors contribute to the higher vulnerability, such as level of education and access to social support. It is important to note, however, that while not every woman with a history of trauma will develop PTSD, traumatic experiences are associated with higher rates of substance abuse.

Adverse Childhood Events

The Adverse Childhood Experience Scale (ACES) is a helpful tool to inform trauma-informed care. The ACES is a 17-question survey that covers an abuse domain with three categories (physical, sexual, and psychological) and a household dysfunction domain that covers four categories (substance abuse, mental illness, witnessing domestic violence, and criminal behavior) (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, Koss & Marks, 1998). Higher scores on the ACES are often linked to more serious health problems and higher mortality rates. Individuals with multiple categories of childhood exposure are likely to have multiple health risk factors later in life (Hughes, Bellis, Hardcastle, Sethi, Butchart, Mikton, Jones & Dunne, 2017). For example, individuals who have experienced four or more categories of childhood exposure have a four to twelve-fold increase of alcoholism, drug abuse, depression, and suicide attempts, compared to those with no categories endorsed (Felitti et al., 1998). It is likely that substance use behaviors serve as a coping mechanism for the trauma experienced. Specifically, substance use provides a perception that the individual has control over mood, anxiety, and hyperarousal.

There are gender differences in ACE reporting. Literature suggests that high ACE scores are more common among women than among men (Choi, DiNitto, Marti, & Choi, 2017). In the case of sexual violence, women are nearly twice as likely to report abuse than men (Felitti et al., 1998). Research suggests that this higher endorsement by women is linked to substance abuse (Choi et al., 2017).

How Women Enter Treatment

Women often enter treatment for SUDs from a wider array of referral sources in comparison to men. Self-referral, social service agencies, and the criminal justice system are the primary sources of referral (Brady & Ashley, 2005). Referrals from primary health care providers are one of the lowest referral routes to addiction treatment for women. It is noteworthy that women often identify psychosocial stress, not drug use, as the primary reason to enter treatment. It is believed this may stem from factors such as shame and denial (Center for Substance Abuse Treatment, 2009).

In general, women are more likely than men to seek out health treatment, including substance abuse treatment. They are also more likely to make use of a variety of healthcare options, including primary care. Despite that, however, women often do not get referred to addiction treatment services, yet they exhibit more serious drug problems on treatment entry, along with related medical and psychological problems (Arfken, Klein, di Menza & Schuster, 2001).

Treatment Settings and Mixed-Gender Settings

Women receive addiction treatment in a variety of settings and there is push within the field to place individuals with addiction in a setting that is most appropriate to the stage of addiction based on symptom severity, level of dependence, and various diagnostic criteria. The

American Society of Addiction Medicine (ASAM) has set criteria for treatment placement and continued stay and transfer/discharge of patients with addiction (Ries et al., 2014). For example, planning for patient treatment spans across six dimensions: Acute Intoxication and/or Withdrawal Potential; Biomedical Conditions or Complications; Emotional, Behavioral, or Cognitive Conditions and Complications; Readiness to Change; Relapse, Continued Use, or Continued Problem Potential; and Recovery/Living Environment (Ries et al., 2014). There are five broad levels of care with decimal numbers to show gradation of intensity:

- Early Intervention (0.5),
- Outpatient Services (1),
- Intensive Outpatient/Partial Hospitalization Services (2),
- Intensive Outpatient (2.1),
- Partial Hospitalization (2.5),
- Residential/Inpatient Services (3),
- Clinically Managed Population Specific High Intensity Residential Services (3.3),
- Clinically Managed High Intensity Residential Services (3.5),
- Medically Monitored Intensive Inpatient Services (3.7),
- Medically Managed Intensive Inpatient Services (4). (Mee-Lee, 2013)

It is unclear to what extent, however, this criteria is used in addiction treatment placement decisions for women. Ideally, treatment providers must use this criterion in addition to considering several other factors that reflect the woman's treatment needs, strengths, and social support (Center for Substance Abuse Treatment, 2009).

Within the addiction treatment field, there is debate about the benefits of women-only treatment. While some addiction specialists do not find that gender plays a role in treatment

outcomes, others emphasize the importance of gender-specific services, particularly because women's frequent trauma histories (Zilberman et al., 2003). As mentioned above, some women-only treatment settings are based on the notion of reducing the risk of retraumatization, as many women's trauma histories are related to male relationships and encounters. For example, a male client who has an angry outburst in a group therapy setting could be a triggering event for a woman who has a history of experiencing domestic violence. In addition, separation of the genders can reduce female gender role expectations and the fact the groups may be biased towards male interests, which means women interests are neglected (Zilberman et al., 2003).

While a limited amount of literature suggests that gender-specific treatment is more effective, there is a significant lack of systematic research that explores how women-only addiction treatment could improve access, treatment retention, and outcome. It is noteworthy that women frequently report they have concerns upon entering women-only treatment settings, which are often attributed to previous poor relationships with females (Neale, Tompkins, Marshall, Treloar & Strang, 2018). However, a majority of women report positive experiences in a women-only treatment setting, and once there they felt safe, supported, and able to develop relationships with others in the program.

Effective Addiction Treatment for Women

The need for efficacious substance abuse treatment services tailored to women is significant. As mentioned earlier, women are at increased risk of illicit drug use and drug-related health risks, such as Hepatitis C and HIV and there are many other issues facing women with SUDs, including exposure to violence and trauma, history of child abuse and neglect, psychiatric issues, and lack of positive and supportive relationships. Untreated SUDs can increase the negative effects of these multiple issues.

Research and attitudes about addiction services have shifted greatly over the past decade. For example, there is a movement away from practices based on tradition or intuition and towards evidence-based treatment (EBT)—treatment programs that have undergone rigorous scientific study and been shown to be effective (Adams & Madson, 2006). Evidence of the outcomes of these treatments must have been demonstrated in at least one study using an experimental or quasi-experimental design.

On a national level for women with SUDs, there is a considerable dearth of tailored evidence-based treatment programs. As mentioned earlier, women's initiation, use patterns, progression of disease, and help-seeking patterns differ from men and these differences must be incorporated into the design of programs (Greenfield et al., 2010). Treatment programs have traditionally been designed with males in mind, with little consideration of gender differences. Below the author will outline some of the evidence-based treatment protocols most frequently used.

Medication Assisted Treatment

As mentioned earlier, MAT is an evidence-based approach that involves prescribing medications to a person who is opiate or alcohol dependent with the goal of diminishing craving and prevention of withdrawal symptoms (Bart, 2012) while an individual engages in other therapeutic activities such as individual therapy or 12-step recovery. Examples of the medications used in MAT include methadone, buprenorphine, and naltrexone (Connery, 2015). Methadone is an opioid antagonist and prevents withdrawal symptoms and reduces craving by activating opioid receptors in the brain. Buprenorphine is an opioid partial agonist and eliminates opioid withdrawal symptoms without producing the euphoria or dangerous side effects and activates and blocks opioid receptors in the brain. It can be combined with naloxone to deter

diversion or abuse as an injection causes withdrawal reaction if used intravenously by an individual dependent on opioids. Naltrexone is an opioid antagonist and prevents relapse following complete detoxification from opioids and blocks opioid receptors so if opioids are used, euphoria is blocked (Connery, 2015). Naltrexone is also indicated in alcohol use disorder (AUD).

A disadvantage to this approach is that MAT is often implemented as a "stand-alone" treatment. Rather, it should be used in conjunction with other psychological, psychoeducational, and peer-based therapies. In addition, MAT is only indicated for AUD and OUD, as there are currently no pharmacological interventions for other drugs of abuse such as methamphetamines. However, MAT is sometimes implemented from an overly narrow "biological" approach to addiction. That is, prescribers do not mandate that the individual engage in a comprehensive treatment plan. In addition, a commonly used drug—buprenorphine—is frequently "diverted" meaning the drug is not taken appropriately and rather, is given or sold to others. As it is also considered a "street drug", its value to users is quite high, as it can be used to manage withdrawal symptoms.

Seeking Safety

Seeking Safety is an EBT rooted in trauma-informed care and is widely used with women in addiction treatment. This protocol aims to address both PTSD and SUD simultaneously, in part by providing individuals with a sense of safety, and a means to discontinue substance use (Najavits, 2002). The protocol has four domains—cognitive, behavioral, interpersonal, and case management—and adopts a coping skills approach to reducing drug use. This protocol can be conducted in either a group or individual setting by both counselors and peers. There are 25

coping skills taught and every skill applies to both trauma and addiction simultaneously. Some examples of categories include healing from anger, compassion, and recovery thinking.

The key principles of this protocol are:

- Safety—helping clients attain safety in their relationships, thinking, behavior, and emotion
- Integrated treatment—trauma and SUD are worked on concurrently
- Focus on ideals
- Four content areas—cognitive, behavioral, interpersonal, and case management
- Attention to clinician processes—for example, self-care and emotional responses to the client

A potential disadvantage to this model, however, is the breadth of its curriculum being potentially burdensome. If a woman is not able to engage in the treatment for a considerable amount of time she would miss much of the content.

Matrix Model of Outpatient Treatment Program

The Matrix model of outpatient treatment was developed in the 1980s in response to the cocaine and methamphetamine epidemic. It integrates empirically supported techniques into a multi-element manual that serves as a protocol in outpatient settings (Rawson, Obert, McCann, Smith & Scheffy, 1989). This model was developed using brain imaging, which examined the effects of stimulants on brain functioning and how these may impact treatment responses.

This curriculum integrates psychoeducational groups with education and social support, with a focus on relapse prevention. Psychoeducational components include the genetic component of addiction, medical effects of drug use, and conditioning and addiction (Rawson, Shoptaw, Obert, McCann, Hasson, Marinelli-Casey, Brethen & Ling, 1995). These elements,

along with individual counseling, random and regular urine drug screening, and family engagement are implemented within an "addiction as a disease" model (Rawson et al., 1995).

A disadvantage to this model is its extensive curriculum. The first phase of the protocol lasts for 26 weeks, with the second and final stage extending for another 5 months. It is potentially difficult to maintain a woman's engagement in a curriculum that is as time consuming as this model. In addition, this curriculum is typically implemented in an intensive outpatient setting, a treatment setting that is usually 15-20 hours a week. Due to many factors mentioned above, including psychosocial, long-term attendance is difficult for many women. Also, while this model is often implemented across all SUDs, it was developed with individuals with stimulant use disorders in mind. While it is applicable across SUD diagnoses, it is potentially more efficacious to use a different protocol with women who have other non-simulant disorders such as OUD or AUD.

Motivational Enhancement Therapy (MET)

MET focuses on addressing ambivalence towards treatment and change while eventually engaging and empowering patients in treatment. MET is rooted in the principles of Motivational Interviewing, an approach that is client-centered and focuses on four tenets: establishing empathy, developing discrepancy, rolling with resistance, and supporting self-efficacy (Miller & Rollnick, 1991). Literature suggests that the use of brief interventions such as MET or MI is effective and related to several health behaviors including drug use treatment, and requires less time than other treatments, a point that is potentially salient for women as they often cite childcare issues and financial constraints as barriers to treatment (Osterman, Lewis & Winhusen, 2017). In addition, these techniques have been found to increase addiction treatment utilization.

MET is sometimes referred to as “MI plus”. MET aims to evoke internally motivated and rapid change. After an initial assessment, the first treatment session focuses on providing the client with feedback from the assessment and encouraging the client to discuss self-motivation to stop using drugs. The client’s change is monitored in subsequent sessions, and coping skills are suggested by the clinician to help the client maintain the change behavior. Encouragement and support of the client’s changes is continually provided throughout sessions by the therapist.

A disadvantage of this approach is that it is short-term (typically two to four sessions), which may not be sufficient duration for more complex cases and more ambivalent individuals. While it is an effective tool in helping individuals find intrinsic motivation to change and explore self-efficacy, it does not necessarily produce long-term changes in drug use. Rather, it should be used as an initial tool and within the wider context of a more comprehensive addiction treatment program.

Comprehensive Opioid Response with 12 Steps (COR-12)

Traditionally, programs with a 12-step approach to addiction treatment have not incorporated MAT as they viewed pharmacological interventions as “substituting drugs.” However, an increasing number of Randomized Controlled Trials (RCTs) have shown that patients who receive some form of MAT do significantly better than patients who receive a placebo (Chou, Korthuis, Weimer, Bougatsos, Blazina, Zakher, Grusing, Devine & McCarty, 2016). These findings, along with the increased number of overdoses and high relapse rates, have caused addiction professionals to examine treatments. One result of this reexamination is the Comprehensive Opioid Response with 12-Steps (COR-12). This model integrates a robust 12-step treatment focus, psychotherapy, and pharmacological interventions to increase the chances an individual will have successful, long-term recovery. COR-12 uses a combination of evidence-

based practices in conjunction such as psychological and psychiatric care, and 12-step-based counseling and medication assisted treatment (MAT), for example, naltrexone, and buprenorphine (Knopf, 2019).

A 12-step model of treatment is a guiding set of principles that provides a blueprint for an individual in addiction treatment to follow. The 12-steps were originally written by the founders of Alcoholics Anonymous (AA) and variation of these steps is still used today for similar groups such as Narcotics Anonymous (NA):

1. We admitted we were powerless over alcohol (our addiction), that our lives had become unmanageable.
2. We came to believe that a Power greater than ourselves could restore us to sanity.
3. We made a decision to turn our will and our lives over to the care of God as we understood Him.
4. We made a searching and fearless moral inventory of ourselves.
5. We admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. We were entirely ready to have God remove all these defects of character.
7. We humbly asked Him to remove our shortcomings.
8. We made a list of all persons we had harmed and became willing to make amends to them all.
9. We made direct amends to such people wherever possible, except when to do so would injure them or others.
10. We continued to take a personal inventory and when we were wrong promptly admitted it.

11. We sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics (addicts) and to practice these principles in all our affairs (Alcoholics Anonymous, 1976).

As mentioned above, there is a perception among a subset of individuals who describe the 12-step model as incompatible with MAT. Despite COR-12 showing efficacy, there is often criticism from those groups who feel that the basic tenets of the 12-step program are being challenged. This has led to the formation of "MAT NA" groups that are inclusive of people in recovery who choose to incorporate MAT into a traditional 12-step model.

Peer-Support Services

Peer support services are often considered an important part of addiction treatment for women, as it is person-centered, focuses on recovery, and has a focus of addiction as a chronic disease (Kaplan, 2008). As mentioned earlier, these types of services are specifically stated by Substance Abuse and Mental Health Services Administration as an integral part of trauma-informed care. It has been found that individuals who receive peer support services as a part of their addiction treatment have higher participation rates (Pantridge, Charles, DeHart, Iachini, Seay, Clone & Browne, 2016). In a pregnant and post-partum population, receiving peer support services led to higher satisfaction of treatment services overall (Sanders, Trinh, Sherman & Banks, 1998).

Historically, peer support services were carried out by an individual who served in a voluntary or part-time capacity. These individuals were often hired as staff or work in volunteer

positions at SUD treatment agencies and provided mentoring, outreach, resource sharing, and facilitating groups (Substance Abuse and Mental Health Services Administration, 2009b). While this still takes place, in recent years the value and utility of this role has been increasingly recognized. As a result, individuals in long-term recovery (typically at least one to two years) can receive training and certification as a Peer Support Specialist. This credential is recognized by insurance companies and services rendered are reimbursable.

Peer support (whether carried out by a certified professional or lay person) can add significant value to a woman's addiction treatment. As mentioned earlier, these types of services are specifically stated by Substance Abuse and Mental Health Services Administration as an integral part of trauma-informed care. In addition, peer support can take the form of self-help groups such as Narcotics Anonymous, Alcoholics Anonymous, or Celebrate Recovery (a Christian faith-based organization), sponsors, or mentors.

A potential disadvantage of peer support services is that they require adjunctive treatments and services performed by licensed professions. Peer support providers require supervision but typically do not receive consistent or objectively qualified supervision. Therefore, there is a risk that peer support specialists perform interventions that are outside the scope of their training and experience.

Workforce and Educational Preparedness

Workforce preparedness is an important part of a woman's recovery. This aspect should be incorporated into recovery processes to better assist a client in the ability to lead a productive and financially stable life free of substances. Employment is an important aspect of recovery for a person with a SUD, as it increases self-esteem and provides income (Goodwin & Sias, 2014). Literature suggests that substance abuse treatment and employment and job-related education

services are most effective when concurrent. This overlap leads to a higher rate of success regarding employment and maintaining sobriety (Melvin, Davis & Koch, 2012) and can be viewed as replacing a negative behavior (drug abuse) with a positive behavior (employment).

When working with clients with SUDs, a major facet is assessment of the individual's education and job skill needs in order to tailor treatment plans to meet these needs. A goal within this model is an attainment of a General Equivalency Diploma (GED). According to the Bureau of Labor (BLS) Statistics, individuals with a GED diploma are more likely to hold full-time employment than those without a diploma (unemployment rates of 12.7 versus 8.3, respectively). In addition, a GED diploma is required for entrance to technical schools, enrolling in college, and participating in other career-oriented training programs.

The types of workforce and educational preparedness programs used with women in addiction treatment settings vary. One example is the Kentucky Educational Television (KET) FastForward program. This program is an online and on-demand test preparation for the GED exam and can be accessed via a tablet, computer, or a smart phone. The program covers the four exam areas: math, language arts, science, and social studies. This type of program can be incorporated into a wider recovery curriculum in order to facilitate a recovery tool (a GED), which can improve a woman's treatment outcomes.

A disadvantage of this approach is that the more involved workforce development and educational programs can be time-intensive. As such, they are often limited to residential settings. From another perspective, workforce programs have an advantage in they can be flexibly scaled down and compressed. For example, when compressed, vocational inventories can be completed with women in settings such as intensive outpatient programs to initiate job interest exploration. Another example of flexibility is the incorporation of workforce and

educational development programs into case management, as a case manager can provide a woman with community resources that help her attain vocational goals, for example, adult education centers.

