

HOPE THEORY AND SUBSTANCE ABUSE TREATMENT

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A Thesis

Presented to

the Faculty of the College of Arts, Humanities, and Social Sciences

Morehead State University

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In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

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by

Rhonda L. Alexander

December 2014

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Accepted by the faculty of the Caudill College of Humanities, Arts, and Social Sciences,  
Morehead State University, in partial fulfillment of the requirements for the  
Master of Arts degree.

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## HOPE THEORY AND SUBSTANCE ABUSE TREATMENT

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Morehead State University, 2014

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Heroin abuse has become more prominent since the obtainment of prescription drugs is more difficult due to new laws and more regulations having forced physicians to refrain from prescribing as many narcotics. Men and women alike are seeking a new substance to obtain a high and heroin is easy to obtain and less expensive than prescription drugs. Heroin has become a readily available substance in many areas plagued by prescription drug use.

Individuals entering substance abuse treatment at The Hope Center located in Lexington, Kentucky are reporting use of heroin as a substitute for prescription medications. Men and women are reporting their use of heroin as an alternate drug because pain pills are more difficult to obtain. A total of sixty participants were interviewed including thirty men and thirty women. This study was conducted using mixed methods.

Quantitative methods were utilized to gather information such as gender, type of drug use, method of administration when using a drug, and how long the client had been using. Qualitative methods were used conducting face-to-face interviews with clients individually. The interviews were aimed at obtaining clients feeling of hopefulness or lack of hope about their completion and successfulness of achieving and maintaining sobriety. Another topic of discussion in the interviews regarded how many times the client had entered into substance abuse treatment. We combined information from both methods in order to determine if level of hope was affected by gender and if the number of times a client entered treatment correlated with

higher levels of hope. Another aspect of this study examined gender and the use of heroin. Finally, we explored if using IV-drugs as opposed to non-IV drugs had an effect on clients level of hope.

Through this research project we found gender was not a factor in heroin use. However, gender was a factor in level of hope for clients in substance abuse programs; males had higher levels of hope than females. Our study indicated IV- drug users were less hopeful than non IV-users. Finally, we discovered the number of times in treatment does correlate with higher levels of hope.

These results indicate the importance of implementing programs that focus on gender specific needs in substance abuse treatment. Women were found to be less optimistic about being successful in substance abuse treatment. Hope is an extremely important tool when trying to recover from substance abuse; hope provides clients with goal oriented direction on their road to recovery.

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## TABLE OF CONTENTS

<b>Chapter 1: Introduction</b> .....	<b>1</b>
The Present Study .....	2
The Purpose of the Study.....	2
Research Questions .....	3
<b>Chapter 2: Literature Review/Theoretical Framework/Hypotheses</b> .....	<b>4</b>
Literature Review .....	4
Heroin Epidemic .....	4
Effects of Heroin .....	8
Heroin Cases Throughout the State .....	10
Heroin Overdose .....	12
Treatment for Opioid Addiction .....	12
Theoretical Framework .....	16
What is Hope Theory? .....	16
Gender in Substance Use/Abuse .....	17
Gender and Level of Hope .....	18
IV Drug Use and Level of Hope .....	19
Multiple Substance Abuse Treatment Episodes and Level of Hope .....	20
Hypotheses .....	21
<b>Chapter 3: Methodology</b> .....	<b>22</b>
Variables .....	23
Quantitative Analytic Strategy .....	25
Qualitative Interviews .....	25
The Hope Scale .....	27
Qualitative Analytic Strategy .....	28
Significance of the Study .....	29
<b>Chapter 4: Results</b> .....	<b>31</b>
Correlations .....	32
Summary .....	37
<b>Chapter 5: Conclusion</b> .....	<b>38</b>
Summary of Findings .....	38
Limitations of the Present Study/Suggestions for Future Research .....	43
<b>Appendices</b> .....	<b>45</b>
Appendix A: Trait Hope Scale	
Appendix B: Qualitative Interview Questions	
<b>References</b> .....	<b>47</b>



## LIST OF TABLES

Table 1: Demographics .....	32
Table 2: Heroin Use and Gender .....	34
Table 3a: Length of Sobriety .....	36
Table 3b: “Reasons for Most Recent Relapse” .....	36
Table 3c: Reasons for Overcoming Previous Barriers .....	37

# CHAPTER 1

## INTRODUCTION

Heroin is quickly becoming a competing, if not a replacement drug for prescription medication because of the ease in obtaining the drug and the lower cost compared to prescription opiates. OxyContin and Opana were two of the most widely abused prescription pain pills. However, around 2010-2011 drug manufacturers reformulated both opiates making them harder to crush and snort (Kentucky Office of Drug Control Policy 2014). Statewide heroin overdose death in Kentucky increased by 650 percent last year and the trend appears to be continuing. As of this date, there were 876 total overdose deaths reported; with 27% of those deaths having heroin in their bloodstream (Kentucky Office of Drug Control Policy 2014). This epidemic is on the rise in other states as well and is not exclusive to Kentucky; authorities in New York have also reported a dramatic jump in heroin related deaths. From 2010 to 2012, heroin related deaths jumped 84% according to a New York City Health Department report released in 2013. In Maryland authorities are seeing a similar increase in heroin related deaths after 37 people died between September and January after using heroin laced with fentanyl (Beranek 2014).

Through research in the present study, results showed an equal amount of men and women are using heroin. Substance abuse treatment facilities have a need to address heroin addiction with gender specific methods. Dr. Strathdee (2001) of the Johns Hopkins University Bloomberg School of Public Health in Baltimore, conducted a study funded by the National Institute on Drug Abuse (NIDA). Strathdee (2001) found similar results regarding both males and females using equal amounts of heroin. However, this research was conducted for the purpose of showing a need for HIV prevention efforts that are gender-specific. Although men and women are using heroin near the same rates, they are contracting HIV through different

methods. Women are using heroin through IV injection but they are more likely to contract HIV through unprotected sex with their male partners who are infected. Researchers found this was due to risker behavior by men who use IV injection; more men reported visiting “shooting galleries” where drug abusers gather to obtain and inject drugs. Men were also more likely than women to share needles with multiple partners (Strathdee 2001).

This study also examined one of the major components in successfully treating heroin addiction and found an increased level of hope correlates with an increased number of times in treatment. Hope is defined as, “a positive motivational state that is based on an interactivity derived sense of successful agency (goal-directed energy), and pathways (planning to meet goals).” Where positive human action is goal directed; hope theory is centered on goals and the attainment of those goals (Snyder 2002).

### **The Present Study**

The present research was conducted using data we collected from The Men and Women’s Hope Centers in Lexington Kentucky. A mixed methods approach was used to gather information including the ASI-Lite (Addiction Severity Index-Lite), the Hope Scale, and open-ended face-to-face interviews. The ASI-Lite is an interview used when researching seven potential problem areas: medical, employment/support status, alcohol, drug, legal, family/social relationships, and psychiatric status. Two time periods discussed in the interview are: the past thirty days and lifetime.

### **The Purpose of the Study**

The purpose of this study was to examine the relationship several variables had on the level of hope for people who were entering substance abuse treatment programs. Additionally, this research is concerned with gender differences regarding substance abuse. Most information

available containing research on substance abuse combines men and women into the same category (Grella 2008; SAMHSA 2011). The current study examines substance abuse by researching differences between men and women with addictions. The overall goal was to determine if and how the level of hope differed by gender for people entering treatment.