Women often cite financial constraints and restrictions as a barrier to long-term recovery. For example, they are often dependent on a significant other for money. This lack of job readiness and educational skill is often associated with trauma and addiction histories. By giving the woman the tools to begin building this aspect of their life, an important recovery tool will be gained.

Overall, a program must fit the circumstances of a woman's life. Providers must consider a continuum of care possibilities when treating addiction that reflects a patient's treatment needs, strengths, and support network. For example, a woman may need a higher level of care (residential, for example) but would be unable to engage in this type of program due to inability to take time away from a job. While diagnostic criteria (notably, ASAM criteria) must steer professional judgment regarding placement, addiction specialists must also be mindful of the unique contexts that women often experience.

Issues and Treatment During Pregnancy

When discussing women and drug use, the childbearing years and potential implications of pregnancy and post-partum should be examined in order to have a more comprehensive view of the implications of SUDs on females. While it is estimated that the prevalence of drug use among pregnant women is lower than that of non-pregnant women, there is still a significant number of pregnant women (1.7 percent) who meet criteria for SUD. One in 10 pregnant women report alcohol or nicotine use, and 1 in 20 report other drug use, (McHugh, et al., 2014). It is estimated that prevalence is highest among young pregnant women—18.3 percent among women

age 15–17 and 3.4 percent among those age 26–44. This population presents unique challenges as it faces barriers to treatment initiation and treatment engagement due to many factors such as stigma, financial constraints, transportation issues, fear of legal ramifications, and perinatal issues (Jones, Deppen, Hudak, Leffert, McClelland, Sahin, Starer, Terplan, Thorp, Walsh & Creanga, 2014).

The pregnancy and postpartum time period typically produces significant emotional stress, and women may be more resistant to remain in treatment because of these additional stressors. The lack of comprehensive and integrated services for these women may be a factor in disengagement. These women may be judged by family and friends and feel guilt and stigma for their substance use during pregnancy. It is of particular importance for this specific population of women to receive care, as untreated SUD in pregnancy has potential long-standing consequences for both mother and baby (Jones et al., 2014).

Drug use by pregnant women is associated with a number of negative effects on fetal development. For example, fetal exposure to drugs has been associated with growth restriction and low birth weight, poor neonatal outcomes, and long-term negative effects on cognitive and academic performance in children (Hulse, Milne, English & Holman, 1997; Lester, Tronick, LaGasse, Seifer, Bauer, Shankaran, Bada, Wright, Smeriglio, Lu, Finnegan & Maza, 2002; Goldschmidt, Richardson, Cornelius & Day, 2004). As mentioned earlier, opioid use during pregnancy is also associated with neonatal abstinence syndrome (NAS), a withdrawal syndrome that has significantly increased in incidence as the rate of opiate addiction rises.

Neonatal Abstinence Syndrome (NAS)

Neonatal Abstinence Syndrome occurs in the majority of all prenatally opioid-exposed neonates. Signs of withdrawal typically start 24-96 hours after birth depending on the specific

opioid exposure and involve a spectrum of symptoms (Patrick, Davis, Lehmann & Cooper, 2015). Withdrawal symptoms include central nervous system signs such as tremors, irritability, high pitched crying, sleep disturbances, tight muscle tone, hyperactive reflexes, and myoclonic jerks. In addition, the neonate may experience autonomic signs such as sweating, fever, yawning, sneezing, rapid breathing, and nasal congestion. Gastrointestinal withdrawal symptoms include poor feeding, vomiting, and loose stools or diarrhea. In about half of NAS cases, medication is required to treat the baby for withdrawal symptoms.

In addition to NAS, there are also long-term consequences of drug use for pregnant women including increased risks of assault and abuse, miscarriage, contracting hepatitis or HIV, delivering infants with physical and behavioral problems, postpartum depression, and potential loss of custody of their children (Wilder, Lewis & Winhusen, 2015). Evidence suggests that early identification, a comprehensive and integrated approach to treatment, and recovery supports (including MAT) can improve maternal and infant outcomes.

Medical Home Model

A model that has been found to be particularly efficacious with this population is a medical home model. This model involves professionals from across disciplines—ideally physicians, nurses, social workers, and mental health therapists (Baird, Blount, Brungardt, Dickinson, Dietrich, Epperly, Green, Henley, Kessler, Korsen, McDaniel, Miller, Pugno, Roberts, Schirmer, Seymour & DeGruy, 2014). A wide array of a patient's needs is addressed, from behavioral health to access to community-based social services. Care is patient-centered—patients are fully informed, and providers respect each patient's unique needs and circumstances. Evidence-based services are implemented in an accessible manner and are carried out by a wide range of professionals. Examples of services found in this model include case management,

medical care, peer support, and other services. The medical home model is holistic and as it is an efficacious approach to this particular population of women, it will be discussed in greater detail.

The tenet of this model is rooted in the holistic approach discussed above but goes further by providing a full continuum of interdisciplinary services for both mother and baby through comprehensive, integrated wraparound services designed to assist them with meeting medical, social, childcare, housing, educational, and vocational needs (Substance Abuse and Mental Health Services Administration, 2018). Examples of services provided include targeted case management, and peer support. Medication assisted treatment (MAT) can be a helpful tool in stabilizing the mother while pregnant as it helps reduce cravings of an opiate dependent pregnant woman and reduce withdrawal for both baby and mother (Bart, 2012). This stability allows the individual to be engaged in therapeutic services offered in the comprehensive model.

The medical home model also facilitates a recovery orientation, which involves lifestyle changes. Professionals involved in a medical home model view SUDs as a chronic disease and believe that recovery is gradual and not linear. Participants advance through stages of treatment and an emphasis is placed on ongoing support beyond treatment. There is high accountability—a premium is placed on honesty, taking responsibility, working towards goals, and a willingness to learn. There is also an emphasis on social learning, mutual self-help, and taking a role in others' recovery. As participants progress in a program, they assume greater personal and social responsibility, and take on leadership roles within the program. For example, oftentimes after engaging in the program with a certain amount of success for a certain amount of time, women can serve as mentors to new women coming into the program.

A disadvantage of this model is the difficulty with which this comprehensive model can be established. There is a significant dearth of providers for this type of wraparound program

who can provide not only MAT but also the comprehensive, integrated services designed to assist participants with meeting medical, social, childcare, housing, educational, and vocational needs. In addition, participation in these types of programs is often geared towards long-term engagement. This long-term commitment is not always possible for women as many of the factors discussed above (for example, transportation and childcare) can present obstacles to ongoing engagement with services. Therefore, it is not surprising that most pregnant and post-partum women with SUDs in the United States are not enrolled in comprehensive programs that address their obstetric needs as well as specialized addiction treatment, mental health care, and health education (Jones et al., 2014).

Self-Efficacy, Substance Use, and Relapse Prevention

Self-Efficacy

According to social cognitive theory (Bandura, 1986), human behavior and motivation is largely regulated by three types of expectancies: situation-outcome expectancies, in which consequences are related to an individual's environment; action-outcome expectancies, where outcomes are related to personal action; and an individual's perceived self-efficacy. This can be directly applied to health behaviors, including substance abuse. For example, the likelihood an individual will give up a harmful health behavior such as drug use depends on three sets of cognitions: the expectancy the individual has that they are at risk (e.g., potential for losing custody of one's child), the expectancy that the behavior change will reduce the risk (e.g., stopping drug use increases chance of maintaining custody), and the feelings an individual has about their capabilities of exercising control over the drug use (e.g., the expectation an individual has of being capable of stopping the drug use).

This study will focus on the third aspect of Bandura's Social Cognitive theory (self-efficacy) and its relation to abstinence of drug use. Maintaining health behaviors is not solely related to perception of an outcome; rather, an individual must believe in their capability to change, which is often referred to as functional optimism (Schwarzer & Fuchs, 1995). Self-efficacy is a consistent and independent predictor of future behavior and clearly has applicability in addiction recovery.

The concept of self-efficacy was first introduced by Albert Bandura who defined it as "the belief in one's capabilities to organize and execute courses of action required to produce given attainments" (Bandura, 1997, p. 2). It is the degree to which an individual feels capable and confident to perform a certain behavior in a certain situation. In contrast to more overly generalized concepts such as self-esteem, self-efficacy is defined and measured in terms of more specific abilities or beliefs. For example, abstinence self-efficacy is a specific construct within self-efficacy. It is defined as an individual's self-beliefs about their ability to maintain abstinence from drug use, and not engage in behavior that would lead to relapse. This concept will be discussed in more depth later in the paper when exploring relapse prevention.

As mentioned above, self-efficacy plays a central role in many health behavior change models, including weight loss, smoking cessation, and physical activity. Self-efficacy requires an individual, at a minimum, to engage in goal-related thinking, a construct often used in predicting treatment outcomes in addiction (Kelly & Greene, 2014). Bandura's theory has been applied to the field of substance abuse and its theoretical importance is now widely accepted within addiction treatment.

The cognitive behavioral model of relapse prevention is centered around high-risk situations and the individual's responses in those situations (Witkiewitz & Marlatt, 2004). It is

thought that if an individual has low self-efficacy (e.g., lack of effective coping responses and self-confidence), they tend to "give in to temptation." This model posits that self-efficacy is an important predictor of relapse to substance use after treatment. Specifically, higher abstinence self-efficacy in high-risk situations is associated with a greater likelihood of abstinence outcomes (Witkiewitz & Marlatt, 2004).

The application of the construct of self-efficacy to addiction stems from the assumption that success in coping with "high-risk" situations where drugs are available, is partly determined by an individual's self-beliefs about whether they have the necessary skills to resist a "slip" (Schwarzer & Fuchs, 1995). The behavior changes necessary to maintain sobriety are dependent on an individual's perception of how well they can cope with stress of the situation, to utilize resources, and plan a course of action that meets the needs of that high-risk situation. It has been posited that addressing psychological problems and increasing self-efficacy greatly improves the chances of maintaining long-term recovery from addiction and can be viewed as a major protective factor in sobriety (Hser, 2007).

The significance of self-efficacy in addiction recovery can be illuminated through the exploration of expectancy theory. First introduced by Victor Vroom in 1964, this model is rooted in the tenet that all human behavior is largely driven by an individual's motivation. Specifically, it says that people are motivated to behave in certain ways when there is an expectancy that their behavior will result in a desired outcome (Vroom, 1964). The three principles of expectancy theory model are valence (anticipated satisfaction with potential outcomes), instrumentality (relationship between an outcome and another outcome), and expectancy. While this model is used most often in vocational and organizational contexts, it also has relevance in addiction recovery, as it is closely related to self-efficacy—a significant construct within the field.

Overall, individuals who doubt their own capabilities are more inclined to anticipate failure, worry about performance, and "give up" prematurely. This doubt can stem from globally low self-esteem or lack of knowledge about high-risk situations and potential coping mechanisms. Conversely, individuals with strong self-efficacy visualize themselves acting successfully in difficult situations, show perseverance, and are more likely to recover when difficulties arise (Schwarzer & Fuchs, 1995). These tenets are directly applicable to addiction treatment and its outcomes and therefore, will be used as the framework for this study.

Empowerment Factors in Women in Addiction Treatment

Self-efficacy is a component of empowerment. In terms of addiction recovery, empowerment is part of a process of becoming emotionally stronger, gaining self-determination, and becoming more confident. It is believed that empowerment concepts can help illuminate how substance abuse problems develop as addiction to drugs may represent an effort for women to gain a sense of control over personal problems such as family rejection or low self-esteem (Freeman, 2001). There is a link between substance abuse and perceived powerlessness. A subset of professionals within the field of substance abuse are hesitant to address the impact of powerlessness within addiction as they feel it allows individuals to avoid personal responsibility. Other substance abuse professionals find that addressing this component—particularly within the context of women in addiction treatment—is an important part of treatment and therefore worthy of study. The author will now discuss some of the empowerment factors that are related to outcomes for women in addiction treatment.

Empowerment is defined as "the process of becoming stronger and more confident, especially in controlling one's life and claiming one's rights" (United Nations Population Fund, 1995). While empowerment is related to concepts such as self-esteem and competence, it covers

a broader number of factors (Hunter, Jason & Keys, 2013). In terms of its application to addiction treatment, empowerment can be conceptualized through a three-factor framework rooted in community psychology: intrapersonal, interactional, and behavioral (Zimmerman, 1995). The intrapersonal factor includes aspects such as self-perception, self-efficacy, and competence. As has been discussed throughout this paper, the role that self-efficacy plays in health behavior changes—most notably substance abuse—is significant, as it can serve as both a direct determinant of treatment outcomes and also serve as a mediator. Women in addiction treatment may address the intrapersonal factor of empowerment through activities such as rehearsing relapse prevention skills. The interactional factor relates to issues such as connectedness with community, skill development, and links to recovery and psychosocial resources. In regard to women and addiction recovery, this is related to treatment components such as case management. The behavioral factor of empowerment involves an individual taking actions. For women in recovery, this component might include use of peer-related services, for example Alcoholics Anonymous (AA) or Narcotics Anonymous (NA), as these services require significant engagement from an individual as they are asked to work through a 12-step process of recovery with the help of a sponsor.

Empowerment and Feminist Theory.

Empowerment can also be examined through the lens of feminist theory. This theory is rooted in the belief that women are assigned inferior social and political status because of societal inequality and that the personal status of women is based on political, economic, and power relations (De Beauvoir, 1972). Throughout history, women have been—and continue to be—oppressed and discriminated against. Akin to empowerment, feminist analysis helps us to understand how women are oppressed and dominated (Turner & Maschi, 2015).

In more recent iterations of feminist analysis, the concept of empowerment has become increasingly important. Feminist theorists have proposed models of empowerment in order to both document the role oppression has played on women and to provide a framework for a movement towards power (Hunter et al., 2013). An example of an empowerment model comes from Worrell and Remer (2003) who posited that four principles underpin empowerment in women: knowledge of personal and societal identity, awareness of gender oppression and stereotypes, comfort in expressing traditional female characteristics, and awareness of unequal power between men and women.

Within the feminist theory, empowerment is viewed as a process, meaning women first recognize an imbalance of power through experience, gain awareness, and experience a personal transformation. It is believed that empowerment is best viewed as a theoretical framework that helps women take greater control over their lives (Carr, 2003). Employing concepts related to empowerment and understanding the power differential between men and women can lead to more effective assessment and intervention strategies when working with women (Turner & Maschi, 2015).

An example of this is the use of group work. Women in a group setting can gain awareness of others' similar plights and identify with others who have been in similar situations, which can lead to increased self-efficacy and sense of empowerment (Gutierrez & Lewis, 1999; Carr, 2003). For example, women who have issues related to substance abuse and who have experienced sexual abuse may experience shame. A treatment group may provide a useful setting for women to discuss their experiences as a group leader can facilitate open discussion on victimization, isolation, and oppression, thereby, lessening a sense of shame. This group dynamic can help abused women increase self-efficacy and self-esteem through modeling,

reducing shame, helping them gain a sense of control over their environment, and learning new and positive coping behaviors (Turner & Maschi, 2015).

Given that self-efficacy is interconnected with empowerment, compatible with feminist theory, and is rooted in taking control over one's life, it serves as a solid framework from which to examine women and recovery from substance abuse. The author will now discuss the interplay of empowerment and self-efficacy and how these play important roles for women in addiction treatment.

Addiction Treatment for Women, Self-Efficacy, and Empowerment

Viewed through the lens of empowerment, the central role of self-efficacy in addiction treatment for women becomes apparent. Studies have demonstrated the role self-efficacy plays in treatment outcomes from many health behavior perspectives, as both a mediator and in treatment outcomes. For example, literature suggests that this construct plays a role in smoking cessation, overeating, and physical activity (Shadel et al., 2017; Ames et al., 2012; Warner et al., 2014).

It is important to note that the relationship between self-efficacy and treatment outcomes does not appear to be strongly influenced by the *type* of treatment (DiClemente, Carbonari, Daniels, Donovan, Bellino & Neavins, 2001). However, literature suggests that certain addiction treatment interventions are more effective in enhancing self-efficacy than others, based on the type of issues addressed during interventions, as opposed to how the intervention approaches the issues (Ilgen, McKellar & Moos, 2006). A study that explored the role of empowerment with women in addiction treatment, found that three factors play a key role in women's sense of empowerment: self-perception, resource knowledge, and participation (Hunter et al., 2013).

Gender-Specific Treatment

A specific model of addiction treatment related both to an empowerment model and self-efficacy is a female-only treatment setting. It is believed that this model of treatment empowers women and enhances self-efficacy to abstain from drug use and potentially allows women to become more autonomous (LaFave, Desportes & McBride, 2009). This model can provide a woman with a sense of intrapersonal empowerment. One treatment component that potentially contributes to these various aspects of empowerment and self-efficacy is the ability to freely discuss women-specific issues. In addition, as discussed earlier, the absence of male clients in this model may also decrease the risk of retraumatization, which is a significant factor as many women in addiction treatment have experienced sexual trauma. For example, a male client who has an angry outburst in a group therapy setting could be a triggering event for a woman who has a history of experiencing domestic violence and as a result, may choose to not disclose or to discontinue treatment. In addition, separation of the genders can reduce the influence of female gender role expectations or a disproportionate focus on issues related to men primarily (Zilberman et al., 2003).

Case Management

As mentioned earlier, case management is a support service that can help women build a foundation for recovery. This model of treatment has been found to promote empowerment as it provides women a link to resources, which gives a woman a better sense of understanding and helps her benefit from her environment. These components can assist women in gaining interactional empowerment and are major tenets of case management, a service frequently found in addiction treatment settings.