### **Research Questions**

The present research seeks answers to the following questions:

- Does gender affect heroin use?
- Does gender affect level of hope in substance abuse treatment programs?
- Are IV drug users less hopeful than non IV users?
- Does the number of times in treatment correlate with higher levels of hope?

By addressing these questions we hope to better understand the needs of individuals in substance abuse treatment programs. Specifically the study seeks to identify the need for gender specific treatment in order to help women be as successful as possible when struggling with addiction.

Chapter 2 presents a review of the literature related to the growing use of heroin and the needs of people with heroin addiction. In addition, it provides a discussion of Hope Theory as it is related to success in substance abuse treatment facilities, followed by a list of hypotheses. Chapter 3 describes the research methodology used in the present study. Chapter 4 reports the results of the research, and Chapter 5 concludes the study with an explanation of the research findings, limitations of the research, and suggestions for future research.

## **CHAPTER 2**

### **LITERATURE REVIEW/THEORETICAL FRAMEWORK/RESEARCH QUESTIONS**

This chapter will address the heroin epidemic and the effects it has on the body along with the risk for overdose followed by the overall toll it has taken on society. Heroin is quickly becoming a competing, if not a replacement drug, for prescription medication because of the ease in obtaining the drug and the lower cost as compared to prescription opiates. Secondly, treatment for substance abuse use will be discussed using Hope Theory. Lastly, four hypotheses were formed concerning gender differences in heroin use, number of times treatment has been attempted and level of hope in gender specific IV users.

#### **Literature Review**

##### **Heroin Epidemic**

Van Ingram is the Executive Director for the Kentucky Office of Drug Control Policy and he has seen a resurgence of heroin in our nation and says Kentucky is no exception. The areas where use is most predominant include Northern Kentucky, Louisville, and Lexington. Police in these areas began seeing more heroin abuse around 2009-2010, but during 2013 heroin use began to increase dramatically. Police explain the increase as basic economics because illegally obtained painkillers are becoming more expensive and more difficult to obtain. In addition to decreased availability, drug manufacturers reformulated OxyContin in 2010 and Opana in 2011, two of the most widely abused prescription pain pills, making them harder to crush and snort. In contrast, the price and difficulty in obtaining heroin have decreased. The cost for one dose of heroin is about \$9 so a heavy heroin user can still purchase a days' worth of heroin cheaper than one OxyContin pill (Ingram 2014). The going rate for OxyContin on the street is \$1 per mg in most parts of the United States, the street price in Miami is only 50 cents

due to increased availability. A pill broker makes a tremendous profit because most patients obtaining prescriptions for the medication are Medicare and Medicaid patients so their doctor visit costs nothing. However, this is considered Medicare and Medicaid fraud when the patient uses their insurance card to obtain prescriptions for someone else. Pill brokers will sometimes pay up to \$680 for a filled prescription of OxyContin that consist of 80 pills (Inciardi et al. 2007). Heroin is also more popular because it's cheap; while an 80-milligram OxyContin costs \$60 to \$100 a pill on the black market, heroin cost \$45 to \$60 for a multiple-dose supply (The Partnership at Drugfree.org 2013).

Heroin has also been spreading to the southern and eastern parts of the state. One reason for the increased difficulty in obtaining prescription painkillers in Kentucky is the implementation of House Bill 1 (HB1). Kentucky HB1 expanded the states monitoring system, Kasper, by requiring all prescription providers of controlled substances to register. Since implementation, registered accounts have nearly tripled. Prior to this new bill KASPER provided less than 3,000 reports daily. Now providers request approximately 18,000 reports each day. Prescribed doses of the drugs that are monitored have fallen: Hydrocodone is down 11.8%, Oxycodone is down 11.8%, Opana is down 45.5%, and Xanax is down 14.5% (Kentucky Office of Drug Control Policy 2014). Although the KASPER system is helping to slightly reduce prescription drug abuse, heroin is replacing the pills that are kept off the street by the program. Heroin does not require a prescription and can't be monitored by a government monitoring system and it is moving into the region at an alarming rate. According to the 2011 National Survey on Drug Use and Health, the number of people who were past year heroin users in 2011 (620,000) was higher than the number in 2007 (373,000) (The Partnership at Drugfree.org 2014). Louisville law enforcement, drug treatment officials, and medical staff have

reported alarming rates of heroin abuse and overdose. Law enforcement attributes this epidemic to the crackdown on opiate prescription pill abuse and the rising street prices to obtain these types of drug. Police report the amount of heroin seized by police has skyrocketed from 104 grams in 2008 to 7,087 grams so far this year. Heroin arrests went up from 32 to 364 during that same time period. Law enforcement officials in Kentucky report that five years ago they rarely ran into cases the involved heroin. Louisville University Hospital reported treating 252 heroin overdose patients last year between June and August, up from 115 in the same period a year earlier. Local drug treatment facilities are also reporting an increase in heroin abuse (Kenning 2013).

Operation Unite reflects the three-pronged, comprehensive approach deemed necessary to combating substance abuse in Kentucky. UNITE is an acronym meaning Unlawful Narcotics Investigations, Treatment and Education. Part of Operation Unites' mission is providing assistance to 32 counties in eastern and southern Kentucky to support families and friends of substance abusers, and educating the public about the dangers of using drugs. This corporation was launched in April 2003 by U.S. Congressman Harold Rogers in response to Kentucky's growing drug epidemic of prescription painkillers and the corruption associated with drug abuse in southern and eastern Kentucky (Operation Unite RSS 2012). Paul Hays, Law Enforcement Director for Operation Unite, says the uncertainty about what heroin users are actually getting makes the drug especially dangerous because they do not know the purity of the heroin. Dealers will often cut the drug with other unknown substances in order to boost their profits. The public has no way of knowing what they are ingesting (The Partnership at Drugfree.org 2013). Heroin can be cut using many different chemicals, other drugs, and everyday items used by the public. Some of the substances used are charcoal, brick dust, sugar, coffee, motor oil, baby laxative, rat

poisoning, salt, drywall, karo corn syrup, sleepanal, adobo, dextrose, inositol, mannitol, tar in powder form, lactose, vitamin B, quinine, scopolamine, lysine, and procaine (Opiophile.org 2006). Although heroin is processed from morphine, a naturally occurring substance found in the seed pod of certain varieties of poppy plants it can still be lethal when taken in large enough doses. Another high risk of death is due to the substances pure heroin is cut with in order for the dealer to make more profit by producing more of the product. Street heroin is cut with other drugs such as antihistamines to mask stuffy noses, watery eyes, and other signs of use, or with sugar, starch, powdered milk, quinine, strychnine or other poisons, or even with other pain killers. Heroin users typically have no idea what the actual strength of the drug is or what was used to cut it; this puts the user at a higher risk of overdose or death. Therefore, it is easy to take a dose that was not weakened enough or “cut” enough, and too much heroin can stop breathing or cause users to suffocate in their own vomit. Heroin can change with each dose a person gets because there could be too much pure heroin or only a little cut with another drug that could be lethal (Online Medical Encyclopedia 2014).

The typical profile of a heroin user is changing. Louisville police say it’s no longer the hippie looking drug user from the 1960s; heroin users no longer fit the traditional stereotype. Now they are finding more heroin users are younger, educated, have a job, and have turned to heroin because they can no longer find the pills they have become addicted to through the painkiller epidemic that has flooded Kentucky during past years. The Louisville Courier Journal tells the story of a 27 year old fighting the demons of heroin abuse while locked in a Louisville jail cell. The informant reports he started illegally using prescription pain pills while in high school and became highly addicted after being prescribed the opiate painkillers after a motorcycle accident. When the physician cut off his supply of pain killers he turned to heroin



for a fix and soon became dependent on the highly addictive drug. He tells the horrors of fighting through withdrawal, writhing in pain, sweat and cramps from his heroin use (Kenning 2013). A great number of people have become addicted to prescription painkillers through legal means by being prescribed the medication for chronic pain caused through illness or injury. After they are cut off from their prescriptions by their physicians some are already addicted and some seek illegal means in order to find painkillers because their body craves the effect painkillers have. Others have gained a higher tolerance to the drugs from taking them for extended periods of time and therefore need more of the drug to achieve the same pain relief. Often their physician will not prescribe a higher dose and larger quantity; therefore the patient may seek illegal means to obtain more of the drug (Kenning 2013). If the user is unable to obtain more of the prescription drug it is more than likely they will find heroin as a comparable alternative.

### **Effects of Heroin**

Heroin is known by several other street names such as Black Tar, Big H, Horse, Brown Sugar, Dope, Junk, Muc, Skag, Smac, and Puppy Chow. It is a highly addictive drug derived from morphine, which is obtained from the opium poppy. Since heroin enters the brain quite quickly, it is very addictive and each time a user administers heroin, more is needed to get the same high. Heroin can be injected into a vein (“mainlining”), injected into a muscle, smoked in a water pipe or standard pipe, mixed in a cigarette, inhaled as smoke through a straw, (“chasing the dragon”), or snorted as powder through the nose (Ingram 2014). Although unintentional, substance abuse can originate through legitimately prescribed pain medication; others seek opiate pain killers or heroin because they don’t want to be in pain physically or emotionally. As human beings, there are many different types of pain such as physical pain likes aches and burns;

and then there is emotional pain like heartache, painful memories, guilt, sadness, insecurity, and anxiety. Most any living creature has a very instinctual drive to not hurt or to avoid pain, but it might be said that humans are subjected to many more types of pain than any other known organism (Opiate Drugs 2013).

Most people are introduced to heroin and other opioids in the form of prescription pain-killers such as OxyContin, Vicodin, Percocet, Hydrocodone, Oxycodone, and Fentanyl. When these drugs are viewed at a molecular level they are virtually identical to the drug heroin which was invented by the pharmaceutical company Bayer (Foundation for a Drug-Free World 2014). Heroin usually appears as a white or brown powder or as a black, sticky substance. Heroin and other similar opioids are highly addictive due to the ability to mimic the brain's natural processes for seeking pleasure when consumed. These drugs access and alter the same components that are involved in producing pleasure and removing pain such as the brains' pleasure center and opioid receptors, dopamine and endorphins. This process affects an individual's cognitive process of how we think and feel about pain and pleasure. Heroin is a central nervous system depressant and has several short-term effects that disappear in a few hours. Some of these effects are a feeling of euphoria and absolute relaxation followed by a warm flushing of the skin, a dry mouth, heavy extremities, sedation, constricted pupils, reduction of pain and anxiety, clouded thinking followed by alternately wakeful and drowsy states. On the down side heroin also causes impaired night vision, vomiting, constipation and depresses breathing which can cause overdose that could possibly be fatal (Opiate Drugs 2013). Long term effects of heroin that chronic users may experience are infection of the heart lining and valves, abscesses, cellulites, and liver disease. Users who inject are also subject to infectious diseases such as HIV/AIDS, hepatitis, skin infections, or bacterial or viral infections, collapsed veins, and lung infections, all of which

can result in death. Pulmonary complications, including various types of pneumonia, may result from the poor health condition of the abuser, as well as from heroin's depressing effects on respiration. Street heroin may also have additives that do not really dissolve and result in clogging the blood vessels that lead to the lungs, liver, kidneys, or brain. This can cause infection or even death of small patches of cells in vital organs. With regular heroin use, tolerance develops, meaning the abuser needs more of the drug to achieve the same intensity or effect which leads to addiction (The Partnership at Drugfree.org 2014).

### **Heroin Cases Throughout the State**

According to information from Operation Unite, heroin is slowly becoming a trendy drug in southeast Kentucky among Pike County dealers. Easy access to interstate highways seems to play a factor in where heroin is turning up on the streets because it is being brought in from out of state. Heroin has been an epidemic level problem in Northern Kentucky and most recently Fayette County, but its slowly making its way in to rural portions of Kentucky. Along with the increase in heroin sales comes an increase in heroin related overdose deaths (Operation Unite RSS 2013). The heroin epidemic is making the news in Richmond, Kentucky because it keeps showing up in their city. Police are seeing a lot more than they had years prior. The amounts they are seeing now are greater than the prior 14 or 15 years combined for the department; it is an issue the police have been working on for a while but the problem keeps going south. The drug dealers come down from the north, they meet up with somebody local, and those local people in turn introduce them to a lot of local users. Richmond Police have made hundreds of heroin related arrests in the past year; it has become a daily event. It is frustrating for the Department because the out-of-state heroin dealers are not only bringing drugs in to the community, but they are committing other crimes as well. There have been several incidents of

assaults and even a kidnapping recently involving dealers from Detroit, Michigan. Police know locals are housing the drug pushers and they are in danger of being arrested too; everybody is talking and realizes it is a big problem. The Kentucky State Police say there is a lot more heroin than they are actually seeing because it is easy to conceal and it can be snorted, smoked, or shot up with a needle (Insko 2014).

Whitley County, KY is home to the Cumberland Mountains and 38,000 acres of western Whitley County are preserved within the Daniel Boone National Forest. Cumberland Falls is also located in the state park; this is the largest waterfall in the Commonwealth of Kentucky. The University of the Cumberland's is the largest private university in the Commonwealth of Kentucky along with another top notch regional campus of Eastern Kentucky University located in Whitley County (Prewitt 2014). However, this county has seen a drastic change in IV-drug use in their region over the past five years. The drug of choice has also changed to heroin, in addition to methamphetamine, and shooting up prescription pain pills; ninety percent of the drug abusers are either using needles or Suboxone strips. Whitley County Police say there was a time when only about one in five abusers used needles; now nearly everyone prefers a needle for their fix. This trend has led to more drug users throwing out used needles and syringes into places like parks and areas near schools. Police have adapted their methods of protecting the public with the ever evolving drug landscape (Beranek 2014). Cincinnati, Ohio Police report a couple overdosing on heroin in a McDonald's play area while their five-year old girl and eight-year old boy were playing. One of the parents was unconscious and not breathing; the other was conscious but unresponsive. They recovered from what police say were "life-threatening overdoses" of heroin (Cops 2014).