Case management (CM) can address some of the unique issues that women face and empower women by assisting in a focused and goal-oriented manner. The ongoing support services that case management provides are considered a crucial part of preventing relapse and assisting female clients in building a foundation for long-term sobriety (Brindis & Theiden, 1997). The role of a case manager may include linking the client to appropriate services and providing them with knowledge of available resources. This involves assessment to determine the client's social, physical, and psychological functioning in order to design an appropriate plan to meet the client's needs. Assisting with transportation issues is another example of how case management can enhance self-efficacy and interactional empowerment. For example, a case manager may help a woman map out and plan how she can use public transport so she can attend treatment sessions and transport her children to and from daycare. These interventions can also provide a woman with a sense of autonomy, another important aspect of empowerment.

In addition, case management may also link the client with appropriate peer-based support services such as Narcotics Anonymous, when it is determined that the client has limited social support. It is also important to note that case management services can help facilitate a social support recovery network for women, another factor important in maintaining sobriety. This sense of connectedness is particularly noteworthy, as it has been proposed in feminist theory that women are emotionally sustained by connections and the ability to maintain these connections (Poorman, 2003; Jordan, 2010). This further supports the idea that case management can enhance a woman's sense of empowerment and therefore, improve self-efficacy.

Relapse Prevention

Self-efficacy plays an important mediating role in relapse prevention. The National Institute on Drug Abuse (NIDA) defines relapse as the return to drug use after an attempt to stop

(National Institute on Drug Abuse, 2020). As addiction to drugs is a complex, chronic, and multi-faceted disease that often involves cycles of relapse and remission, relapses are viewed as a natural component of recovery. However, steps should be taken to assist an individual in avoiding relapse. It is thought that skills-building plays a role in the improvement of coping skills, which in turn enhances an individual's self-efficacy and empowerment (an example of behavioral empowerment). Below, the author will discuss the role that coping skills play in relapse prevention.

Related to relapse prevention, self-efficacy is one of the many mediators of outcome. Self-efficacy interacts with other individual and environmental attributes to determine a person's ability to resist using drugs. Specifically, it is believed self-efficacy and coping skills are interrelated and play an important role in an individual's ability to remain abstinent. That is, the more robust and reliable an individual's coping skills are will help determine their level of self-efficacy. Abstinence self-efficacy is a term that is used when discussing a cognitive behavioral relapse prevention model that is skills-based (Marlatt, 1985). According to this model, context-specific abstinence self-efficacy plays an important role in determining which situations will pose a threat to an individual's potential relapse through its relationship with coping effort (Gwaltney, Shiffman, Norman, Paty, Kassel, Gnys, Hickcox, Waters, & Balabanis, 2001). Therefore, skills should be tailored to meet the demands of these high-risk relapse situations.

Formulating an action plan within a treatment context is an example of coping skill development that works in concert with abstinence self-efficacy. If an individual wants to stop using drugs, they must first form a plan. This includes planning how they will respond and cope with a high-risk relapse situation. These types of relapse action plans are typically a component

of a treatment plan where an individual may be asked to engage in positive internal dialogues in these situations and draw on resources, for example, calling a peer sponsor.

There is a relationship between self-efficacy and affective symptoms when predicting long-term abstinence in individuals in recovery from substance abuse (May, Hunter, Ferrari, Noel1 & Jason, 2015). In a study relating self-efficacy to negative affect, self-efficacy was found to have an important mediating affect in the maintenance of sobriety in a population of sober living individuals (May et al., 2015). That is, self-efficacy scores significantly predicted lower affect scores (depressive and anxiety symptoms) and these lower scores have significant influence on abstinence self-efficacy. Gwaltney et al. (2001) found abstinence self-efficacy to be lowest in negative affect contexts. This study is particularly salient as co-occurring disorders are frequently found in individuals with SUDs (Agrawal et al., 2005).

Coping Skills.

The author will now further define coping skills and the role these skills play in relapse prevention. Coping skills can be defined as the behaviors that people learn to achieve a desired outcome (Penberthy, Konig, Gioia, Rodriguez, Starr, Meese, Worthington-Stoneman, Kersting & Natanya, 2015). It is believed for an individual to stop abusing substances, they must deemphasize former coping methods and establish new strategies (LaFave et al., 2009). For instance, building an individual's abstinence self-efficacy skills within addiction treatment improves an individual's chances of successful, long-term recovery (May et al., 2015).

As mentioned earlier, self-efficacy and coping skills are interrelated. It has been demonstrated that both an individual's coping skills and those related to their ability to successfully implement these skills can predict positive treatment outcomes (Litt, Kadden, Cooney & Kabela, 2003). In other words, neither the skills alone nor self-efficacy by itself would

likely be sufficient to successfully maintain sobriety. Literature suggests that individuals with more effective coping strategies will feel more able to resist drug use and maintain sobriety, for example, increased self-efficacy. Self-efficacy and coping skills have been described as the "the braking mechanisms" for an individual's ability to resist urges and cravings to use drugs (Niaura, 2000, p. 159).

Ilgen et al. (2007) examined abstinence self-efficacy at discharge and at one year follow up from community residential treatment setting. It was found that higher levels of abstinence self-efficacy were largely driven by the activities the patient engaged in during treatment (Ilgen et al., 2007). Specifically, it is found that skills-building techniques were contributing factors to an individual's higher abstinence self-efficacy. Examples of these types of activities include coping skills and stress management. As mentioned earlier, this is consistent with the relapse prevention model that emphasizes skills training to increase self-efficacy and minimize the risk of relapse.

Motivation.

An individual's participation in activities to build coping skills and the development and stress-management training highly influence an individual's self-efficacy (Ilgen et al., 2007). In addition, it is believed that once an individual builds these coping skills, their levels of readiness to change enhances the use of these newly formed coping skills. This readiness to change is a concept explored in the transtheoretical model of motivation, which posits there are five stages, with each stage representing a level of readiness: precontemplation, contemplation, preparation, action, and maintenance (Prochaska & DiClemente, 1984).

In terms of motivation, the relatedness between this construct and self-efficacy will be further explored here. Motivational Interviewing (MI) is a technique that can potentially enhance

an individual's self-efficacy. MI is an approach that is client-centered and focuses on four tenets: establishing empathy, developing discrepancy, rolling with resistance, and supporting self-efficacy (Miller & Rollnick, 1991). MI aims to evoke internally motivated and rapid change. After an initial assessment, the first treatment session focuses on providing the client with feedback from the assessment and encouraging the client to discuss self-motivation to stop using drugs. The client's change is monitored in subsequent sessions, and coping skills are suggested by the clinician to help the client maintain the change behavior. Encouragement and support of the client's changes is continually provided throughout sessions by the therapist.

Role of Art Therapy

Art therapy can play a role in improving individuals' psychological states (Kaimal & Ray, 2017). As a specific treatment modality, it can serve as a tool for improving an individual's mood, coping skills, and self-efficacy. For example, a study with adolescents receiving inpatient treatment for mental health issues found that art played a role as a coping mechanism, and significant improvements in mood and emotional regulation was noted. In addition, self-efficacy scores improved after participation in a single (45 minute) art activity (Drake, Coleman & Winner, 2011). In a second study, individuals were provided with a brief art making experience under the direction of an art therapist, which resulted in significant reduction of negative affect and increase in positive affect (Kaimal & Ray, 2017). These findings suggest that even brief art-based interventions can play a role in emotional regulation.

Literature suggests that art can play a specific role in enhancing self-efficacy and improving other mental health indicators. In a study with a non-clinical sample of women at how art therapy affects self-efficacy and anxiety, it was found that after the 12 weeks of weekly 90-minute art therapy sessions, women's anxiety levels decreased, and self-efficacy levels had risen

significantly (Toraghi, 2015). These findings provide further support for a role for art therapy in women's addiction treatment and long-term sobriety.

In another study with African American women who were homeless, quilting as an art modality was found to be a therapeutic tool (Moxley, Feen-Calligan, Washington & Garriott, 2011). The women engaged in quilting workshops over a four-month period, both individually and collaboratively. Participants engaged in discussion about how the product represented their current problems and situations, personal history, or any other area of their life from which they drew that inspired their work. It was found that the quilting activities contributed to enhancing factors that influence self-efficacy, for example, skill building, building interpersonal ties, and building knowledge of resources (Moxley et al., 2011). It is noteworthy that while it is believed that the quilting contributed to these changes found among the women, it was further found that the non-specific nature of the social intervention and support of the quilting group played a significant role. It was hypothesized that social engagement significantly contributed to the enhanced self-efficacy.

Relevance of Self-Efficacy to This Study

Yes Arts is a community arts group that targets addiction. Its mission is to mobilize the power of community and the therapeutic aspects of the arts to disrupt the cycle of addiction. This project will focus on one component of the organization, Yes Arts Recovery, which guides women in Franklin County Drug Court through a variety of arts activities (writing, drama, music, sculpture, and visual arts) to enhance self-expression, connection, and social support. According to addiction literature, these factors are integral to successful long-term recovery.

This study will examine the impact of a community art project on women in a drug court treatment program, through the lens of self-efficacy and addiction recovery. The purpose of the

study is to analyze program effects from the perspective of the woman participating in these services. Self-efficacy likely mediates many of the factors that literature has established as important to long-term recovery in women. For example, coping skills, knowledge of resources, and gender-specific treatment settings all play important roles in better treatment outcomes in women and promoting relapse prevention and their effects are partly determined by self-efficacy. In addition, many of these factors are related to empowerment, a construct that is deeply rooted in feminist theory. Also, directly relevant to this study is the art setting or modality, as it has been shown to positively influence the factors that potentially enhance self-efficacy, particularly with a female population.

Summary

Women with SUDs have unique treatment needs and patterns of drug use. Women's trauma histories, psychosocial relationships, dual diagnoses, vocational and educational histories, and issues related to parenting and pregnancy all affect addiction treatment initiation, engagement, and long-term sobriety outcomes. Positive treatment outcomes are influenced by interventions and approaches that take into account the unique treatment needs of women, including art as a complementary therapy. In addition, self-efficacy and empowerment are constructs that play significant roles in women's sobriety outcomes and should be considered by addiction professionals when treating women with SUDs.

Chapter Three: Design of the Study

Research Question

- *Does the Yes Arts Recovery Program promote self-efficacy and recovery of a woman who participates in the program as a part of the Franklin County Drug Court?*

Research Design

Qualitative Approach

A qualitative approach was used for this study. The qualitative approach can be defined as a "naturalistic, interpretative approach concerned with understanding the meanings that people attach to phenomena (actions, decisions, beliefs, values, etc.) within their social worlds" (Ritchie & Lewis, 2003, p.3). Qualitative approaches have evolved considerably within the past few decades and are currently widely used and accepted in social sciences. In this method, relationships between variables are typically not statistically tested as in quantitative methodology. Quantitative designs involve hypothesis-*testing* research whereas qualitative approaches lead to hypothesis-*generating* research. Qualitative and quantitative approaches differ—the former adopts an idiographic approach while the latter favors a nomothetic approach. While the latter can produce broad, general statements about phenomenon, the former seeks to understand the meaning of specific or unique occurrences (Miles, Huberman & Saldana, 2014)

This study served an evaluative purpose, as it assessed the effects of Yes Arts program participation through the lens of a participant's perceived self-efficacy in successful long-term recovery. The project's aim was to identify empirically based findings that could be used to guide Yes Arts program modifications and improvements and inform the design of new

addiction treatment programs tailored to women. A case study approach was used, and the following section will describe this approach further.

Overview and Rationale of Case Study Approach

The case study approach is wide ranging. Some academicians define the case approach as both the process and product of our learning about the case (Stake, 1995). This approach may also be defined as an "in-depth" study of one particular case, whether that case be an individual, policy, or organization (Green & Thorogood, 2009). Others view the case study approach as an empirical enquiry that investigates contemporary phenomenon to develop theory (Yin, 2009). Despite the diversity of definitions, all case study approaches share an intense focus of a single phenomenon in a real-life context.

If carefully conceptualized and thoughtfully undertaken, case studies can provide profound insights (Miles et al., 2014). This naturalistic design emphasizes a narrative approach and is rooted in the idea that humans are "storytelling organisms", therefore, the use of narrative is a method to explore how an individual experiences and describes their world (Connelly & Clandenin, 1990, p. 2). On a practical level, a narrative approach allows a participant to "tell their story" as it relates to the guiding study questions.

The decision to use the case study approach was based on several factors. First, this method allowed for a holistic and in-depth study of an individual and their narrative. Second, multiple contexts could be explored such as the individual's experiences both in drug court and addiction treatment settings. Third, a case study approach was selected in order to remove potential limits to the data related to the phenomenon. Fourth, this design was selected due to its capacity to explore novel topics in an open-ended way. In contrast, the use of close-ended surveys or measures emphasizes relationships among variables while deemphasizing the

discovery of phenomenon and variables for future research. Fifth, this approach was an efficient way to gather a concentrated amount of data in a short amount of time, which was necessary due to significant limitations and uncertainty of participant access due to the COVID-19 pandemic. As noted, case study aims to generate in-depth understanding of a complex topic, which leads to the identification of themes and salient issues (Crowe, Cresswell, Robertson, Huby, Avery & Sheikh, 2011). The case study approach is highly relevant to applied research and evaluation as it can be translated to practical research questions, which are potentially applicable to programmatic changes (Yin, 2009; Reismann, 1993).

The in-depth inquiry of a case study further provided an opportunity for iterative conversation between researcher and participant. This type of inquiry allowed for flexibility that allowed the researcher to adapt to the idiosyncratic concerns of the individual, while maintaining focus on the general study question. For example, even when employing a semi-structured interview approach, information offered by the participant was pursued as the researcher had the adaptability to ask additional questions. Overall, this method allowed for a detailed exploration of a participant's perceptions of complex situations and life events such as psychosocial factors associated with substance abuse.

Elements of the Case Study

Case study can involve both single case and multiple cases in its inquiry. In addition, there is further delineation of, as comparative case method can be employed as a strategy when examining multiple cases (Reismann, 1993). Qualitative researchers have identified three types of case studies: intrinsic, collective, and instrumental (Stake, 1995). The intrinsic approach is employed when the aim is to examine unique phenomenon. A collective approach involves the examination of multiple cases simultaneously to better understand a particular topic, whereas an

instrumental approach uses an individual case to gain a better understanding of a particular issue. For this study, the single, instrumental approach was used, as the aim was to better understand a specific concern, namely, women in recovery in a drug court program who engaged in a therapeutic art setting through examination of a single case.

Likewise, there are three epistemological approaches to the instrumental case study method: critical, positivist, and interpretive (Crowe et al, 2011). The critical approach involves examining one's own assumptions within a wider context, for example, a political environment. The positivist approach involves establishing variables to study in advance and seeing if they fit within the findings. The interpretive approach involves understanding individual and shared social meanings, with a focus on theory building.

This study employed an interpretive standpoint, as the study involved trying to understand the participant's perceptions in order to further investigate and apply to similar groups in the future. This approach was congruent with the study's aim to understand the recovery of women enrolled in drug court and to inform further research applicable to other women in recovery. This epistemological approach was underpinned by a critical and reflective method that explored the case study within the wider social context in which the participant exists (Doolin, 1998). For example, the scope of the examination included many contexts including temporal, historical, political, economic, cultural, social, and personal (Stake, 1995). The participant was prompted to reflect on issues within these domains. Examination of the study question through these lenses served to shape conceptual structure and ultimately allowed for focus of theory building.

As the study questions involved more than one unit of analysis (for example, an individual's perception of recovery and the perceived effect of an art program), an embedded

approach was appropriate (Yin, 2009). For example, while this study was generally concerned with women in a drug court setting, it further explored a second component within this program—Yes Arts intervention—and how this may play a role in recovery. This approach was chosen as opposed to a holistic or global approach, as this study aimed to explore not just drug court as a whole, but also how its programs play a role in participants' self-efficacy, and in turn, recovery.

Case studies also play a key role in evaluation. Stake (1995) described the main roles of case studies as explaining, describing, illustrating, exploring, and meta-cognition. In this study, the researcher drew upon four of these applications. This study *explained* the experience of a woman in the drug court program, *described* her feelings and beliefs around the services she received through this program and its impact on her recovery, *illustrated* this narrative through an in-depth exploration of this single case, and *explored* the impact of Yes Arts and other components of the drug court program on her recovery.

Data Collection

Interviews

Interviews in the case study approach involved the use of semi-structured questions. Interviews were conducted with a single subject over a period of several months, as the subject progressed through the drug court system. A semi-structured interview method provided sufficient flexibility to enable the participant to expand her responses beyond the scope of questions. The interviews served as a qualitative method in which the participant reflected on her experiences in the program, the program's potential impact on her self-efficacy, and her perspectives on her anticipated long-term recovery. In addition, it allowed the participant to provide the researcher insights into the participant's attitudes, behaviors, and beliefs about her

drug use and approach to recovery. The researcher conducted the interview in a non-directive manner, while also maintaining the pace of discussion, and probed for further responses or elaboration when indicated (Ritchie & Lewis, 2003). The researcher followed the general principles and guidelines of conducting case study, which includes asking relevant and informed questions, actively listening, being aware of any preconceived biases or notions, and being flexible so that new information will be viewed as new research opportunities (Yin, 2009).

The limitations to the study's method could have potentially caused data to be missed or inaccurately recorded. For example, the interviews in this study could not be recorded due to restrictions from the Administrative Office of the Courts. In addition, a co-moderator was not possible due to these limitations. Given these restrictions, detailed handwritten notes were continuously maintained by the interviewer. This included noting and recording themes related to study questions, direct quotations from the participant that had particular relevance, and recording concepts and constructs that may be related to the study questions. The interviewer used an individualized "shorthand" that she had frequently used in prior clinical and research settings, so as to capture as much of the information from the participant as possible. This method gave the researcher a more effective and efficient way to capture a large amount of information and acceptable level of confidence that the quotations were accurate and reflections of what the participant said. Immediately after each interview, when memory of the interview was still fresh, the researcher reviewed the notes and summarized the information in an organized fashion on a separate sheet of paper, in order for the data to be more easily analyzed once all interviews had commenced.