## **Heroin Overdose**

Statewide heroin overdose deaths in Kentucky increased by 650 percent last year and the trend appears to be continuing. As of this date, there were 876 total overdose deaths reported; with 27% of those deaths having heroin in their bloodstream. There were 1,567 heroin trafficking charges statewide from January 2013 to September 2013 (Kentucky Office of Drug Control Policy 2014). University Hospital in Louisville, Kentucky treated 252 heroin overdose patients this year between June and August, up from 116 in the same period a year earlier. Local drug treatment facilities say they, too, are seeing an increase in addicts of the opium derived drug compared to five years ago, when the drug was rarely seen in the area (Kenning 2013). This epidemic is on the rise in other areas and is not exclusive to Kentucky; authorities in New York City have reported a dramatic jump in heroin related deaths. From 2010 to 2012, heroin related deaths jumped 84%, from 3.1 to 5.7 per 100,000 people, according to a New York City Health Department report released in 2013. That amounts to 382 deaths in 2013, more than one per day. In Maryland authorities are seeing a similar increase in heroin related deaths after 37 people died between September and January after using heroin laced with fentanyl (Beranek 2014).

## **Treatment for Opioid Addiction**

Drug abuse treatment availability in Kentucky is lacking considering the epidemic that has become a statewide issue. The Kentucky Office of Drug Control Policy states they will continue to work towards increased public education, increased access to treatment, enhanced penalties for major traffickers, and greater access to naloxone (Kentucky Office of Drug Control Policy 2014). The Kentucky Office of Drug Control Policy is amending current legislation to increase the availability of drug treatment. They are increasing the scope of mandatory coroner and medical examiner reporting in deaths involving Schedule I deaths and a direct portion of

recaptured savings from criminal justice reforms will be directed to funding of KY-ASAP; this will specify that controlled substance treatment services be offered under Medicaid. The availability of Naloxone for use as a rescue drug for narcotic overdose situations will also be increased.

Kentucky legislators have been trying to crack down on heroin after hearing it has overwhelmed their courts system, jails and social service networks. The Kentucky Senate voted unanimously to toughen penalties on heroin traffickers and provide more money for the treatment of addicts, reports the Cincinnati Enquirer (The Crime Report 2014). Senate President Pro Tem Katie Stine states, “Overdoses have become a daily occurrence in Northern Kentucky.” Campbell County District Court Judge Karen Thomas told legislators most crime in Northern Kentucky has roots in heroin (Courier-Journal 2012). This proposal would deal with both law enforcement and the medical side of heroin abuse. More money would be allocated towards substance abuse treatment through the Kentucky Agency for Substance Abuse Policy, allow first responders and people close to heroin addicts to administer the life-saving drug Naloxone to overdose victims, and grant limited immunity to good Samaritans who seek medical care for overdose victims (The Crime Report 2014). Treatment needs to be readily available without addicts in need being added to a waiting list. Heroin withdrawal in regular abusers may occur as early as a few hours after the last administration. This produces a drug craving, restlessness, muscle and bone pain, insomnia, diarrhea and vomiting, cold flashes with goose bumps (“cold turkey”), kicking movements (“kicking the habit”), and other symptoms. Major withdrawal symptoms peak between 48 and 72 hours after the last dose and subside after about a week. Sudden withdrawal by heavily dependent users who are in poor health can be fatal (The Partnership at Drugfree.org 2014).

Naloxone, also known by its brand name Narcan, is a medication called an “opioid antagonist” used to counter the effects of opioid overdose, for example morphine and heroin. The brain has many receptors for opioids and an overdose occurs when too much of any opioid like heroin or OxyContin fits in too many receptors slowing and then stopping breathing. Naloxone has a stronger affinity to the opioid receptors, than opioids like heroin or Percocet, so it knocks the opioids off the receptors for a short time. This allows the person to breathe again and reverses the overdose (Harm Reduction Coalition 2014). Naloxone is a non-addictive prescription medication. This drug is ideal for treating overdose in people who have been prescribed opioid pain medication and in people who use heroin and other opioids, and it has no potential for abuse. Naloxone is a special narcotic drug that can be used to treat narcotic drug overdose or to diagnose narcotic drug addiction. When this drug is used to treat heroin overdoses it is injected into a muscle or under the skin, or into a vein through an IV. If this drug is used to treat an overdose, some effects may be experienced such as feeling nervous, restless, or irritable, body aches, dizziness, weakness, diarrhea, stomach pain, mild nausea, fever, chills, sneezing and runny nose. When a victim is being treated for an opioid overdose, 0.4 to 2 mg/dose may be used and repeated every 2 to 3 minutes as needed (Kentucky Office of Drug Control 2014).

Treatment for heroin and opiate addiction usually begins with medically assisted detoxification, and drugs such as methadone and buprenorphine or buprenorphine-Naloxone are administered to help withdrawal symptoms. These drugs are used to help with side effects from withdrawal and cravings but not for pain. Standard Medical Management (SMM) has demonstrated efficacy through doctor prescribed buprenorphine and referring patients to self-help groups. In addition, Opioid Dependency Counseling (ODC) helps to educate patients about

addiction and recovery, relapse prevention including coping with higher risk situations, managing emotions and dealing with relationships (Weiss et al. 2011).

One of the major issues that is preventing much needed treatment is the correlation between drug addiction and crime. Unsurprisingly, incarceration alone has little effect on reduction of drug addiction or in promoting recovery (NCADD Drugs and Crime 2014). Holding someone in jail without access to alcohol and drug addiction treatment with no specific plans for treatment and recovery support upon discharge is not only ineffective, it's expensive. For many in the criminal justice system, preventing future crime and re-arrest after discharge is impossible without treatment of addiction. According to the Uniform Crime Reporting Program (UCRP) of the Federal Bureau of Investigation, there were almost 1.7 million state and local arrests for drug abuse violations in 2009. Our nation's prison population has exploded beyond capacity; 1 in 100 U.S. citizens is now confined in jail or prison. The U.S. incarcerates more people per capita than 25 of the largest European nations combined; 80% of offenders abuse drugs or alcohol. Nearly 50% of jail and prison inmates are clinically addicted and approximately 60% of individuals arrested for most types of crimes test positive for illegal drugs at the time of arrest (NCADD Drugs and Crime 2014). Imprisonment has little effect on drug abuse because 60-80% of drug abusers commit a new crime (typically a drug-driven crime) after release from prison. Approximately 95% return to drug abuse after release from prison. Studies have found that providing treatment without holding offenders accountable for their performance in treatment is ineffective (NCADD Drugs and Crime 2014). Unless they are regularly supervised by a judge 60-80% drop out of treatment prematurely and few successfully graduate. Through decades of experience, The National Council on Alcoholism and Drug Dependence (NCADD) has found that with treatment and recovery support, millions of people who have been



in the criminal justice system can break the chain through long-term recovery from addiction (NCADD Drugs and Crime 2014).

## **Theoretical Framework**

### **What is Hope Theory?**

Snyder (2002, 250) defines hope as, “a positive motivational state that is based on an interactivity derived sense of successful agency (goal-directed energy), and pathways (planning to meet goals).” Where positive human action is goal directed; hope theory is centered on goals and the attainment of those goals. As it pertains to substance abuse treatment completion, hopeless people are more likely to become lifetime abusers (Weiss, Hawkins, and Despinos 2010). A study in Sweden (Berman et al. 2008) found lack of hope led to failure of treatment seven times greater than treatment with hope installed in the program. Another study funded by the National Institute on Drug Abuse focused on three factors associated with physical and mental wellbeing; dispositional optimism, hope, and self-esteem. The results suggest that optimism, hope, and self-esteem are determinants of avoiding substance use, with the effects of these variables being mediated by attitudes, perceived norms, and perceived behavioral control. These findings suggest efforts to prevent substance use may be more effective if they address more global intrapersonal factors in conjunction with the more immediate determinants of substance use (Carvajal & Clair 1998).

Hope has long been associated with psychological health and well-being. Merriam-Webster’s Online Dictionary defines hope as “desire accompanied by expectation of or belief in fulfillment.” Hope has been viewed as multidimensional, dynamic, empowering, central to life, oriented toward future, personalized to each individual, and related to external help and caring. Hope is particularly relevant to the area of humanistic counseling because humanism is a

perspective that highlights human potential and actualization, and hope is believed to be one of the conditions that allows people to make changes to their lives and come closer to acquiring the life they want to live. Hope is necessary for clients to stay in therapy; hope also contributes to positive therapy outcomes by inspiring faith in the therapy process (Womens Addiction 2013).

### **Gender in Substance Use/Abuse**

A study was conducted in 2006 on urban mothers with alcohol and drug use and abuse issues. The findings from this study indicate mothers were more receptive to a gender-tailored and contextual treatment approach. Compared to men, women are less likely to complete substance abuse treatment programs, probably in large measure because of personal, familial, and social issues (Guzman et al. 2006). Some of these issues encountered are various barriers to effective substance abuse not shared by men such as lack of childcare when seeking substance abuse treatment. Some women are concerned their children could be taken away by authorities if their addiction is exposed. Women also reported fear of punishment if they admit having a drug addiction. Others feared violence from their husbands, boyfriends or partners if they tried to leave home and seek help for their addiction (National Institute on Drug Abuse 2014). Women's feelings of shame and guilt regarding their substance abuse might restrict their ability to seek treatment or reach out to family and friends for support. Participants identified four aspects of the therapeutic relationship as most salient: the facilitators' compassion, honesty, helpfulness, and the fact that they were not judgmental about the participants' lifestyle, particularly her use of alcohol and drugs. Most women who engaged in this study did not enter wanting treatment for alcohol or drug use. The facilitators began talking with the women about harm reduction and better ways to interact with their children and other family; from there the subject of alcohol and drug reduction came into play. Researchers found most women wanted help in how to cope with

the stress of being single mothers in disadvantaged neighborhoods with difficult circumstances. This train of thought ultimately led to the goal of reducing substance and alcohol use (Guzman et al. 2006). The concept of reducing the harm associated with substance use can be an effective tool for individuals who are receptive to engaging in services but who might not yet be interested in reducing or eliminating their drug and alcohol use. One of the participants described the broad focus of the harm reduction approach, and the emphasis on family concerns, as major factors in treatment engagement and as what encouraged her to reduce her substance abuse. She stated, “I thought there was no hope for me because I was a relapser but this program helped me with the situations of how to deal with my teenagers, how to deal with the grieving that I had of my husband, how to deal with a lot of things that also my teenagers didn’t understand. So they really helped me” (Guzman et al. 2006).

### **Gender and Level of Hope**

As a psychological, cognitive construct, hope represents the realistically possible; hope has been divided into two separate but related constructs in this study. One concept concerned hope-agency, the ability of an individual to formulate or envision goals that motivated the individual to plan a course of behavior. The second construct concerned hope-pathways, the ability to see a plan or process by which the goals might be accomplished. A study conducted by Dr. Joseph Ferrari, Department of Psychology DePaul University and funded by NIDA examined the positive personality construct of hope among men and women recovering from substance abuse. A total of 601 adult participants were involved in this study (199 women, 402 men; mean age=38.5 years old). Most participants were Caucasian or African American adults recovering from substance abuse (Ferrari et al. 2012).

This study combined levels of hope for both men and women in the results. The concept of self-liking was more strongly associated with hope agency. Resistance to impulsivity was more strongly related to hope pathways and impulse resistance was significantly predictive of both pathways and agency. Finally, self-regulation/discipline was not a significant predictor of either agency or pathways (Ferrari et al. 2012). The positive personality constructs of impulse, liking, competency and confidence resulted in higher levels of hope for both men and women.

#### **IV Drug Use and Level of Hope**

IV drug users are usually less hopeful than non IV users due to different reasons. One possibility for lower levels of hope is the low rate at which IV drugs users are diagnosed with depression (Stein 2005). Some IV drug users may not seek treatment for depression because they do not want to address their current drug addiction. Some clinicians may believe a diagnosis of major depression cannot be validly made in the context of daily drug use. Alternatively, clinicians may believe that depressive symptoms are attributable to an opiate's toxic effects, drug withdrawal, or short-term life crisis and will resolve spontaneously. Finally, practical considerations suggest that drug injectors often lead significantly disrupted lives, making adherence to treatment difficult and thus limiting the effectiveness of depression treatment (Stein 2005).

Another reason IV drug users may feel less hopeful is because of the high risk of contracting HIV. Intravenous drug users are the largest group at risk for AIDS in New York City and the main source of heterosexual transmission of the disease (Magura et al. 1998). The amount of AIDS knowledge and needle sharing among IV drug users appears to be high in the New York City area, suggesting that knowledge may not affect sharing. Despite the awareness,

their desire to use a needle or to please their drug-using friends and sexual partners is strong and immediate (Magura et al. 1998).

### **Multiple Substance Abuse Treatment Episodes and Level of Hope**

An increased number of times a person enters substance abuse treatment seems to correlate with higher levels of hope (Simpson and Joe 1993). Clients in substance abuse treatment for the first time often have high expectations of quitting drug use forever. When the client drops out of treatment and comes back again they are sometimes more hopeful because they have not set their goals so high that they set themselves up for failure. Clients entering treatment multiple times have been found to set more realistic goals and short term goals that are reachable (Simpson and Joe 1993). Others in substance abuse treatment are more hopeful because after relapsing or dropping out of treatment they reenter with encouragement from family or friends. This provides the client with more hope when they know they have support. Other clients who have previously dropped out of treatment know what to expect after multiple attempts to get sober. When a client enters treatment with the knowledge they had from previous treatment episodes it acts as a guide to help them through barriers they were unable to overcome previously (Simpson and Joe 1993).

### **Hypotheses**

**H1:** Gender does not affect heroin use.

**H2:** Gender affects level of hope in substance abuse treatment programs.

**H3:** IV drug users are less hopeful than non IV users.

**H4:** Times in treatment correlates with higher levels of hope.

Extensive reviews of the available literature on the heroin epidemic and hope theory have been provided that support the above hypotheses. However, the relationship between substance

abuse and levels of hope need further research considering the important role hope plays in addiction recovery. With the recent increase of heroin use, treatment methods that are most effective will be critical in helping addicts recover. The next chapter provides information on methods used in our present study that examine how hopeful individuals in substance abuse treatment feel.