It was determined that four, one-hour interviews (one in October 2020, two in November 2020, and one in December 2020) would allow for adequate data collection. Each interview was

conducted through video conferencing using Zoom software. The first interview took place as a new cohort was beginning the Yes Arts recovery program, while the second and third interviews took place after 2 months of participation, and the fourth was held after the participant had spent three months engaged in the program. The dates were determined by the Memorandum of Understanding with the Administrative Office of the Courts, which allowed access to the participant during a restricted window of time. In addition, as the Yes Arts program did not start their program until September, the initial interview took place after this program had commenced. It was determined that the intervals between each interview were sufficient to allow the participant to progress through the various stages of the program, thereby allowing the participant to gain additional experiences and insights. The participant was in Phase II of the Drug Court system and was asked guided questions by the researcher about her recovery as well as her experiences with Yes Arts and its perceived effect on her self-efficacy. Guiding questions included:

1. *What experience with art activities did you have prior to starting the program? What kinds of art were you exposed to? (October) Which parts of the art program are you enjoying the most and why? (November) Which of the arts that you participated in did you like the best and why? (December)*
2. *What expectations and hopes do you have for the therapeutic arts component of drug court? (October)*
3. *Describe your feelings and beliefs about your confidence in maintaining recovery from drug use (e.g., resisting cravings, etc. (October, November, December).*

4. *What do you feel are the most important tools and types of assistance you need to maintain abstinence and how do you feel you can gain these tools? (October, November, December)*
5. *Do you feel your confidence in recovery maintenance has improved since beginning the program? (November, December).*
6. *What would you change about the program? (November, December)*

A central tenet of case studies is drawing information from more than one source, thereby allowing for triangulation (Yin, 2009). The use of multiple sources of evidence allows the researcher to address a range of issues within the study context and produce converging lines of inquiry (Yin, 2009). In this study, potentially corroborative information was collected from the Circuit Court judge who presides over the Franklin County drug court. The judge provided details of the program, its history, what he perceived as strengths and weaknesses, the court's future goals, and his perceptions of the art program within the drug court system.

A single, one hour interview was conducted with this jurist. Guiding questions included:

1. *Describe the history of Franklin County drug court.*
2. *What do you view as strengths and weaknesses of drug court?*
3. *What interventions do you feel are most effective for producing positive outcomes?*
4. *What changes would you like to see made?*
5. *What are your perceptions of the art component of drug court?*

The collateral information gained from this source specifically allowed for data and theory triangulation, thereby addressing issues of construct validity.

Access and Selection of the Participant

Initial design of the study intended to use focus groups to explore the research question. Therefore, wide recruitment methods were used.

Population

The recruited population consisted of females, age 18-60, around 80 percent Caucasian. Eligible participants were enrolled in the Franklin County Drug Court program. Females enrolled in the drug court program in Franklin County attend Yes Arts as a mandatory part of their recovery activities for drug court. Drug court is not necessarily mandatory for all women who are processed in the court system for drug offenses. Program participants are selected by the presiding judge (and at times, other court personnel) to be candidates for the program, for example, their offense involved a lesser offense such as possession versus distribution, or selling drugs and moving drugs with the intent to sell. Drug court is considered a "diversion" program within the judicial system, meaning these programs are intended to divert people away from a correctional setting and provide them with tools to help them rehabilitate outside of a jail setting.

Participants in drug court are not jail detainees and they are not on probation. However, they are monitored by the court and court officials. For example, participants must submit to drug screens and submit documentation of activities that are geared towards successful recovery from drug abuse, for example, attending AA meetings, applying for jobs, or enrolling in school. The women typically opt for Drug Court as a means to avoid prison time and/or other similar sentences as well as their intrinsic interest in sobriety. If they successfully complete drug court they will likely avoid prison and/or other punishments.

Recruitment Procedures

The potential sample was identified through the Executive Director and staff at Yes Arts. All women who were currently participating in Phase I and Phase II of the program were eligible to participate if they were willing. Initial contact was made by the Primary Investigator (PI) during a video conferencing meeting facilitated by the Franklin County drug court coordinator. The PI presented the recruitment script to the entire group, explaining the purpose of the study in broad terms and stating clearly that participation was voluntary and deciding to participate or not would not affect the services they receive at Yes Arts. The women were told they could email the PI with any questions. The women were given two days to decide if they wanted to participate and were instructed to inform the Franklin County drug court coordinator with their decision. Initially, five women indicated they were interested in participating and consent forms were sent to these women. Attrition led to one identified participant, and at that point, the researcher decided to use the intensive single case study. The COVID-19 pandemic played a major role in the attrition experienced in this study. Due to the adopted remote or virtual method due to the health crisis, recruitment of participants was significantly impacted. As a result, the initially proposed methodology was necessarily redirected.

Recruitment Script:

> *I am a doctoral student at the University of Kentucky and am inviting women in Franklin County drug court who are participating in the Yes Arts program to join me in an informal discussion and completion of a brief questionnaire. We will discuss your experiences at the clinic and your participation will assist me in better understanding the opinions and observations of those receiving services at Yes Arts. Participation is completely voluntary and a decision either way will not*

affect the services you receive at Yes Arts in any way. No names or identifying information will be used. Would you be interested in attending and in completing the questionnaire?

Yes Arts

As Yes Arts is an organization outside of the University of Kentucky (UK) system, a letter of support was required to gain approval from the University of Kentucky Institutional Review Board. Yes Arts recovery intervention runs on an academic calendar-type schedule, as services run September to May. Normally, the art interventions are conducted weekly and in-person at the Yes Arts offices. However, given the COVID-19 pandemic, the interventions were conducted bi-weekly and via video conferencing using the Zoom platform.

Participant

The participant is a 34-year-old woman who was enrolled in the Franklin County drug court for the second time, and had an extensive substance abuse history. Further information on the participant will be provided in Chapter Four.

Data Analysis

Data analysis was modeled after a framework approach, which is a matrix-based method for organizing and synthesizing data (Ritchie & Spencer, 2003). The term "framework" refers to the method's central tenet, thematic framework. Within this method, the data are organized according to key themes, concepts, and emergent categories and each main theme is subdivided by related subtopics. Data that are typically used in this type of analysis are gathered from participant observations, focus groups, or interviews (Ritchie & Spencer, 2003).

The framework approach is grounded, systematic, and enables easy retrieval. It further allows for within-case analysis, and is accessible to others (Ritchie & Spencer, 2003). This

approach was selected as it is well-suited to projects with specific study questions and a pre-designed sample (Srivastava & Thomson, 2009). This approach may contribute to theory, however, its main aim is to provide description and interpretation of what is occurring in a particular setting. This approach is similar to grounded theory but it differs slightly as it does not involve concepts such as theoretical sampling. This method considers a priori research enquiries and aims to address specific study questions (Ritchie & Spencer, 2003). The framework approach has five stages: familiarization, identifying a framework, indexing, charting, mapping and interpretation (Srivastava & Thomson, 2009), which are viewed as interconnected.

During familiarization, the researcher becomes immersed in the data and begins to initially note key ideas and themes. While this may seem an obvious step in the process, it arguably is the most important. During this step, in addition to the data, it is important to review the proposal, with particular attention paid to the objectives of the study. This step should generate a list of themes, which may include behaviors, attitudes, or opinions. After emerging themes and issues have been recognized during the familiarization stage, the key concepts expressed in the data become the basis of the thematic framework. During this process, it is important to maintain awareness of personal biases and perspectives and acknowledge that these ideas helped shape the study questions. Further, it is important to maintain a flexible approach and an openness to other emerging and divergent themes.

The next step is to devise an index, which is derived from the main themes identified during familiarization in addition to the guiding concepts of the study proposal. The data is sorted under broader, higher order categories, which creates main themes and subthemes. Essentially, this step is labeling and aggregating data in a way that makes the thematic

framework more manageable by placing meaning and significance to the data (Ritchie & Spencer, 2003). In addition, this step helps to ensure conceptual clarity.

The content of indexing varies based on the type of study. For example, it may contain abstract classifications, descriptive classifications, or tend to be rooted in semantic content. During this step of the process, it is important to maintain focus on the language and terms seen within the data, rather than language and concepts seen within the relevant literature or broader social or political theories. This is done in order to not distract from critical analysis and ensure that analysis remains grounded in the data itself. Constructs from external sources are incorporated into analysis later in the process as a part of theory building.

The next step involves labeling the data. This would typically involve using the transcript to numerically note where the data corresponds to the index. However, as recording of the interviews was not allowed in this setting, there were no transcripts. As such, the researcher consulted the notes and typed the information in the corresponding area of the index.

At this point, the researcher can take what was learned about the data gained during the indexing process to create thematic matrices, or charts. These charts consist of headings and subheadings that were found during the thematic framework process and through a priori research enquiries (Ritchie & Spencer, 2003). The overarching goal of this step is to summarize the key content in each theme while retaining the voice of the respondent. Each main theme is charted in its own matrix, with each column denoting a subtopic, thereby a chart for each main theme is created. During this step, there is a level of synthesis of data that must take place in order to prevent the charts from becoming unwieldy, thereby making the interpretation component more difficult.

Mapping and interpretation involve analyzing the key concepts that were outlined in charting and involves the production of a schematic diagram to illustrate the interpretation of the data set. This step involves pulling together the key characteristics of the data in order to interpret the data as a whole. Namely, it involves defining concepts, finding associations, mapping the range of phenomenon explored, and providing explanations. In essence, it involves finding "what is happening" in each single subtopic and creating a descriptive analysis (Ritchie & Spencer, 2003).

Through these steps, a clear and detailed picture about the data can emerge and a story line with the key concepts will emerge about the participant's experienced phenomenon. At this stage, the researcher can begin to write a descriptive overview of the participant's story including theoretical propositions.

Case study design and analysis is guided by theoretical propositions (Yin, 2009). For example, the researcher should be well-versed in relevant literature that has led to a solid foundation in the subject matter. Overall, an investigator should bring some level of prior, expert knowledge on a topic before initiating a case study approach, particularly the analysis component. It is also important to note that the process of analysis is cyclical, as a researcher may move between the stages throughout the analytic process (Williams & Moser, 2019).

Case Study Report

There is diversity in case study report styles, as there is not one particular standardized form. Case study reports do not typically follow a traditional research report outline. It is advised the researcher choose an approach that best portrays the case. The overarching "rule of thumb" among case study research is to organize the write-up in a way that best contributes to the reader's understanding of the case and best addresses the study questions (Stake, 1995).

In addition, a critique checklist was created for the case study report, which the researcher used in this study:

1. Does this report have a conceptual structure (i.e., themes or issues)?
2. Are its issues developed in a serious and scholarly way?
3. Is the case adequately defined?
4. Is there a sense of story to the presentation?
5. Have quotations been used effectively?
6. Has adequate attention been paid to various contexts?
7. Were sufficient raw data presented?
8. Were data sources well-chosen and in sufficient number?
9. Do observations and interpretations appear to have been triangulated?
10. Is the role and point of view of the researcher apparent?
11. Does it appear that individuals were put at risk? (Stake, 1995, p. 131).

Ethical Issues

A general ethical concern in the case study approach is the interpretive process (Stake, 1995). The assertions, or generalizations, that take place during the process of interpretation are not derived from a standardized guide. While the framework process allows the researcher to organize the data and find themes and concepts, the process thereafter is not uniform. As there are no standardized guides for how information gathered should be transformed into these assertions, there is room for the researcher's personal biases to play a role in interpretation. The same can be said for potential biases hindering the interview process (Yin, 2014).

However, it is asserted that in case study research biases can be kept in check through maintaining good research ethics including responsibility to scholarship, honesty, transparency,

avoiding deception, and accepting responsibility for the research project (Yin, 2014). In addition, reflexivity, or the researcher's awareness of their background, values, and experience with phenomena being studied, play a significant role (Cope, 2014). It is recommended that a researcher be sensitive to this reflexivity, which will result in better interviews and ultimately a better case study (Yin, 2014).

As noted above, there is significant value in the case study approach in terms of clinical relevance and potential for discovery of novel concepts. It is an efficient way to explore an individual's experiences and perceptions both critically and reflectively. Moreover, in contrast to group interviews, a one-to-one case study approach with an individual potentially allows for increased candor due to privacy and confidentiality.

Chapter Four: Results

Introduction: The Study and the Researcher

"There is importance in 'showing up for life' and being blessed with the rebirth that recovery gives."

Betty Ford, former First Lady of the United States

The study was designed to gain a better understanding of the experience of a participant enrolled in Franklin County drug court through the lens of self-efficacy. Chapter four begins with a description of the researcher's background and training, followed by a discussion of the role of these experiences. The research question is presented, followed by a description of the participant, a brief overview of the research methodology and data analysis, the themes and results of the data analysis, and information given by Franklin County, Kentucky Circuit Judge Phillip Shepherd that provides triangulation and additional context for data interpretation.

The Researcher

Research Interest.

The researcher's interest in this topic stems from a decades long career in the mental health field, many of which were spent working in substance abuse. Throughout the researcher's clinical work, she became particularly interested in the complexities of addiction, specifically the intricacies of the treatment and recovery needs of women. In addition, the researcher frequently witnessed the relationship between the judicial system and women with SUDs. Many of her patients found themselves in the court system partly as a result of their disease and associated behaviors, while addiction treatment—as opposed to "punishment"—rarely occurred. A professional colleague—Amelia Berry—who serves as the Executive Director of Yes Arts, described her agency's role in Franklin County drug courts and presented the researcher with the

opportunity to examine this unique population and gain insight into the potential therapeutic effects of art interventions on women in a drug court setting.

Researcher Background and Training.

As a licensed professional counselor, throughout the researcher's career she has frequently encountered clients with substance abuse issues in some form, whether it is their own use or that of people close to them. The researcher shifted specifically to work with individuals with SUDs as a Licensed Clinical Alcohol and Drug Counselor in the midst of a national drug epidemic. It was during this time she became aware of the devastating impact of drug use. In particular, the researcher became acutely aware of the specific needs of women as she increasingly saw women with SUDs who were receiving services that did not lead to success in long-term recovery.

Role of the Researcher.

In qualitative research, the researcher serves as the primary instrument to collect and analyze data. The aim is to design a case study and collect, analyze, and present findings in a comprehensive way (Yin, 2014). The aim of this study was to fairly represent the views and perspectives of the participant in a reflexive way so as to minimize potential biases into the data analysis. In addition, an aim was to provide a body of work that contributes to the field in a novel and meaningful way.

Description of the Participant

"Marie" is a 34-year-old Caucasian woman initially referred to drug court for drug possession charges. This was her second enrollment in this program. At the time of her first interview, she had been enrolled in the program for eight months. Marie agreed to be interviewed and was told by the drug court supervisor that she would receive credit ("community service")

from the drug court as a part of her participation. Marie indicated this external reward was not a primary motivating factor in participating in research. Rather, she said she wanted to help others understand addiction and how difficult recovery is.

From the first interview it was apparent that Marie was able to articulate her experiences and opinions regarding her addiction history and recovery process. She frequently expressed her eagerness to share her experiences as she said, "so many people don't get it." With a long history of drug use, considerable experience with various types of addiction treatment, and a recent period of sobriety (eight months), Marie had potential to be an informant into addiction processes, how her personal history and background can influence drug initiation and continuation, and issues related to the maintenance of long-term sobriety. Marie frequently made statements relevant to her self-efficacy *("I feel very confident that I can be sober—I know what I need to do and I can do it for myself"*) and her gratitude to the drug court program ("*drug court saved my life"*).

Interviews

Data were collected from four interviews conducted with Marie over three months. These interviews largely consisted of information covering seven areas: Personal History and Background, Addiction Treatment, Drug Court, Social Relationships, Self-Efficacy, Yes Arts, and Vocational Issues. Across these areas, five overarching themes were discovered:

- Intrinsic Motivation
- Hope
- Stability
- Building Healthy Relationships
- Access to an Array of Services

All five areas were related to self-efficacy, as detailed below.

In addition to the interviews with the participant, information was gathered from a single interview with Judge Phillip Shepherd of the Circuit Court, who oversees Franklin County drug court. A narrative of the framework from Marie's information was formulated incorporating Judge Shepherd's information to provide triangulation.

Framework Analysis

Using the notes taken during Marie's interviews, a framework analysis was conducted, with specific repeated words, patterns, and phrases guiding analysis. Below is a narrative matrix to illustrate the information:

INTRINSIC MOTIVATION	**1.1 Role in treatment**	**1.2 Effect on relapse prevention**	**1.3 Knowledge of services**
	1. Feeling capable of putting in recovery work	1. Protective factor in "giving up"	1. Empowerment
	2. Self-Efficacy	2. Knows she has effective skills if recovery becomes difficult	2. Locus of Control
HOPE	**2.1 Engaging in positive activities**	**2.2 Role of Drug Court**	**2.3 Vocational success**
	1. Imagining a life in long-term recovery	1. Providing a second chance and avoiding jail time	1. Gain recognition for hard work and able to provide for self
	2. Role of self-care	2. Opportunities for life improvement	2. Completing vocational trainings for future employment
STABILITY	**3.1 Role of drug court**	**3.2 Keeping busy**	**3.3 Vocational training**
	1. Reliable and predictable support network	1. Work and drug court schedule demanding	1. Long-term vocational viability
	2. High accountability of actions	2. Engagement in a life without drugs	2. Feeling that she can eventually help others in recovery

HEALTHY RELATIONSHIPS	**4.1 Support Network**	**4.2 Accountability**	**4.3 Repairing and improving**
	1. People on whom she can rely	1. Understanding that actions affect others	1. Chance to repair past relationships
	2. Peer in recovery facilitator provides unique support	2. Increase desire to stay sober	2. Examine current relationships and the role they play in recovery
ACCESS TO ARRAY OF SERVICES	**5.1 Multiple opportunities and settings**	**5.2 Trauma**	**5.3 Gaining insight into addiction processes**
	1. Wide network of services	1. Understanding difficult feelings	1. Therapy "normalizes" addiction and its processes
	2. Art as an adjunct way to process addiction processes	2. Multiple ways to process trauma	2. Gain insight into trauma history and drug use (avoiding difficult feeling)

From this framework, a narrative was composed that outlined and expanded upon information provided in the interviews across the noted themes.