## **CHAPTER 3**

### **METHODOLOGY**

The purpose of this chapter is to explain what type of research methods I utilized to test my hypotheses. I used mixed methods while collecting data from informants to provide a more comprehensive analysis of the research questions. First, I used the quantitative method by utilizing a generalized questionnaire to obtain demographic, family, medical and criminal history on each participant. Research participants also completed the Hope Scale which measures a cognitive model of hope which defines hope as a positive motivational state that is based on an interactively derived sense of successful agency (goal-directed energy), and pathways (planning to meet goals) (Snyder 2002). Hope is a thinking process in which people have a sense of agency (willpower) and pathways (way power) for goals; there have been strong correlations found between one's belief in their abilities to reach a goal and successful fulfilling that goal (Pattengale 2014).

Secondly, I used a qualitative method when questioning each participant about their level of hope during their treatment; I did this by using open ended questions. The level of hope I asked about included questions regarding how many times they have been in treatment and what was the outcome of each treatment episode. Another question I posed was how the client felt about their opportunity to be in treatment. My next inquiry was related to their gender; for example, I asked questions about how hopeful they felt as a male or female entering substance abuse treatment and what did they perceive to make an impact on their addiction and recovery. Other questions were designed to learn their level of hope regarding staying clean once they returned home, again based on their gender. I conducted interviews one-on-one with each

participant to obtain as much information and understanding about their level of hope as possible.

These interviews were conducted at The Hope Center in Lexington, Kentucky. The men's center has been open since 1996 and is a 110 bed facility; over a thousand men have successfully completed the program so far. The Hope Center is a long-term recovery program that uses a combination of the twelve steps of alcoholics anonymous and the recovery dynamics curriculum. In addition to long-term care the men's center also has a non-medical detoxification center that is always open and can accommodate up to eight people. The success of the 110-bed Hope Center that opened in 1996 for the men's recovery program led many in the Lexington community to urge the Hope Center to open a similar program for women. In 2002, another Hope Center opened that offered a recovery program for women. This treatment facility features SOS (supportive, safe environment to gain sobriety) instead of an emergency detoxification center. However, the SOS program does add several gender specific features and includes a health clinic. Outcome data indicates that 95 percent of women remain abstinent from drugs and alcohol six months after entering the program. One year after completing the program, 71 percent remain abstinent from drugs and alcohol. Many of those who do relapse use the tools and resources they learned and quickly return to the path of recovery before doing further damage to themselves and others (The Hope Center Lexington KY 2014).

### **Variables**

In addition to using the Hope Scale for measurement, I also utilized the Addiction Severity Index- Lite which contains a number of variables that were important to my study. The ASI-Lite uses survey questioning to determine gender and what types of drugs are being used; my research focused on heroin use and opioid abuse. The category of opiates included: pain



killers such as Morphine, Dilaudid, Demerol, Percocet, Darvon, Talwin, Codeine, and Fentanyl. Another factor included in the index is method of drug administration, including IV injection. All clients received the same standard interview with two time periods discussed; the past thirty days and lifetime data. Lifetime refers to the time prior to the last 30 days; however, if the client has been incarcerated for more than one year, I only gathered lifetime information. The exception to this rule was if the client admitted to significant drug use during incarceration. The 30 day question only requires the number of days the client used the drug. The lifetime use question was asked to determine how many times they used a drug for an extended period of time.

My main demographic variable of interest to this study was the client's gender, the question was asked with the dichotomous choices of Male=1 and Female=2. There was also a categorical question of: Have you been in a controlled environment in the past 30 days? No=1, jail=2, alcohol/drug treatment=3, medical treatment=4, psychiatric treatment=5, other=6. As a follow-up to this question respondents were asked: How many days, referring to total number of days detained in the past 30 days. This question helped to determine if there had been drug use in the past 30 days in question. In order to determine if the clients were using heroin or opiates, they were asked: in the last 30 days how many times have you used heroin or opiates, in your lifetime how many times have you used heroin or opiates? These questions were answered by writing in the amount of times the client reported use. In order to determine the route of administration the question was asked with categorical answer choices of oral=1, nasal=2, smoking=3, non-IV injection=4, IV=5. The routes of administration were listed from least severe to most severe; if the client answered more than one route of administration, the most

severe was used in the data analysis. In addition to listing the most severe method, the usual or most recent route was also documented.

### **Quantitative Analytic Strategy**

All data analysis was computed using the SPSS 17.0 software package for Windows. Descriptive analysis was utilized to look at means, standard deviations, and the range to illustrate age, type of drug use, and method of administration. Bivariate relationships were used to examine the correlation between gender and heroin use. Next, an analysis of the relationship among the variables of drug type and method of administration was conducted using a two-tailed Pearson's correlation coefficient. Lastly, a regression analyses was conducted in order to test each hypotheses. Regression analysis is a statistic used to investigate the interrelationship between selected variables; regression indicates the significance of one variables influence on another. This analysis tested the relationship between gender and level of IV use, gender and level of hope in substance abuse treatment programs, IV user's level of hope compared to non IV users, and finally the number of times in treatment related to higher levels of hope was analyzed.

### **Qualitative Interviews**

This project was designed to examine the potential variances in the level of hope of male and female clients entering substance abuse treatment and examine the potential variation in the level of hope of rural and urban residents entering substance abuse treatment. This research was conducted by using qualitative interviews with these clients along with completing reliable scales. This project consisted of interviewing thirty female and thirty male participants. During these interviews, participants were asked to complete several scales and to answer open ended interview questions. We recruited clients through the inpatient unit social worker at The Hope Center. Participants were informed of what the study included and what they would be asked to

do throughout the interview. They were also notified that everything was voluntary, confidential, and that they may end the interview at any time. The participants were also notified of the incentive offered for participating in the research project. Each client signed a consent form and then the researcher signed also; a telephone number was provided to the client in case they had questions about the study at a later time. Each interview was estimated to last about one hour and at the end of the interview participants were compensated \$25 for their time and asked to complete a payment verification form for accounting purposes. Eligibility criteria to be considered for participation included: being at least 18 years old, being an inpatient at The Hope Center, and a willingness to participate. Each person entering treatment at The Hope Center was screened for eligibility and the -Hope Study was explained to each client who met the criteria. The thirty females and thirty males in the project were from both rural and urban areas.

The interviews conducted at The Hope Center were done in a private location with only the researcher and participant in the room after an informed consent had been signed. The informed consent describes the purpose of the study, the sensitive and personal nature of the questions, and the client's right to refuse to participate in all or part of the survey. After consent was obtained the interview began. Those interviewed were new to the program and could have only been at The Hope Center for approximately 24 hours. Once the interview began, participants were asked open ended questions pertaining to their perceptions of their level of hope, barriers to entering treatment, and potential for long term sobriety. They were also asked open ended questions pertaining to their perception of barriers to treatment, their decision to enter treatment, how hopeful they are about successfully completing treatment and their chances for long term sobriety.

All interviews were confidential and sensitive material will not be shared. The confidentiality of the interviewees will be maintained by keeping each interview packet free of names and only using numbers as identifiers. As with most studies, there are limitations and possibilities that not all the information will be accurate. Some participants may not have reported honestly, possibly giving inaccurate information due to legal problems or history of abuse. Many behaviors are subject to social desirability bias, especially given the scales and open-ended questions that were interviewer-administered. However, self-report data is the only viable method for assessing historical patterns of substance use with any precision (Sobell and Sobell 1992). Numerous studies have shown that self-reported substance use is both reliable and a valid measure of actual substance use. It is also a possibility that participants may disclose more about their substance abuse in research settings where they have been assured anything they say will remain confidential. The potential risks for participants are minimal; it may be possible that some participants may have become distressed by some questions they were asked. However, each participant was reminded that their participation was voluntary and they were not obliged to answer anything and could end the interview at any time. Even though this project has limitations it also has the potential to contribute to public health in a positive way. This study was conducted over one year's time. Participant recruitment and procedures were approved by the Morehead State University Institutional Review Board.

### **The Hope Scale**

My research was conducted using The Hope Scale which measures a cognitive model of hope which defines hope as a positive motivational state that is based on an interactively derived sense of successful agency (goal-directed energy), and pathways (planning to meet goals). This instrument utilizes twelve items; four items measure pathways to thinking, four items measure

agency thinking, and four items are fillers. Participants respond to each item using an 8-point scale ranging from 1 (definitely false) to 8 (definitely true). The sum of these answers provides The Hope Score. The designation of the questions is willpower (agency) or way power (pathways). The Hope Scale is an independent predictor of success in various areas of life performance. Hope as a measurable construct is an important component of likelihood of participant success in completing treatment. Hope is a thinking process in which people have a sense of agency (willpower) and pathways (way power) for goals; there have been strong correlations found between one's belief in their abilities to reach a goal and successful fulfilling that goal (Pattengale 2014).

### **Qualitative Analytic Strategy**

Once all sixty interviews were completed, a six step approach was utilized for data analysis. The first step was to organize the data and type a summary of the notes taken during the interviews. The second step included reading all of the data collected and to document emerging ideas. The typed notes were read several times in random order to allow for comparison of individuals in particular categories (i.e. gender, drug choice). The reading and rereading of the data led to the development of themes, such as the commonality of participants who were using IV drugs. The third step was to code all of the data into categories. The fourth step included reviewing the coding and deciding on themes to include in the data analysis. The fifth step was to describe the themes that emerged from the data. And the sixth step was to interpret the findings.

Coding of data began with a review of participant responses guided by the research questions: 1) Is this your first time in substance abuse treatment?; 2) If not, how many times have you been in treatment before?; 3) What was the outcome of your treatment?; and 4) What will

make you successful this time? Through these questions we produced an initial list of codes, which was then added to as additional codes emerged from the data. To test the coding scheme and insure reliability, a second reader coded six of the transcripts which showed 100% agreement between the readers.

### **Significance of the Study**

The information from this study on level of hope for individuals entering substance abuse treatment was found to be significant by determining if there were variations in the level of hope for those entering substance abuse treatment based on gender and residency status. This study may also have introduced a proposal for new treatment options to underserved clients. The research conducted in this study provided critical information on the level of hope among women who have many obstacles to overcome when trying to enter treatment as opposed to males entering treatment. This study also showed the significance of “hope therapy” as a potential treatment for substance abuse clients to improve post-discharge outcomes such as decreased substance use, risky behavior, and increased treatment and service use. Although The Hope Center has treatment facilities for both men and women, men have more advantages in their treatment programs. The men’s program usually takes 4-6 months to complete and includes a non-medical, licensed detoxification center that has eight beds and is always open. There is a waiting list for women and they have to call and complete an over the phone screening and then they are placed on a waiting list. The Hope Center does not have an emergency shelter where they can stay until a bed becomes available, so they are referred to the Salvation Army’s emergency shelter for women and children. Another concern many women entering treatment have is what to do with their children. Women entering treatment or women in need of treatment find The Hope Center is unable to offer accommodations for their children and this causes a

potential obstacle for women with substance abuse problems. This is an issue that needs to be further investigated and possible solutions found.

## CHAPTER 4

### RESULTS

In order to gain a better understanding of how both genders have been affected by the increased use of heroin and the effects it has on people entering substance abuse treatment, qualitative interviews were conducted to obtain the most accurate information available. Gender was an independent variable of interest examined in order to find potential variances in the dependent variable level of hope between males and females entering treatment. Gender differences in substance abuse treatment are a subject that has been lacking attention in the research. When research is conducted on substance abuse treatment both men and women are typically placed in the same category (Grella 2008; SAMHSA 2011). In research that has been conducted with several thousands of men and women taking the Hope Scale, no sex differences have been obtained (Snyder 2002). However, women and men with addictions have different needs and it is vital to understand these differences in order to develop more appropriate treatment programs (Cook 2004). In order to be as thorough as possible it was necessary to include the qualitative method of one-on-one private interviews with each of the sixty participants. In addition, each participant completed the Hope Scale to determine their level of hope and the ASI-Lite, a reliable instrument, to gather information on types of substances being used. This information was gathered from thirty males and thirty females in order to provide a comparison between genders. Interviews were conducted at The Men and Women's Hope Centers in Lexington, Kentucky.



## Correlations

Demographic information for the study group is described in Table 1.

**Table 1: Demographics**

	<b>MALE</b>	<b>FEMALE</b>
<b>AGE</b>	34.43 (9.747)	31.72 (8.146)
<b>RACE</b>	74.2% White	93.5% White
<b>RESIDENCY</b>	45.2% Urban	41.9% Urban

This study was designed to answer four questions: First, does the independent variable of gender affect the dependent level of heroin use? Second, does the independent variable of gender affect the dependent variable level of hope in substance abuse treatment programs? Third, are IV drug users less hopeful than non IV users? And fourth, does number of times in treatment correlate with the dependent variable higher levels of hope? This chapter will provide a discussion on the findings from the data analysis of both the quantitative and qualitative information gathered throughout the interviews.

The qualitative analysis findings showed level of hope was affected by the gender of the participant. In order to determine how hopeful the client was, The Hope Scale was utilized as a measuring tool. The Hope Scale which measures a cognitive model of hope which defines hope as a positive motivational state that is based on an interactively derived sense of successful agency (goal-directed energy), and pathways (planning to meet goals). Hope is a thinking process in which people have a sense of agency (willpower) and pathways (way power) for goals; there have been strong correlations found between one's belief in their abilities to reach a goal and successful fulfilling that goal (Pattengale 2014). People with high hope have an

elevated sense of agency and pathways for situations in general, they approach a given goal with a positive emotional state, a sense of challenge, and a focus on success rather than failure.

People with low hope have perceptions of deficient agency and pathways in general and probably approach a given goal with a negative emotional state, a sense of ambivalence, and a focus upon failure rather than success (Snyder 2002).

The Hope Scale has been found to be a reliable and a valid method of measurement; it has acceptable internal reliability. The item-remainder coefficients for each item are significant (ranging from .23 to .63), and the coefficient alpha is acceptably high (Cronbach's alphas of .74 to .84). The highest possible Hope Scale score is 32, and the lowest score is 8. Average scores for college and non-college samples of people are approximately 24, with significantly lower scores for people who are seeking psychological help and those persons who are inpatients at psychiatric hospitals (Snyder 2002). An important factor in determining if a scale is reliable and valid is it must measure what it purports to measure; The Hope Scale does this through measuring reported agency and pathway cognitions for goals to determine if the level of hope is high or low. Lastly, when a new self-report measure is tested for validity and reliability the scale must account for unique variance in predicting theoretically related outcomes. In a series of studies the scores on the Hope Scale predicted coping, well-being, and reported psychological health responses. These results corroborate the fact that The Hope Scale captures unique predictive variance in predicting and understanding relevant coping activities (Snyder 2002).