Case Study Narrative

The presentation of the case study narrative consists of briefly describing each theme and then presenting data related to each theme and its dimensions. In the following sections, the findings in each of the themes will be discussed and related to the main question of this study.

Intrinsic Motivation

The theme of intrinsic motivation was found across all four interviews, with Marie citing her lack of intrinsic motivation in previous attempts to stop using drugs as the only reason she was not able to stay sober. She frequently used phrases such as:

"I didn't want it for myself—everyone else wanted it—I just went through the motions….

I tried for 27 years to quit but couldn't and it was because everyone else wanted it except

for me. Even with the drug charges and going to jail, I didn't care….I would show up to meet my probation officer high as a kite…My first time in drug court I didn't take it seriously, I didn't care if I went back to jail. I went on the run for two years, and just didn't care what happened."

She said it was not until she completed a 30-day residential program through her local Community Mental Health Center that was related to a relapse during her second enrollment in drug court that she felt ready to quit saying:

"I had the confidence to do it after that, I also had the 'want power' not just 'will power'. It saved my life. It gave me confidence…..I was tired of the drug life. I think residential was the beginning of me really being in recovery."

Marie stated she felt strongly that she was capable of achieving her goal of long-term sobriety. She said while it was her residential experience that initiated this changed sense of self-efficacy, positive change and her motivation was maintained through subsequent recovery activities:

*"My 30-day stay put the fire under my butt—I stay sober by doing what I need to do—that keeps me straight…*I*t isn't 'will-power', it's 'want power'—if you don't want it, it won't happen. Doesn't matter how much you've got put right in front of you—you have to want to do that stuff…. If you don't want it bad enough it doesn't matter how many things you have access to—it won't work."*

To illustrate this point, she discussed the recent change in drug court protocol related to the pandemic with regard to relapses:

"Before COVID, there was real punishment if you relapsed. You went to jail. But now they're trying to keep people out of jail so there aren't any real consequences when you

screw up. Some people need jail as a way to not screw up because they don't really want to be sober."

Hope

Marie's sense of hope and the role it played in her recovery was a thread throughout the interviews. She articulated that this sense of hope was related to her view that she could achieve her goal of long-term sobriety through internally driven means. She articulated her vision of her future without drugs and described steps she was taking in order to make this a reality. Her sense of hope was apparent in how she spoke about being capable of living a life not simply without drugs but with dignity and accomplishments.

Marie reported that she was proud to be considered for early advancement to the next stage in drug court and appreciated the support she receives from drug court personnel:

"My therapist wrote a letter of support for me. He told drug court that I was in the top five percent in progress. That really made me feel good…They only want the best for us—they go to bat for us and believe in us. Their praise helps me keep going and know that good things can happen. Judge Shepherd told me last week that I was on the right path. That made me feel good. That made me proud of myself."

This sense of hope was also apparent when discussing her work options. She also expressed self-efficacy and a sense of purpose regarding her ability to make a positive impact in the lives of others in recovery. She spoke excitedly about her peer support specialist certification, which she had earned a few weeks prior:

"I can't believe I'm actually going to be helping people like me. If you would have asked me a year ago if I would have done something like this I would have said 'hell no'. But I've got a story to tell and maybe I can help people from doing the stupid shit I did."

Marie's optimism and hopefulness was also discussed in the context of Yes Arts' emphasis on self-care:

> *"The last ten minutes of Yes Arts is self-care. We use that time to think about ourselves—this is important for me to stay sober. It don't matter what we do. She just wants us to do something that doesn't involve anyone else, like a breathing exercise, or some women just use the time to doodle….When I was using I was a mess. Taking care of myself didn't' happen—I only thought about using… I hated myself too much to take care of myself. I would go to sleep at night and hope I wouldn't wake up. I knew I'd just wake up and it would be the same shit."*

Stability

Marie frequently described the "chaos" of her life when she was actively using drugs. She related how her chaotic environment prevented her from envisioning a life in which she could be sober or make any significant change. She frequently cited the consistency and accountability in her life because of her participation in drug court and said this was the driving forces in her continued sobriety:

> *"Drug court saved my life, there's no doubt. They are my support. I'm stable now because of them. I didn't have anything good before—no job, no people looking out for me, I'd just sleep wherever…..These are people that I don't want to let down—they tell me they are going to hold me accountable and they do…..I know I was in a chaotic environment before and that's why I didn't have people to help me. But my routine now is good—it's stable."*

The provision of structure through the drug court program increases the sense of stability, according to Marie:

"I'm always busy with something that is helping me with my recovery—they keep us busy. I'm always having to check in with them or do drug screens. It used to be peeing in a cup but with COVID now they're swabbing our mouths, but they still know if we screwed up. I can't screw up and I don't want to."

During our first three interviews, Marie was unemployed. As she was not employed during this time, she was required to complete community service hours to satisfy the drug court requirements:

"I worked in a little restaurant before. They were really good to me, it was just a little family run thing. There was a falling out, though. Sometimes I think I might train to work with my sister grooming dogs but maybe not—drug court keeps me so busy it would be hard to have the time."

During our second interview, Marie spoke excitedly about an opportunity she had through the drug court program to complete training for a peer support specialist credential. Over the course of the interviews, Marie completed this 40-hour training and gained the credential that will allow her to serve in a mentor-type role in addiction treatment settings.

"The drug court program went to bat for me and they paid for all the costs for the training. I really think this would be something I could be good at—I've always wanted to help people like me. I was kind of scared about the training because I was never good at school—I never got it. But I understood this content and I thought it was interesting."

In addition, Marie found inspiration to help others in recovery from the female facilitator who leads the Yes Arts program:

"She told us her story about how she got into drugs. She came back from it and has a good life now. She told us about all the stuff she does now—it was impressive."

By the final interview, Marie's unemployment benefits had unexpectedly stopped and led to her seeking a job to have money to survive:

> *"I don't know why but the checks stopped coming. I don't know what happened. But I needed money. I was lucky that I saw a woman I know at the dollar store who told me about a job with a little cleaning company. They hired me and I had a raise after a week—they know I just get the job done. And they're already talking about putting me in a management position. And they're flexible so I can still get my drug court stuff done because I can't have a job screw that up."*

Healthy Relationships

It was clear in the first interview that Marie wanted to tell her recovery story as she spent significant time discussing her background and what led her to addiction and to the drug court program. During this interview and subsequent interviews, she focused particularly on her relationships. While no direct questions about her relationships were asked, it became clear that relationships—both positive and negative—play an important role in her addiction history and current recovery:

> *"I started using drugs when I was ten. My older sister was a partier and I idolized her. I did drugs with her because I wanted to spend time with her and I wanted her to respect me….Doing drugs in my family seemed normal. My childhood wasn't good. A lot of bad things happened. It caused a lot of intense emotions that I couldn't deal with."*

She spoke of her difficult past in a matter-of-fact way that did not suggest she wanted to reveal any of the details of her history. While she was open about many other facets of her recovery and history, this was an area where she was clearly not willing to disclose, despite the seemingly pivotal role it played in the initiation and continuation of her drug use.

Marie continued using drugs through pregnancy and parenting. She described her adult relationships as tumultuous. She has three children (now ages 16, 14, and 12):

> *"When I was using, one of my kids brought me a picture of me in a coffin because that's where she thought I was going to end up because of drugs. That really shook me up. I tried to stop after that but it was too hard. So I just started using meth instead. I figured there was less chance of me dying of an overdose with meth. This is why my kids have given up on me. I don't blame them—I put them through hell…..My oldest daughter lives with her friend's family nearby now. I'm glad she has a stable place to be. My other two are with their dad and they're doing good. My youngest won't talk to me. My middle daughter hasn't given up on me, though….We go to family therapy. I didn't realize how much she liked going until recently when our car wouldn't start and we couldn't go. She got so mad that she slammed her book down on the car and started yelling."*

Marie spoke a great deal about her current relationship with her fiancé. During the course of the interviews, she experienced tumult with him:

> *"Things with him are up and down and living with his parents sucked. If I left a dirty bowl in the sink they would go crazy….When we broke up last month I was struggling—I don't like being alone. I really had to stay busy but I never felt the urge to use….We're together now but I know what will happen. It will be good for a while and then it will go back to how it was—that's what always happens….He's good for my recovery. He always reminds me how bad things were when we used and how terrible it would be if I went back to drugs."*

Marie cited the healthy relationships she has made through the Yes Arts component of drug court as important in her recovery:

"Normally in drug court the women wouldn't be all together. We all do different groups and we don't really see each other—Yes Arts is the only time we're together…we really bonded and we're close. I think it's because we have to make art and talk about it with the group—we all are going through the same things. We are recovering with our hands and not just our mouths—in Yes Arts we deal with the hard stuff but in a different way……I've exchanged phone numbers with most of the women. Normally I prefer treatment with men—I think my views are more aligned with men. But I like being with these women—they give me support."

Marie also recognized that bonding with a group of women in early recovery could compromise her own recovery:

"One of the women in the group called me recently. She needed a ride to get away from something bad—this put me in a bad situation. Things like this could screw things up for me."

When discussing healthy relationships, she frequently cited the importance of the Yes Arts facilitator, who is also a person in recovery:

"We all respect her because she knows what we're going through and she has a good life now. I like her…..there was one time I had to miss a session because of work and I wanted to get the assignment done because I didn't want to let her down."

Access to an Array of Services

When speaking about her recovery, Marie spoke about all aspects of her treatment as playing important roles in her sobriety.

"I do recovery activities every day. I do IOP, individual therapy, family counseling with my daughter, and I go to AA. I found a good AA group that meets on Zoom—it's

supportive, but I wish it were in person….I do Yes Arts every two weeks and it is a fun thing to do…..They do drug screens. I also have my Vivitrol shot that I started doing when I was in residential and this is really my savior—I don't even think about using. Sometimes when I smell the alcohol in hand sanitizer it makes me feel sick—it works that good! At first, I thought the needle was going to be a problem, I thought it would be a trigger but I don't' have any problems after…I think I used drugs because I didn't have to feel things—I hated feeling emotions….alcohol and opioids were the best for that—those are my devils….I try to talk about these things in therapy because I know it's helpful….I really need all of this drug court stuff to help me stay sober. "

When discussing the Yes Arts program, Marie became animated:

"I did it during my first time in drug court and I liked it. I never took art before but I've always used art activities to help me relax like writing in a journal or coloring so the art stuff makes sense to me."

There were specific art activities through Yes Arts that Marie cited as particularly therapeutic:

"I loved the project where we had to find objects that represented our recovery journey and then take a picture with it. I did a bunch of collages showing what my life was like when I did drugs. Then I put the rock that I got after I did residential in front of me. I wanted it to show that my drug use was behind me and I couldn't see it anymore…..I also liked the Halloween project because it was something I could do it with my fiancé's kids."

Triangulation

An interview with Judge Shepherd, jurist of the Circuit Court of Franklin County who oversees the drug court program, provided additional information about the drug court program's

protocols and history. In addition, it gave insight into the Judge's (and drug court personnel's) perceptions of the participants' addiction processes, including initiation and continuation of drug use, effective interventions available through the drug court program, and how the program may evolve. This information provided an interpretive lens for the participant's information:

> *"Participants in Franklin County drug court are far into their addiction. Most of them have failed at a traditional probationary route…..Most have used drugs for a majority of their adult lives and have drug use histories that stretch across several generations—it's normal to them because they grow up in a drug environment……Inter-generational use leads to enabling behaviors."*

He described the course involved in participants becoming enrolled in the specialty court:

> *"When drug court personnel evaluate potential participants, they err on the side of eligibility—we don't really have a protocol for deciding this. Typically, lawyers will make referrals to the court and we go from there."*

Judge Shepherd emphasized the role that trauma plays in a many of the participant's histories:

> *"Pretty much all of the participants have a severe trauma history. For women it's mostly sexual and I really think for women the trauma plays a bigger role—for them the drugs are a way to combat the painful feelings associated with the trauma….. I have seen some of the worst trauma in the drug court participants. Some of the worst I've seen as a sitting judge. You can't imagine some of the things one human being can do to another human being……All drug court personnel are trained in trauma informed care—we know that without these types of approaches, a person is more inclined to return to drug use. If they address this trauma then the outcomes tend to be better."*

Gender differences within the Franklin County drug court system were also noted in the ways in which trauma is processed:

> *"Women seem better about opening up once they are in a therapeutic setting, they seem to be able to express themselves more. Men seem to turn inward, and this leads to sporadic abstinence."*

Judge Shepherd reported the pandemic has shifted some of the previous protocols and beliefs around participants who were not completing the required drug court steps:

> *"Prior to the pandemic, participants who tested positive on drug screens got sent back to jail. The pandemic led many judicial systems across the country—and Franklin County was no exception—to take unprecedented steps to minimize the jail population. We were trying to slow the spread of the disease. We released our non-violent offenders or offenders who were close to the end of their sentence. So we decided drug court participants who test positive get a revised treatment plan. This may mean increased participation or writing reflective papers on their drug use and how it has affected others….. I've realized that sending them back to jail undoes their progress and sets them back. This new approach is more trauma-informed so we're going to stick to it even after the pandemic."*

Judge Shepherd indicated that Medicaid expansion in Kentucky in 2015 significantly improved the network of care for participants in the program:

> *"Before expansion, we had trouble finding providers for participants. This expansion was significant for our participants. There weren't places that took people without insurance and no way to pay out-of-pocket. Now there are places we can send them to for services and it's comprehensive."*

Overall, Judge Shepherd's impressions of MAT was that it serves as a helpful tool in an individual's recovery and is used in Franklin County drug court:

> *"Between 30-40 percent of our participants are on some form of MAT. It's on a case-by-case basis. Anything without abuse and diversion potential then I'm all for it. I'm hesitant sometimes with suboxone because I think it frequently leads to problems—there's so much abuse and diversion. The high street value doesn't help and there's so much out there on the streets…..While they are with us and there is accountability there is more control. The trouble comes when they have left the drug court setting….To some extent I blame the prescribing physicians—they can be irresponsible. My daughter is General Counsel for the Kentucky Board of Medical Licensure and she tells me about how the physicians go outside reasonable limits."*

In his experience, he has found arts-based programs helpful to women:

> *"In my time on the bench I've found these types of programs are an effective way for women to process trauma. I think this kind of program is great for women, but it doesn't translate the same with men. Men have trouble opening up in any kind of treatment setting. I wouldn't ever mandate this type of program for men—it wouldn't work….Therapeutic arts have limits, though. I think it only works if it's used with a lot of other comprehensive services—a person has to be invested in the whole package…But there's no one answer to this problem. We have to incorporate the types of programs that work and that means these types of complementary therapies."*

The Franklin County drug court program emphasizes workforce and educational preparedness:

> *"We strongly believe that employment leads to money, a sense of worth, and coping skills, and all these things lead to better recovery outcomes. I really believe this is*

replacing a negative behavior with a positive behavior…..If someone isn't employed, then they have to show that they are working towards educational attainment or completing community service….I'd say that 80% of our participants don't have a high school diploma or a GED so this makes meaningful employment more difficult. They need more than just fast food. I'd like to eventually mandate the GED in the future."

He went on to say the courts are working on building community partnerships to improve educational and vocational outcomes:

"The educational systems have failed these people….We need to build partnerships with community agencies to help with the educational and vocational transition. A lot of employers don't want to hire our participants—they have drug histories, criminal histories, and no high school diploma. I'd like to involve the state vocational rehabilitation office and I'd also like to find a program to help them get their GEDs."

Judge Shepherd summarized by saying:

"I think we have a comprehensive and progressive drug court program that meets the needs of the participants and the ones who fully engage in their recovery tend to have the best outcomes. I also think it's important that we understand the role that trauma plays in a person's ability to successfully complete the program."

Summary

The themes found across the interviews with Marie—intrinsic motivation, hope, stability, healthy relationships, and access to an array of services—all play significant roles in her sobriety maintenance. The comprehensive services that she receives as a participant of the Franklin County drug court program (including an art intervention component) play important roles in providing an environment in which she can thrive and engage in meaningful recovery activities.

It does not seem that an art intervention alone has significant impact on a woman's self-efficacy. However, it does serve as an effective recovery tool for women, particularly when incorporated into a larger, more comprehensive program, as it provides an alternative way to process trauma and gives a setting to form relationships with other women in recovery. Judge Shepherd mirrored many of the themes and sentiments that Marie expressed as important to recovery and described a robust drug court program that strives to meet the treatment and support needs of the individuals it serves.

Chapter Five: Discussion, Conclusions, Limitations, and Recommendations

Summary of Findings

This study suggests that an art intervention within a comprehensive addiction treatment setting as a part of a drug court program can potentially have a positive impact on recovery for the participant in this study. An individual's intrinsic motivation, sense of hope, life stability, the ability to build and sustain healthy relationships, and access to an array of services all might play important roles in long-term sobriety. These factors may influence long-term sobriety by providing tools and resources that enhance self-efficacy to avoid using drugs.

Discussion of Findings

The discussion will first explore the following three findings:

- The role of self-efficacy in initiation and maintenance of sobriety
- The potential positive role of therapeutic art programming within a comprehensive addiction treatment approach
- A drug court program as a setting for access to addiction treatment to promote positive sobriety outcomes.

Next, the study's findings are discussed in relation to relevant literature, followed by discussion of the study's limitations, and future clinical and research directions.

Self-efficacy

This study suggests that self-efficacy plays an important role in sobriety. A central theme in this study is the participant's belief based in her participation in Yes Arts and several other treatment modalities that motivation to be successful in recovery was equally important to having access to recovery tools and resources. The participant indicated that when she gained intrinsic motivation she began to conceptualize long-term successful outcomes. Her increased

perception of self-efficacy for maintaining sobriety that she reported having after residential treatment appears to have increased her resiliency and locus of control, which likely played a role in managing setbacks and cravings. This finding suggests that psychosocial factors play a role in potential barriers to treatment adherence and efficacy, in addition to the other barriers to treatment that women frequently encounter, such as lack of childcare, money, and transportation.

The findings further suggest that resiliency and self-efficacy may play a more prominent role in the stages of change than previously considered. This construct of stages of change in addiction implies that major life changes entail an element of risk. In other words, an individual who has the perceived ability to cope with known and unknown aspects of change is more likely to initiate change. In addition, an individual who perceives herself as capable of successfully carrying out the behaviors needed to effect positive change is more likely to be motivated to change.

One of the main themes that emerged from this study was the importance for an individual to recognize the costs of using drugs is more burdensome than taking the steps required to maintain sobriety. In Marie's words, the "want power" plays an important role. These findings support that self-efficacy plays a role in this facet of recovery. As discussed above, literature suggests an individual is likely to follow a path or behave in a way that they feel is obtainable. In other words, if they feel it is likely they will be successful in sobriety they are more likely to achieve this. It is likely that even if an individual does not feel they can or want to stop, providing them with the tools necessary and helping them change self-beliefs may change their motivation. For example, if an individual becomes affiliated with a recovery network, they may feel more accountability and social support, thereby reinforcing their motivation to change and maintain sobriety.

Another aspect of self-efficacy relevant to this study is the role of modeling for women in recovery. In self-efficacy theory, modeling is one of the primary mechanisms through which self-efficacy develops as it provides a demonstration of competence by people perceived as similar to the observer. Marie described her arts facilitator as having a better understanding of addiction than others not in recovery. She also cited this factor as a key element in her desire to engage in treatment. Marie attributed much of her investment in the arts program to her identification with the facilitator. It is also noteworthy that the facilitator was female, likely contributing more to the identification that Marie had with this individual, thereby, further increasing Marie's self-efficacy. The potential role of gender could be explored in follow-up studies comparing male versus female. In addition, Marie indicated that the facilitator had greater credibility due to her own recovery narrative. As such, it is likely that Marie's self-efficacy for sobriety was further increased through non-specific aspects of the program, namely the facilitator's gender and demonstration of a positive and healthy path to long-term sobriety. Marie could conceptualize a different future for herself based on her identification with the facilitator.

Art Interventions

These types of art interventions can provide an environment where healthy relationships with other women can be fostered, for example, through non-verbal means and through collaborative processes. In particular, it is this social support and connectedness found in this complementary therapy that potentially is the most influential on self-efficacy, as this network becomes a healthy resource to use when coping with challenges in recovery. In addition, engaging in recovery activities alongside other women in recovery can enhance a woman's sense of empowerment, another tenet of self-efficacy.

In addition, this study suggests that an art-based intervention can provide a unique outlet to process trauma and other psychological difficulties and learn about addiction processes. It is noteworthy that the participant cited that the art component felt like a "special" modality that was unlike what she had been offered in past addiction treatment programs. The novelty of this type of complementary therapy may help an individual become more engaged with an addiction treatment program as a whole and serve as a catalyst to stimulate an individual's interest and engagement in addiction treatment. Also noteworthy, is that the therapeutic value of these types of programs seems most effective when the individual is engaged in a comprehensive addiction treatment program.

It is likely that prior art involvement does not dictate participant experience in this type of treatment setting. That is, an individual does not need to have prior art training or experience to benefit from creative activities. However, these findings suggest that gender may play a role in activity engagement, as does a positive outlook on how the art activities may be therapeutic and helpful in long-term recovery. It is likely that women in particular may be more receptive to this type of adjunct intervention for addiction treatment.

Drug Court

This study suggests that drug court can serve as an effective conduit to addiction treatment. This type of specialty court program can facilitate recovery through the provision of ongoing networks of support, holding individuals accountable for their behaviors, providing educational opportunities and incentives, and offering a stable environment.

Marie spoke of drug court as life-changing and referenced the important role it played in her recovery: "drug court saved my life." She emphasized that drug court provided her with social supports and programming to which she would not have had access to otherwise. Drug

court provided a broader context and depth of experiences that maximized the impact of art-based activities. This suggests that these activities work synergistically and not as stand-alone interventions. Additionally, while Medicaid in the state of Kentucky expanded coverage of services of lower-income individuals, assistance is often needed when navigating help. The drug court system can act as a facilitator in the provision of these services.

Other findings are rooted in the discrepant views of the drug court judge and the participant. In Marie's opinion, the watered-down consequences for drug court participants were ineffective as they reduced accountability. In contrast, the judge indicated these less punitive consequences implemented due to the pandemic better facilitated a participant's ongoing engagement. This discrepancy points to the possibility that the drug court could access and incorporate feedback from the participants in order to optimize program outcomes by identifying program effects of which they were not aware. Marie's views on these lessened consequences likely relate to her more general emphasis on the importance of accountability of participants.

Study Findings and Literature

Themes emerged in the study that were consistent with addiction treatment literature while also highlighting gaps. One area of consistency with literature is related to the participant's statements of her preference for women-only treatment (Neale et al., 2018). While the participant initially felt more comfortable in mixed-gender settings, as she became more engaged in the process of recovery, she came to appreciate the deeper level of peer support only found in women-only groups.

The participant frequently mentioned the bonds she formed with other participants in Yes Arts as well as the facilitator and the role these relationships played in her engagement in the program. Literature cites this social connectedness of art interventions as an important

component of a woman deriving benefit from this type of complementary therapy (Moxley et al, 2011). While the participant spoke of the aspects of Yes Arts that she found helpful, she most frequently spoke of the bonds she built with the women as driving forces behind her participation in this aspect of drug court.

This study tentatively demonstrates the important role that a provider with lived experience can play in a participant's recovery. This type of provider is often cited in literature as a factor in positive change within addiction treatment settings (Kaplan, 2008). While this study did not involve the integration of a certified peer support specialist, the program did incorporate an individual who was in long-term recovery (facilitator for the Yes Arts program).

This study further highlights the important role that self-efficacy plays in addiction treatment outcomes. Literature suggests there is a strong relationship between this construct and behavior changes around substance abuse (Hassel, A., Nordfjærn, T., & Hagen, 2013). The participant frequently cited aspects related to self-efficacy as central to her ability to maintain her sobriety, for example, modeling and positive coping skills.

This study further suggests in a preliminary way the value of a comprehensive drug court program that provides high accountability and strong support. The participant frequently discussed the important role that drug court played in her recovery through the provision of a continuum of services within a supportive environment. These types of specialty court programs could significantly improve treatment gaps that are often found in addiction, and potentially alleviate many of the issues found in our judicial system, for example, overcrowded jails, and overloaded court dockets (Marlowe et al., 2016).

The important role of Medicaid in the outcomes of this population was highlighted in this study. Judge Shepherd emphasized the important role that Medicaid expansion in Kentucky

plays in providing drug court participants to addiction treatment services. This illustrates that current public policy plays a large role in whether an individual has access to addiction treatment, particularly for populations who have fewer financial means. This further underpins the importance of the clinical, research, and policy triad and this construct should be considered when working with this population as each component influences the other components (Bechelli, Caudy, Gardner, Huber, Mancuso, Samuels, Shah & Venter, 2014).

Marie spoke of the social connectedness she gained from the art component and the benefit derived from not just the activities but also from the group being facilitated by a woman in recovery. In addition, she talked of the important role that her immersion into the many recovery activities she participated in as a part of drug court played in her sobriety. These sentiments are often found in literature that explores the role of art interventions within treatment settings (Moxley et al., 2011). While the participant's sentiments align with these findings, this study's findings further suggest that this adjunct therapy within a comprehensive program can additionally facilitate engagement and promote recovery. While these findings illustrate the potential benefit of a therapeutic art component within a comprehensive addiction treatment program, there is a lack of literature that explores the efficacy of this complementary therapy with a wider treatment continuum.

Limitations

Pandemic Restrictions

During the time this study was conducted, a global pandemic occurred. This health crisis significantly limited the ability to conduct the study as originally planned. For example, the Administrative Office of the Courts was largely restricted to virtual proceedings across all courts, including drug court. As mentioned earlier, this led to the study largely being conducted in a

virtual format, which potentially limited the effectiveness of the intervention. In addition, this format potentially decreased the quality of these interventions in that it minimized collaboration among the participants. Yes Arts activities are typically conducted weekly, in person, and are frequently collaborative. The bi-weekly and virtual format significantly changed the dynamics of the encounter, potentially limiting its effects. It is possible that a traditional format would have led to more meaningful interactions and engagement.

While the art projects were conducted synchronously, they were conducted independently and only shared with others in the groups to the extent that the video allowed. This potentially interfered with the interpersonal processes cited in the literature that contribute to therapeutic benefit. In addition, this format did not allow the participants to have access to the art supplies and resources that would normally be available had the interventions been conducted in-person. These limitations restricted the activities available to participants, which potentially decreased some of the therapeutic value. Despite these limitations, the participant indicated that while she would have preferred face-to-face interactions, she nonetheless benefited from the virtual format, and the adapted art interventions.

The interviews were conducted via Zoom as a result of the COVID-19 pandemic. This format had potential impacts on data collection. For example, non-verbal and nuanced language was potentially not captured as a result of the virtual format. In addition, the pace and overall "feel" of interviews conducted in a virtual format likely differed from interviews conducted in person. For example, the delays that often occur due to connectivity can slow the conversation down and cause the discourse to feel less natural. On the other hand, a potential advantage of a virtual interview was the participant may have found it easier to share as they may have felt the

screen offered a degree of anonymity. However, based on my observations, rapport was established, and the participant was comfortable sharing personal information.

The notes taken during the interviews with the participant and the jurist were not shared with either of these individuals. It is possible that had the participant and jurist had a chance to review the interview notes that discrepancies and/or incorrect or misconstrued information were noted. This sharing would have allowed for clarification of the data, thereby allowing for a more accurate analysis or further elaboration.

Legal Implications for Drug Court Participants

It should be kept in mind that programs embedded in the drug court setting may also potentially hinder therapeutic processes. For instance, participants in this type of setting may not be as honest with counselors or facilitators as they feel potentially harmful information could hinder their progress through the program or result in penalties. It is likely that more transparency would be found in therapeutic settings where there is not an implicit threat of judicial punishment.

Methodological Limitations

There are methodological limitations worthy of discussion. First, the participant was drawn from a sample of convenience. In addition, there was a potential selection bias in the process of participant recruitment. Recruitment was in a group setting, which may have influenced decisions on whether or not to participate. That is, some participants may have felt social or institutional pressure to participate or not participate. Also, there was no agreed upon definition of self-efficacy between the researcher and the participant. The lack of clarity of this term could have led the participant's articulations to be rooted in a meaning of this term that was divergent from the researchers.

In addition, there was no control or comparison group. In this study, another county's women's drug court program could have hypothetically served as a comparison. Specifically, a program without an art component or with a stand-alone art program could have allowed for inferences to be made regarding the potential influence art has on women's self-efficacy and long-term sobriety outcomes. However, qualitative research, and case study methods in particular, are designed to derive empirical findings based on in-depth examination of complex phenomena and are not intended to be based on experimental control comparisons. In addition, the researcher could not incorporate the use of quasi-experimental design, or single case study, as it was not possible to control the treatment being provided or randomly assign participants.

Another potential limitation was the researcher's implicit and explicit biases regarding SUDs and this population. As discussed above, some level of knowledge on the research topic can play an important role in research question development and analysis. However, prior knowledge and experience can also pose a potential threat to validity as the researcher could unconsciously interpret data in idiosyncratic ways.

Additionally, another potential impact on the validity of these qualitative data is that the participant received an incentive from the court to participate. Although the incentive (community service credit) was not excessive and did not likely unduly influence the participant's decision to consent, the "reward" coming directly from the court could have subtly influenced her responses regarding the program. In other words, the participant might have suppressed criticism of the program or staff due to a perceived connection between the researcher and Yes Arts.

Additionally, the data collected was not quantified as would be the case with questionnaires. There is a risk when carrying out interviews that the participant's intentions,

meanings, and feelings will be misunderstood or missed by the interviewer. However, similar biases potentially exist in quantitative research, for example, at the instrument and variable selection stage. While it is understood there will always be biases in research, the researcher took steps to maintain self-awareness and continuously monitor for influences of biases in order to minimize the potential effects.

Limitations related to the agreement with the Administrative Office of the Courts mandated that interviews took place over a limited period of time (4 months) in cross-sections. Interviews at these slices of time meant data was vulnerable to other influences on the participant, for example, stressors or mood at the time. Additional interviews, or interviews conducted at longer intervals, could have allowed for additional experiences and insights by the participant, thereby enriching the data. Moreover, the researcher's notetaking might have detracted from establishing rapport and facilitating the interviews. With regard to inter-rater reliability, it was not possible to maintain a "chain of evidence". This would have involved a second researcher to review the report, follow the steps of analysis, and ensure data was presented in an accurate way while also addressing the research question.

Additionally, further triangulation and corroborative data could have occurred had the researcher been able to access additional information. The participant's court records (for example, presentencing file) could have provided additional interpretive context. However, this level of access was not possible because AOC would not allow a "record review." and because the information found in these types of judicial documents is sensitive and private.

Ethical Issues

There were ethical considerations related to the participant being enrolled in and monitored by a court program. For instance, despite being told participation was voluntary, some

potential participants might have felt that it was mandatory and that not participating may have negatively impacted their standing within the drug court system. In addition, participants may have felt they could not speak critically about the program, for fear of repercussions or loss of status within the drug court program.

The other ethical considerations were related to data collection with a population that falls under the purview of a government entity. Before the researcher could conduct the data collection, a Memorandum of Understanding (MOU) was signed with the Administrative Office of the Courts. This MOU served three purposes: to establish guidelines and define the relationship between the AOC and the researcher regarding the participation of Franklin County Drug Court participants in the research project, ensure the confidentiality of any information or data obtained consistent with applicable statutory mandates, and define the responsibilities of the researcher, most of which are outlined in the IRB protocol that was approved by the University of Kentucky. The MOU required the researcher to allow the AOC to review the project manuscript for approval should the researcher decide to submit for publication. In addition, the MOU asked that the researcher sign a non-dissemination agreement, which forbids the researcher from ever releasing any information related to the participants. It is fair to say that this MOU and the fact that AOC had purview over this population largely dictated how this study could be conducted.

Future Clinical and Research Directions

The current findings tentatively suggest that addiction professionals should assess an individual's self-efficacy early in treatment and shape a treatment plan accordingly. An individual with lower self-efficacy ratings and lower intrinsic motivation to change may initially need more tools that can help her improve in these areas. For example, as suggested in this study,

a facilitator in recovery can model a successful treatment outcome, increase an individual's accountability, and foster a sense of hope and optimism. All of these factors may lead to an increase in the "want power" factor that the participant discussed.

This study illustrates the potential virtual application of this type of art intervention to a wide range of populations for whom traditional in-person intervention is less feasible. Virtual interventions could be effective with incarcerated women or with a population for whom disabilities mean face-to-face interactions are not possible. This virtual component could eliminate some of the barriers that are found with these populations.

A theme across the interviews was that "buy in" to a comprehensive continuum of treatment was necessary to experience the unique effects the adjunctive therapy of art interventions provide. The impact of art as a complementary therapy within a wider network of care could be further examined in future studies. A common adage among addiction professionals is "we need lots of tools for the toolbox" to work effectively with individuals with SUDs. Art as a complementary treatment could potentially serve as an effective "tool", particularly with a female population.

Future studies could explore a comprehensive treatment program that does not include an art component. Findings related to long-term sobriety outcomes and self-efficacy ratings of these programs could be compared to that of programs that include art as a complementary therapy within a comprehensive program. In addition, future studies could examine the effectiveness of stand-alone therapeutic art programs related to these constructs, which would allow for further inferences to be made regarding the role that this complementary therapy may play in women's addiction treatment outcomes.

This study tentatively suggests that an art program facilitated by a woman in recovery is beneficial to female participants as it provides a model of competence in maintaining sobriety and could increase treatment adherence. It would be worth exploring how an art intervention would benefit women in addiction if it were facilitated by an individual who is not in recovery. While it is possible that the art activities and relationships with other participants that take place in this type of intervention would still occur, it is possible that it is the credibility of the facilitator that "solidifies" the experience and provides an additional role model within a participant's social support network.

The role of MAT provided by drug court in successful sobriety outcomes was highlighted in this study. For some, this pharmacological tool may be vital in initiating and maintaining abstinence from drug use (Bart, 2012). As such, drug courts should encourage and facilitate this approach to sobriety, as program outcomes may be better for those who engage in this form of treatment. While there is concern by those overseeing drug court about the diversion and abuse of some forms of MAT, namely buprenorphine, there should be an opportunity for individuals to use this particular pharmacological approach. Drug courts could implement strategies to dissuade individuals to divert and abuse, for example, pill counts and quantitative drug screens.

As this study highlighted the potential important role that drug court can play in addiction treatment for women, future studies could serve as a model for other similar judicial programs and additionally inform addiction treatment programs that serve a population that is similar to those found in a drug court setting. This includes individuals with long-term addiction, history of severe trauma, and intergenerational drug use.

This judicial program's focus on women may be particularly salient as the number of women incarcerated has increased significantly in recent years, with many offenses drug-related

(Mauer, 2013). Many offenses by women are directly related to drug use or are committed in order to support their substance abuse behaviors. As such, the female offender population may be uniquely receptive to addiction treatment programs that provide a path for women to not only avoid incarceration but also engage in activities that support and promote their recovery from drug use, thereby, decreasing the potential for future offenses.

Further studies could examine this program and its effects in a quantitative manner in part by using the current findings to create surveys. Surveys and measures would allow for further examination of the potential value of art interventions in addiction treatment settings, particularly within the structured environment that a drug court setting provides. This would have particular value if administered to groups as opposed to case studies. In addition, future research could also explore the potential gender differences regarding the benefit of art interventions within addiction treatment settings. The development and implementation of surveys or self-efficacy measures would also glean additional information about effective program components of drug court. In addition, this quantitative data could be used to analyze outcomes in comparison to drug courts without an art component. Finally, future studies would benefit from using a larger and more diverse sample to examine how the treatment needs might differ based on backgrounds and ethnicities of women.

These findings could be beneficial to the Yes Arts program and other similar agencies that offer this type of complementary therapy. For example, as the participant cited the therapeutic value of a woman in recovery conducting the group, Yes Arts could prioritize this quality when finding facilitators for their programs. In addition, the feedback the participant gave regarding aspects of the program she found most beneficial could be used to guide future design and implementation.

Overall, these preliminary findings illustrate the potential value of an art intervention within a drug court setting that mandates multifaceted addiction treatment. The findings suggest that there is benefit in this type of ancillary program that is embedded with a comprehensive treatment program. By highlighting empirically-based positive effects of holistic addiction care, it is possible that clinicians will see the value in incorporating these types of ancillary interventions into their programs.

Conclusion

Art interventions within a drug court can play a significant role in women's recovery from drug addiction and enhance women's self-efficacy. Specifically, based on current findings, an art component in a drug court setting may have particular value to recovery and self-efficacy if this specialty court setting establishes mechanisms for accountability and mandates a number of trauma-informed recovery activities to its participants. The current study provided preliminary findings that suggest drug court programs could effectively incorporate this multifaced approach tailored to the unique needs of female participants. While an art component may likely enhance self-efficacy and therefore recovery, in order to be effective it should be embedded within a larger context of a comprehensive and supportive treatment setting. Clearly, women in recovery face multiple obstacles and the recovery process is complex and dynamic. Self-efficacy can be impacted by the ongoing effects of issues such as trauma history, lack of stability, unhealthy relationships, and lack of access to care. Any one type of intervention alone, including therapeutic art, would likely be insufficient to maintain sobriety.

References

Adams, J.B., & Madson, M.B. (2006). Reflection and outlook for the future of addictions treatment and training: An interview with William R. Miller. *Journal of Teaching in the Addictions, 5*(1), 95-109. https://doi.org/10.1300/J188v05n01_07

Agrawal, A., Gardner, C., Prescott, C., & Kendler, K. (2005). The differential impact of risk factors on illicit drug involvement in females. *Social Psychiatry and Psychiatric Epidemiology, 40*, 454-466. https://doi.org/10.1007/s00127-005-0907-0

Alcoholics Anonymous. (1976). *Alcoholics Anonymous: The Story of How Many Thousands of Men and Women Have Recovered From Alcoholism* (3rd ed). New York: Alcoholics Anonymous World Services.

Aletraris, L., Paino, M., Edmond, M. B., Roman, P.M., & Bride, B.E. (2014). The use of art and music therapy is substance abuse treatment programs. *Journal of Addiction Nursing, 25*(4), 190-196. https://doi.org/10.1097%2FJAN.0000000000000048

Amaro H., & Hardy-Fanta C. (1995). Gender relations in addiction and recovery. *Journal of Psychoactive Drugs. 27*(4), 325–337. https://doi.org/10.1080/02791072.1995.10471698

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC.

Ames, G.E., Heckman, M.G., Grothe, K.B., & Clark, M.M. (2012). Eating self-efficacy: Development of a short-term WEL. *Eating Behaviors, 13*(4), 375-378. https://doi.org/10.1016/j.eatbeh.2012.03.013

Annis, H.M., & Graham, J.M. (1988). Situational Confidence Questionnaire (SCQ-39) User's Guide. Toronto, Canada: Addiction Research Foundation.

Arfken, C.L., Klein, C., di Menza, S., & Schuster, C.R. (2001). Gender differences in problem severity at assessment and treatment retention. *Journal of Substance Abuse Treatment 20*(1), 53–57.

Baird, M., Blount, A., Brungardt, S., Dickinson, P., Dietrich, A., Epperly, T., Green, L., Henley, D., Kessler, R., Korsen, N., McDaniel, S., Miller, B., Pugno, P., Roberts, R., Schirmer, J., Seymour, D., & DeGruy, F. (2014). The development of joint principles: Integrating behavioral health care into the patient-centered medical home. *Annals of Family Medicine, 12*(2), 183-185. https://doi.org/10.1370/afm.1634

Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. W.H. Freeman and Company.

Bandura, A., & National Institute of Mental Health. (1986). *Prentice-Hall series in social learning theory. Social foundations of thought and action: A social cognitive theory.* Prentice-Hall, Inc.

Bart, G. (2012). Maintenance medication for opiate addiction: the foundation of recovery. *Journal of Addiction Disease, 31*(3), 207–225. https://doi.org/10.1080/10550887.2012.694598

Bechelli, M.J., Caudy, M., Gardner, T.M., Mancuso, D., Samuels, P., Shah, T., Venter, H.D. (2014). Case studies from three states: Breaking down silos in health care and criminal justice. *Health Affairs, 33*(3), 474-481.

Brindis, C., & Theidon, K. (1997) The Role of Case Management in Substance Abuse Treatment Services for Women and Their Children, *Journal of Psychoactive Drugs*, *29*(1), 79-88. https://doi.org/10.1080/02791072.1997.10400172

Brady, T.M., & Ashley, O.S. (2005). Women in substance abuse treatment: Results from the

alcohol and drug services study [ADSS]. Rockville, MD: Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Brady, K., Beck, S., & Greenfield, S. (2009). Women and Addiction: A Comprehensive Handbook. New York: Guilford.

Bryant, J., & Treloar, C. (2007). The gendered context of initiation to injecting drug use: evidence for women as active initiates. *Drug and Alcohol Review*, *26*(3), 287-293. https://doi.org/10.1080/09595230701247731

Bureau of Justice Statistics (2019). *Prisoners in 2017.* Retrieved from: https://www.bjs.gov/content/pub.pdf/p17_sum.pdf

Carr, E.S. (2003). Rethinking Empowerment Theory Using a Feminist Lens: The Importance of Process. *Affilia, 18*(1), 8–20. https://doi.org/10.1177/0886109902239092

Carroll, K.M., & Onken, L.S. (2005). Behavioral therapies for drug abuse. *American Journal of Psychiatry, 162*(8), 1452–1460. https://doi.org/10.1176%2Fappi.ajp.162.8.1452

Center for Substance Abuse Treatment. (2009). *Substance Abuse Treatment: Addressing the Specific Needs of Women. Treatment Improvement Protocol (TIP) Series 51*. HHS Publication No. (SMA) 09-4426. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Chen, L.Y., Strain, E.C., Crum, R.M., & Mojtabai, R. (2013). Gender differences in substance abuse treatment and barriers to care among persons with substance use disorders with and without comorbid major depression. *Journal of Addiction Medicine, 7*(5), 325-334. https://doi.org/10.1097%2FADM.0b013e31829b7afe

Choi, N.G., DiNitto, D.M., Marti, C.N., & Choi, B.Y. (2017). Association of adverse childhood experiences with lifetime mental and substance use disorders among men and women aged 50+ years. *International Psychogeriatrics*, *29*(3), 359-372. https://doi.org/10.1017/s1041610216001800

Chou, R., Korthuis, P.T., Weimer, M., Bougatsos, C., Blazina, I., Zakher, B., Grusing, S., Devine, B., & McCarty, D. (2016). *Medication-Assisted Treatment Models of Care for Opioid Use Disorder in Primary Care Settings*. Rockville (MD): Agency for Healthcare Research and Quality (US); (Technical Briefs, No. 28.).

Christiansen, D.M., & Hansen, M. (2015). Accounting for sex differences in PTSD: A multi-variable mediation model. *European Journal of Psychotraumatology*, *6*(1), 260-268. https://doi.org/10.3402/ejpt.v6.26068

Connelly, F.M., & Clandinin, D.J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, *19*(5), 2-14. doi:10.3102/0013189X019005002

Connery, H.S. (2015). Medication-assisted treatment of opioid use disorder: review of the evidence and future directions. *Harvard Review of Psychiatry*, *23*(2), 63-75. https://doi.org/10.1097/hrp.0000000000000075

Creswell, J.W. (2013). Qualitative inquiry and research design: choosing among five approaches. Thousand Oaks, CA: SAGE Publications.

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, *11*(100), 1-9.

De Beauvoir, S. (1972). *The Second Sex*. Harmondsworth: Penguin.

DiClemente, C., Carbonari, J., Daniels, J., Donovan, D., Bellino, L., & Neavins, T. (2001). Self-efficacy as a matching hypothesis: Causal chain analysis. In Longabaugh, R., Wirtz, P.

(eds.) Project MATCH Hypotheses: Results and Causal Chain Analyses, NIAAA Project MATCH Monograph Series, Vol. 8, 239-259, NIH Publication No. 01-4238, Washington: Government Printing Office.

Doolin B. (1998). Information technology as disciplinary technology: Being critical in interpretative research on information systems. *Journal of Information Technology*, *13*, 301-311.

Drake, J.E., Coleman, K., & Winner, E. (2011). Short-term mood repair through art: Effects of medium and strategy. Art Therapy. *Journal of the American Art Therapy Association, 28*(1), 26–30. https://doi.org/10.1080/07421656.2011.557032

Felitti, V. J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M. P., & Marks, J.S. (1998). Relationship of childhood abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine, *14*(4), 245-258. https://doi.org/10.1016/s0749-3797(98)00017-8

Frajzyngier, V., Neaigus, A., Gyarmathy, V.A., Miller, M., & Friedman, S.R. (2007). Gender differences in injection risk behaviors at the first injection episode. *Drug and Alcohol Dependence*, *89*(2-3), 145-152. https://doi.org/10.1016/j.drugalcdep.2006.12.021

Freeman, E. (2001). *Substance abuse intervention, prevention, rehabilitation, and systems change: Helping individuals, families, and groups to empower themselves.* Columbia University Press.

Goldschmidt, L., Richardson, G.A., Cornelius, M.D., & Day, N.L. (2004). Prenatal marijuana and alcohol exposure and academic achievement at age 10. *Neurotoxicology Teratology*, *26*(4), 521–532. https://doi.org/10.1016/j.ntt.2004.04.003

Goodwin, L., & Sias, S. (2014). Severe substance use disorder viewed as a chronic condition and disability. *Journal of Rehabilitation*, *80*(4), 42-44.

Grant B.F, Dawson D.A., Stinson F.S., Chou S.P., Dufour M.C., & Pickering R.P. (2006). The 12-Month prevalence and trends in DSM-TR-IV alcohol abuse and dependence. *Alcohol Research and Health*, *29*(2), 79–91. https://doi.org/10.1016/j.drugalcdep.2004.02.004

Greenfield, S.F., Back, S.E., Lawson, K., & Brady, K.T. (2010). Substance Abuse in Women. Psychiatric Clinics of North America, *33*(2), 339-355. https://doi.org/10.1016%2Fj.psc.2010.01.004

Grucza, R.A., Norberg, K., Bucholz, K.K., & Bierut, L. J. (2008). Correspondences between secular changes in alcohol dependence and age in drinking onset among women in the united states. *Alcoholism: Clinical and Experimental Research*, *32*(8), 1493-1501. https://doi.org/10.1111/j.1530-0277.2008.00719.x

Gutierrez L.M., & Lewis E.A. (1999) *Empowering women of color*. Columbia University Press.

Gwaltney, C.J., Shiffman, S., Norman, G.J., Paty, J.A., Kassel, J.D., & Gnys, M., Hickcox, M., Waters, A., & Balabanis, M. (2001). Does smoking abstinence self-efficacy vary across situations? Identifying context-specificity within the Relapse Situation Efficacy Questionnaire. *Journal of Consulting and Clinical Psychology*, *69*(3), 516-527.

Hassel, A., Nordfjærn, T., & Hagen, R. (2013). Psychological and interpersonal distress among patients with substance use disorders: Are these factors associated with continued drug use and do they change during treatment? *Journal of Substance Use*, *18*, 363–376. doi:10.3109/14659891.2012.685122

Hawke, J.M., Jainchill, N., & De Leon, G. (2000). The prevalence of sexual abuse and its impact on the onset of drug use among adolescents in therapeutic community drug treatment,

Journal of Child & Adolescent Substance Abuse, *9*(3), 35-49. https://doi.org/10.1300/J029v09n03_03

Holt E., & Kaiser D.H. (2009). The First Step Series: Art therapy for early substance abuse treatment. *The Arts in Psychotherapy*, *36*, 245–250. https://doi.org/10.1097%2FJAN.0000000000000048

Hser, Y.I. (2007). Predicting long-term stable recovery from heroin addiction: findings from a 33-year follow-up study. *Journal of Addictive Diseases*, *26*(1), 51-60. https://doi.org/10.1300/j069v26n01_07

Hughes, K., Bellis, M.A., Hardcastle, K.A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *Lancet Public Health*, *2*(8), 356-366. https://doi.org/10.1016/s2468-2667(17)30118-4

Hulse, G.K., Milne, E., English, D.R., & Holman, C.D. (1997). The relationship between maternal use of heroin and methadone and infant birth weight. *Addiction*. 92, 1571–1579.

Hunter, B. A., Jason, L.A., & Keys, C.B. (2013). Factors of empowerment for women in recovery from substance use. *American Journal of Community Psychology*, *51*(1), 91-102. https://doi.org/10.1007/s10464-012-9499-5

Ilgen, M., McKellar, J., & Moos, R., (2007). Personal and treatment-related predictors of abstinence self-efficacy. *Journal on Studies on Alcohol and Drugs*, *68*(1), 126-132. https://doi.org/10.15288/jsad.2007.68.126

Johnson J.L., & Leff, M. (1999). Children of substance abusers: Overview of research findings. *Pediatrics*. *103*(5 Pt 2), 1085–1099.

Jones, C.M., Mack, K.A., & Paulozzi, L.J. (2013). Pharmaceutical overdose deaths, United States, 2010. *Journal of the American Medical Association*, *309*(7), 657-659. https://doi.org/10.1001/jama.2013.272

Jones, H.E., Deppen, K., Hudak, M.L., Leffert, L., McClelland, C., Sahin, L., Starer, J., Terplan, M., Thorp, J.M., Jr, Walsh, J., & Creanga, A.A. (2014). Clinical care for opioid-using pregnant and postpartum women: the role of obstetric providers. *American Journal of Obstetrics and Gynecology*, *210*(4), 302-310. https://doi.org/10.1016/j.ajog.2013.10.010

Jordan, J. (2010). *Relational cultural therapy*. American Psychological Association.

Kaimal, G., & Ray, K. (2017). Free art-making in an art therapy open studio: Changes in affect and self-efficacy. *Arts & Health*, *9*(2), 154-166. https://doi.org/10.1080/17533015.2016.1217248

Kaplan, L. (2008). The role of recovery support services in recovery-oriented systems of care (DHHS Publication No. (SMA) 08-4315).

Kelly, J.F, & Greene, M.C. (2014). Where there's a will there's a way: A longitudinal investigation of the interplay between recovery motivation and self-efficacy in predicting treatment outcome. *Psychology of Addictive Behaviors*, *28*(3), 928-934. https://doi.org/10.1037%2Fa0034727

Knopf, A. (2019). Study finds MAT combined with 12-Step residential treatment is effective. *Alcoholism and Drug Abuse Weekly*, *31*(37), 1-3. https://doi.org/10.1002/adaw.32492

LaFave, L. Desportes, L., & McBride, C. (2009). Treatment outcomes and perceived benefits: A qualitative and quantitative assessment of a women's substance abuse treatment program. *Women & Therapy*, *32*(1), 51-68. https://doi.org/10.1080/02703140802384743

Lester, B.M., Tronick, E.Z., LaGasse, L., Seifer, R., Bauer, C.R., Shankaran, S., Bada, H.S., Wright, L.L., Smeriglio, V.L., Lu, J., Finnegan, L.P., & Maza, P.L. (2002). The maternal lifestyle study: effects of substance exposure during pregnancy on neurodevelopmental outcome in 1-month-old infants. *Pediatrics*, *110*(6), 1182–1192. https://doi.org/10.1542/peds.110.6.1182

Litt, M.D., Kadden, R.M., Cooney, N.L., & Kabela, E. (2003). Coping skills and treatment outcomes in cognitive-behavioral and interactional group therapy for alcoholism. *Journal of Consulting and Clinical Psychology*, *71*(1), 118–128. https://doi.org/10.1037/0022-006X.71.1.118

Marlatt, G.A. (1985). Relapse prevention: Theoretical rationale and overview of the model. In G. Marlatt & J. Gordon (Eds.), *Relapse prevention*. Guilford Press.

Marlowe, D.B., Festinger, D.S., Lee, P.A., Dugosh, K.L., Benasutti, K.M. (2006). Matching judicial supervision to clients' risk status in drug court. *Crime and Delinquency*, *52*(1), 52-76.

Marlowe, D.B., Festinger, D.S., Dugosh, K.L, Benasutti, K.M., Fox, G., Croft, J. (2012). Adaptive programming improves outcomes in drug court: An experimental trial. *Criminal Justice and Behavior*, *39*(4), 514-532.

Martin, G.W., Wilkinson, D.A., & Poulos, C.X. (1995). The drug avoidance self-efficacy scale. *Journal of Substance Abuse*, *7*(2), 151-163. https://doi.org/10.1016/0899-3289(95)90001-2.

Mauer, M. (2013). The changing radical dynamics of women's incarceration. Washington, DC: The Sentencing Project.

May, E.M., Hunter, B.A,, Ferrari, J., Noel1, N., & Jason, L.A. (2015). Hope and abstinence self-efficacy: positive predictors of negative affect in substance abuse recovery. *Journal of Community Mental Health, 51*(6), 695-700. https://doi.org/10.1007/s10597-015-9888-y

McHugh, R.K., Wigderson, S., & Greenfield, S.F. (2014). Epidemiology of substance use in reproductive-age women. *Obstetrics and Gynecology Clinics of North America, 41*(2), 177-189. https://doi.org/10.1016/j.ogc.2014.02.001

Mee-Lee, D.E. (2013). *The ASAM Criteria: Treatment criteria for addictive, substance-related, and co-occurring conditions.* (3rd ed.). Carson City, NV: The Change Companies.

Melvin, A.M., Davis, S., & Koch, D.S. (2012). Employment as a predictor of substance abuse treatment completion. *Journal of Rehabilitation, 78*(4), 31-37.

Merikangas K.R., & Stevens D.E. (1998). Substance abuse among women: Familial factors and comorbidity. In: Wetherington C. and Roman A., (Eds.). Drug Addiction Research and the Health of Women. (pp. 245-269). Rockville, MD: National Institute on Drug Abuse; 1998. pp. 245–269. NIH Publication No. 98-4290.

Miles, M.B., Huberman, A.M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, California: SAGE Publications, Inc.

Miller, W., & Rollnick, S. (1991). Motivational interviewing: Preparing people to change addictive behavior (1st ed.). New York: Guilford Press.

Moxley, D.P., Feen-Calligan, H.R., Washington, O. G. M., & Garriott, L. (2011). Quilting in self-efficacy group work with older African American women leaving homelessness. *Art Therapy, 28*(3), 113-122. https://doi.org/10.1080/07421656.2011.599729

Najavits L.M., & Weiss R.D., Shaw, S.R. (1997). The link between substance abuse and posttraumatic stress disorder in women. A research review. *American Journal on Addictions, 6*(4), 273–283.

Najavits, L.M. (2002). Seeking safety: Therapy for trauma and substance abuse. *Corrections Today, 64*(6), 136-139.

Najavits, L.M., & Schmitz, M. (2012). Why do women with PTSD and SUD use substances? A study of expectancies. *European Psychiatry, 27*(1). https://doi.org/10.1016/S0924-9338(12)74251-7

National Institute on Drug Abuse. (2020, May 29). Treatment and Recovery. https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/treatment-recovery

Neale, J., Tompkins, C.N.E., Marshall, A.D., Treloar, C., & Strang, J. (2018). Do women with complex alcohol and other drug use histories want women-only residential treatment? *Addiction, 113*(6), 989-997. https://doi.org/10.1111/add.14131

New York State Education Department, (2011). Adult Career and Continuing Education Services. Substance Use Disorders and Vocational Rehabilitation Implications.

Niaura, R. (2000). Cognitive social learning and related perspectives on drug craving. *Addiction, 95*(8s2), 155-164. https://doi.org/10.1046/j.1360-0443.95.8s2.4.x

O'Connell, M., Tondora, J., Croog, G., Evans, A., & Davidson, L. (2005). From rhetoric to routine: Assessing perceptions of recovery-oriented practices in a state mental health and addiction system. *Psychiatric Rehabilitation Journal, 28*(4), 378–386. https://doi.org/10.2975/28.2005.378.386

Olff, M., Langeland, W., Draijer, N., & Gersons, B.P.R. (2007). Gender differences in posttraumatic stress disorder. *Psychological Bulletin, 133*(2), 183–204. https://doi.org/10.1037/0033-2909.133.2.183

Osterman, R., Lewis, D., & Winhusen, T. (2017). Efficacy of motivational enhancement therapy to decrease alcohol and illicit drug use in pregnant substance users reporting baseline alcohol use. *Journal of Substance Abuse Treatment, 77*, 150-155. https://doi.org/10.1016/j.jsat.2017.02.003

Pantridge, C., Charles, V., DeHart, D., Iachini, A., Seay, K., Clone, S., & Browne, R. (2016). Examining the role of peer support services in a substance abuse treatment setting: A ground-level view of evidence-based practice. *Alcoholism Treatment Quarterly, 34*(3), 337-353.

Patel, K., Boutwell, A., Brockmann, B.W., & Rich, J.D. (2014). Integrating correctional and community care for formerly incarcerated people who are eligible for Medicaid. *Health Affairs*, *33*(3), 468-473. https://doi.org/10.1377/hlthaff.2013.1164

Patrick, S.W., Davis, M. M., Lehmann, C.U., & Cooper, W.O. (2015). Increasing incidence and geographic distribution of neonatal abstinence syndrome: United States 2009 to 2012. *New England Journal of Medicine, 372*, 2118-2126. https://doi.org/10.1038/jp.2015.63

Penberthy, J.K., Konig, A., Gioia, C. J., Rodriguez, V.M., Starr, J.A., Meese, W., Worthington-Stoneman, D., Kersting, K., & Natanya, E. (2015). Mindfulness-based relapse prevention: History, mechanisms of action, and effects. *Mindfulness*, *6*, 151-158. https://doi.org/10.1007/s12671-013-0239-1

Piat M., Sabetti J., Couture A., Sylvestre, J., Provencher, H., Botschner, J., & Stayner, D. (2009). What does recovery mean for me? Perspectives of Canadian mental health

consumers. *Psychiatric Rehabilitation Journal*, *32*(3), 199–207. https://doi.org/10.2975/32.3.2009.199.207

Pilowsky, D. J., Wu, L.T., Burchett, B., Blazer, D.G., & Ling, W. (2011). Depressive symptoms, substance use, and HIV-related high-risk behaviors among opioid dependent individuals: Results from the clinical trials network. *Substance Use and Misuse*, *46*(14), 1716-1725. https://doi.org/10.3109/10826084.2011.611960

Poorman, P. B. (2003). *Microskills and theoretical foundations for professional helpers*. Allyn and Bacon.

Prochaska, J., & DiClemente, C. (1984). *The transtheoretical approach: Crossing the traditional boundaries of therapy*. Krieger.

Rawson, R.A, Obert, J.L, McCann, M.J, Smith, E., & Scheffy, E. (1989). The neurobehavioral treatment manual. The Matrix Center, Beverly Hills, CA.

Rawson, R.A., Shoptaw, S.J., Obert, J.L., McCann, M.J., Hasson, A.L., Marinelli-Casey, P.J., Brethen, P.R., & Ling, W. (1995). An intensive outpatient approach for cocaine abuse treatment: The Matrix model. *Journal of Substance Abuse Treatment*, *12*(2), 117-127. https://doi.org/10.1016/0740-5472(94)00080-b

Ries, R.K., Fiellin, D.A., Miller, S.C., & Saitz, R. (2014). *The ASAM Principles of Addiction Medicine.* Philadelphia: Wolters Kluwer.

Riessman, C.K. (1993). *Narrative analysis*. Newbury Park: Sage Publications.

Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman and R. G. Burgess (Eds.), *Analyzing qualitative data*, (pp. 173-194).

Ritchie, J., & Lewis, J. (2003). *Qualitative research practice*. Sage Publications.

Sacks, J.Y., McKendrick, K., & Hamilton, Z. (2012). A randomized clinical trial of a therapeutic community treatment for female inmates: Outcomes at 6 and 12 months after prison release. *Journal of Addictive Disorders, 31*(3), 258–269. https://doi.org/10.1080/10550887.2012.694601

Sanders, L.M., Trinh, C., Sherman, B.R., & Banks, S.M. (1998). Assessment of client satisfaction in a peer counseling substance abuse treatment program for pregnant and postpartum women. *Evaluation and Program Planning*, *21*(3), 287–296. https://doi.org/10.1016/S0149-7189(98)00018-4

Schwarzer, R., & Fuchs, R. (1995). Changing risk behaviors and adopting health behaviors: The role of self-efficacy beliefs. In A. Bandura, *Self-efficacy in changing societies*, (pp. 259–288.) Cambridge University Press. https://doi.org/10.1017/CBO9780511527692.011

Shadel, W. G., Martino, S. C., Setodji, C., Cervone, D., & Witkiewitz, K. (2017). Does self-efficacy causally influence initial smoking cessation? An experimental study. *Addictive Behaviors*, *73*, 199-203. https://doi.org/10.1016/j.addbeh.2017.05.018

Shepherd, S. (2020, November 24). Personal Interview.

Srivastava, A., Thomson, S.B. (2009). Framework analysis: A qualitative methodology for applied policy research. *Journal of Administration and Governance*, *4*(2), 72-79.

Stake R.E. (1995). *The art of case study research*. London: Sage Publications Ltd.

Substance Abuse Treatment: Addressing the Specific Needs of Women. (2009). *Treatment Improvement Protocol (TIP) Series, No. 51*. Center for Substance Abuse Treatment. Rockville (MD): Substance Abuse and Mental Health Services Administration (US).

Substance Abuse and Mental Health Services Administration. (2014). *Recovery*. https://www.samhsa.gov/sites/default/files/samhsa-recovery-5-6-14.pdf

Substance Abuse and Mental Health Services Administration (2013). Results from the 2013 National Survey on Drug Use and Health: National Findings. Office of Applied Studies, NSDUH Series H-48, HHS Publication No. (SMA) 14-4863). Rockville, MD.

Substance Abuse and Mental Health Services Administration (2009). Substance abuse treatment: Addressing the specific needs of women. Treatment Improvement Protocol (TIP) Series, No. 51. Center for Substance Abuse Treatment. Rockville, MD.

Substance Abuse and Mental Health Services Administration. (2009). What are peer recovery support services? HHS Publication No. (SMA) 09-4454. Rockville, MD.

Substance Abuse and Mental Health Services Administration. (2014). Trauma-Informed Care in Behavioral Health Services**.** Treatment Improvement Protocol **(**TIP**)** Series 57, HHS Publication No. (SMA) 13-4801. Rockville, MD.

Substance Abuse and Mental Health Services Administration (2018). Clinical Guidance for Treating Pregnant and Parenting Women with Opioid Use Disorder and Their Infants. HHS Publication No. (SMA) 18-5054. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Suryaprasad A.G., White J.Z, Xu F., Eichler, B., Hamilton, J., Patel, A., Hamdounia, S.B., Church, D.R., Barton, K., Fisher, C., Macomber, K., Stanley, M., Guilfoyle, S.M., Sweet, K., Liu, S., Iqbal, K., Tohme, R., Sharapov, U., Kupronis, B. A., & Holmberg, S.D. (2014). Emerging epidemic of hepatitis C virus infections among young nonurban persons who inject drugs in the United States, 2006-2012. *Clinical Infectious Disease*, *59*(10), 1411-1419. https://doi.org/10.1093/cid/ciu643

Tolia, V.N., Patrick, S., Bennett, M., Murthy, K., Sousa, J., Smith, P., Clark, R. H., & Spitzer,

A. (2015). Increasing incidence of the neonatal abstinence syndrome in U.S. neonatal ICUs. *New England Journal of Medicine, 372*(22), 2118-2126. https://doi.org/10.1056/nejmsa1500439

Tolin, D.F., & Foa, E.B. (2008). Sex differences in trauma and posttraumatic stress disorder: A quantitative review of 25 years of research. *Psychological Trauma: Theory, Research, Practice, and Policy, S*(1), 37–85. https://doi.org/10.1037/1942-9681.S.1.37

Toraghi, L.M. (2015). The effectiveness of art therapy on housewives' general health, anxiety, and self-efficacy in Tehran. *European Psychiatry*, *30*(S1), 852-852. https://doi.org/10.1016/S0924-9338(15)30665-9

Turner, S., & Maschi, T. (2015). Feminist and empowerment theory and social work practice. *Journal of Social Work Practice, 29*(2), 151-162. https://doi.org/10.1080/02650533.2014.941282

Tuten M., & Jones H.E. (2003). A partner's drug-using status impacts women's drug treatment outcome. *Drug and Alcohol Dependence*, *70*(3), 327–330. https://doi.org/10.1016/s0376-8716(03)00030-9

United Nations Population Fund. (1995). *Women empowerment*, Issue 7.

Volkow, N.D., Koob, G.F., & McLellan, A.T. (2016). Neurobiologic advances from the brain disease model of addiction. *New England Journal of Medicine, 374*, 363-371. https://doi.org/10.1056/nejmra1511480

Vroom, V.H. (1964). *Work and motivation*. New York: Wiley.

Warner, L.M., Schüz, B., Wolff, J.K., Parschau, L., Wurm, S., & Schwarzer, R. (2014). Sources of self-efficacy for physical activity. *Health Psychology*, *33*(11), 1298-1308. https://doi.org/10.1037/hea0000085

Wilder, C., Lewis, D., & Winhusen, T. (2015). Medication assisted treatment discontinuation in pregnant and postpartum women with opioid use disorder. *Drug and alcohol dependence*, *149*, 225–231. https://doi.org/10.1016/j.drugalcdep.2015.02.012

Williams, M. S., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, *15*(1), 45-55.

Witkiewitz, K., & Marlatt, G.A. (2004). Relapse prevention for alcohol and drug problems: That was zen, this is tao. *American Psychologist*, *59*(4), 224-235. https://doi.org/10.1037/0003-066x.59.4.224

Yin, R. (2009). *Case study research: Design and methods*. Sage Publications.

Zakiniaeiz, Y., & Potenza, M.N. (2018). Gender related differences in addiction: A review of human studies. *Current Opinion in Behavioral Sciences*, *23*, 171-175. https://doi.org/10.1016/j.cobeha.2018.08.004

Zilberman, M.L., Tavares, H., Andrade, A.G., & El-Guebaly, N. (2003). The impact of an outpatient program for women with substance use-related disorders on retention. *Substance Use and Misuse*, *38*(14), 2109-2124. https://doi.org/10.1081/JA-120025128

VITA

Catherine L. Troop

EDUCATION

Georgetown College, MS, Special Education
Georgetown, KY

UCL, University of London, MSc, Psychology
London, England

Centre College, BS, Psychology
Danville, KY

PUBLICATIONS

Book Chapters

Harley, D. A., Andrews, T. S., & **Troop, C**. (in review). Minority college student populations with disabilities and accommodations. In B. Kinyanjui (Ed.), Educational accommodations in higher education: A handbook for advisors. Abingdon, UK: Taylor & Francis.

Harley, D.L., **Troop, C.L**., Alston, R.J. (2020). Infectious diseases and disability. In Harley, D.L., Flaherty, C. *Disability Studies for Human Services: An Interdisciplinary and Intersectionality Approach.* New York: Springer.

Levine, A., **Troop, C.L.** (2020). Career counseling for individuals with mental health disorders. In Sametz, R.R., Joseph, M.M. *Career Counseling: A Holistic Approach to Lifespan and Special Populations*. San Diego, CA: Cognella, Inc.

Rogers, K., Wilson, K., **Troop, C**.L., & Chau, S. (2020). Enculturation and clinical supervision: Facilitating positive outcomes. In Wilson, K.B., Lusk, S.L., & Chao, S. Wilson, K. *Clinical Supervision: Understanding Diversity and Interpersonal Dynamics-Nuances and Outcomes*. Linn Creek, MO: Aspen.

Troop, C.L., Harley, D. (2019). Understanding power and privilege. In D.A. Harley, *Cultural diversity in mental health and disability counseling of marginalized groups*. Ronkonkoma, NY: Linus Learning.

Journal Articles

Troop, C.L. (in press). Beyond birth: A substance use disorder treatment program for post-partum women. *Journal of Applied Rehabilitation Counseling*.

PROFESSIONAL POSITIONS

Bluegrass Community and Technical College / Adjunct Faculty
2020 - present, Lexington, KY

University of Kentucky Healthcare / Drug and Alcohol Brief Interventionist
2017 - 2019, Lexington, KY

Kentucky Cabinet for Health and Family Services, Department for Behavioral Health, Developmental and Intellectual Disabilities / Policy Advisor
2015 - 2016, Frankfort, KY

Sibley Memorial Hospital / Emergency Department Crisis Interventionist
2013 - 2015, Washington, DC

API Associates / Therapist
2011 - 2013, Washington, DC

Boulder Alcohol Education Center / Therapist
2009 - 2010, Boulder, CO

University of Colorado / Professional Research Assistant
2008 - 2009, Denver, CO

Governor's Scholars Program / Psychology Faculty
Summer 2006, 2007, 2008, Morehead State University

Shelby County Public Schools / Special Education Teacher
2006 - 2007, Frankfort, KY

Frankfort Independent Schools / Special Education Instructional Assistant
2005 - 2006, Frankfort, KY

Great Ormond Street Hospital for Children / Asst. Psychologist
2002 - 2004, London, England

Lampton School / Learning Mentor
2001 - 2002, London, England

Bellewood Home for Children / Program Counselor
1998 - 1999, Louisville, KY

SCHOLASTIC AND PROFESSIONAL AWARDS

University of Kentucky, College of Education, John Edwin Partington and Gwendolyn Gray Partington Scholarship 2020 Awardee