The quantitative component of this study was designed to answer the question of: Does gender affect heroin use? Quantitative analysis findings showed gender was not affected by heroin use. When participants were asked if they used heroin, 56.7% of the males answered yes

and 43% of the females stated they had used heroin. Table 2 contains the results of these findings. My hypothesis was supported and stated as follows:

H1: Gender does not affect heroin use.

**Table 2: Heroin Use and Gender**

	<b>Male</b>	<b>Female</b>
<b>Heroin users (N=33)</b>	56.7% (n=17)	43% (n=13)
<b>Non-heroin users (N=27)</b>	53% (n=16)	47% (n=47)

Through individual interviews with both male and female clients we concluded that male participants were more hopeful than female participants entering treatment. Male clients felt more hopeful about their opportunity to be in treatment. They also felt it would be easier for them to achieve sobriety and to remain sober when compared to women. Male clients also reported having fewer difficulties/obstacles to overcome related to staying sober. The qualitative interview data revealed levels of hope are affected by gender. Males had a higher level of hope with a statistically significant mean score of 47.30 and standard deviation of 8.146. Women exhibited lower levels of hope; females had a mean score of 40.36 and a standard deviation of 10.573. Therefore, this hypothesis was supported. The hypothesis is stated as follows:

H2: Gender does affect level of hope in substance abuse treatment programs.

The hope scale was utilized to examine the clients' level of hope based on IV drug use compared to non-IV drug use. Unsurprisingly, IV users were found to be less hopeful than non-IV users; these findings represent both male and female IV drug users. IV drug users exhibited a lower level of hope; with a mean score of 42.38 and a standard deviation of 7.274. Non-IV drug

users were more hopeful with a hope mean score of 53.28 and a standard deviation of 7.712. My hypothesis was supported and stated as follows:

H3: IV drug users are less hopeful than non IV drug users.

Another section of the individual interviews was designed to determine if the number of times a client entered substance abuse treatment correlated with a higher level of hope. In hopes of obtaining this information we asked the questions: 1. Is this your first time in substance abuse treatment? A) If not, how many times have you been in treatment before? B) What was the outcome of your treatment? (How long sober? What precipitated relapse in their perception?). C) What will make you successful this time? (How will you overcome previous barriers?). As a result of these questions, we were able to determine the number of times a client entered treatment resulted in a higher level of hope; this applied to both male and female participants. Clients that have been in treatment more times had a higher level of hope. Instead of being discouraged because they had not completed prior treatment attempts or they had relapsed after treatment, this appeared to give them more hope for being successful in their present endeavor. When asked if this was their first time in treatment, 32 replied yes and 28 replied no. Participants responding yes to being in treatment before were then asked how many times they had been in treatment. The majority of 18 participants stated that had been in treatment 1-2 times, 6 participants responded 3-4 times, 2 participants responded 5-6 times, and one participant responded they had attended treatment 7 or more times; one respondent did not answer this question. Participants that had a mean score of 2.07 and a standard deviation of 1.741 or higher for treatment episodes, also had a higher hope score with a mean score of 47.30 and a standard deviation of 8.146. Participants with lower treatment episode scores with a mean of 1.83 and standard deviation of 1.234 also had lower hope scores with a mean of 40.36 and standard

deviation of 10.573. Twelve participants with the longest length of sobriety reported staying sober from less than one month up to five months; another group of six respondents reported staying sober for over two years. Participants were questioned as to why they relapsed and forty-eight percent stated relapse was precipitated by the stress of everyday life. Seventy-four percent of participants responded their reason for overcoming previous barriers was personal motivation. Therefore, this hypothesis was supported. The hypothesis is stated as follows:

H4: Times in treatment correlates with higher levels of hope

**Table 3a: Length of Sobriety**

a. Less than one month	5
b. 1-5 months	7
c. 6-10 months	1
d. 11-15 months	2
e. 16-20 months	2
f. Over or at least 2 years	6

**Table 3b: “Reasons for most recent relapse”**

a. Traumatic event/emotional reason	3
b. Discharged before completion	4
c. Left program before completion	5
d. Stress/Everyday life	11

**Table 3c: Reasons for overcoming previous barriers**

a. I won't be-don't want to be here	1
b. Personal drive/personal motivation	20
c. An actual recovery plan with a support group/sponsor	4
d. Removing oneself from toxic environment	2

**Summary**

The results of the qualitative interviews and quantitative research findings have been presented in this chapter. Qualitative analysis indicated levels of hope have been affected by three factors; gender, use of IV injected drugs, and times in treatment. Quantitative analysis indicated gender did not play a role in which clients were using heroin. All hypotheses were supported. The final chapter of this thesis will further discuss the findings of both the qualitative and quantitative data and discuss study limitations.

## CHAPTER 5

### DISCUSSION

The goal of this study was to examine the relationship between gender and substance abuse, mainly focusing on heroin. The information gathered on these two variables allowed us to examine the level of hope between males and females to determine who was more hopeful about completing substance abuse treatment and maintaining sobriety. This study utilized a mixed methods approach to obtain information from clients currently in a substance abuse treatment program. Data was gathered by conducting sixty face-to-face qualitative interviews with thirty males and thirty females entering substance abuse treatment.

This chapter begins with a discussion of empirical findings and an interpretation for the results of each of the stated hypotheses. In addition, this chapter will present limitations of the study. And finally it will offer recommendations for the direction of future research that will help determine what can be done to improve the level of hope for women in substance abuse treatment.

#### **Summary of Findings**

##### *Hypothesis 1*

The first hypothesis stated gender does not affect heroin use. We examined the use of heroin in both men and women to determine if one gender reported more heroin use. Through quantitative methods we collected clients' gender and then clients were asked if they had used heroin in the past 30 days, as well as lifetime use, then we asked the route of administration when using heroin. If the client reported they had used more than one route of administration we listed the most usual or recent method of administration. There were no statistically significant differences in reported levels of heroin use between males and females. Bivariate analysis

indicated 17 of the 30 males were heroin users and 16 of 30 females were heroin users. In addition, both genders reported they had most often used IV injection for administration of heroin. This is what the present study predicted as the outcome of this line of questioning.

Results of other research in this area are mixed in this regard. A study conducted in Vancouver, Canada revealed the rates of injection initiation were similar between male and female youth (Ahamad 2014). This study was conducted from September 2005 to November 2011 with youth enrolled into the At-Risk Youth Study, a cohort of street involved youth aged 14-26. Cox regression analyses were used to assess variables associated with injection initiation and stratified analyses considered risk factors for injection initiation among male and female participants separately. Although the rates of initiation into injecting drug use were similar for male and female street youth, the risk factors for initiation were distinct. These findings suggest a possible benefit of uniquely tailoring prevention efforts to high-risk males and females (Ahamad 2014). These findings support the conclusion that there is a need for gender specific treatment and prevention. Another study that supported my research findings was conducted with a sample of 202 problematic hard-drug users from the Netherlands (Havinga et al. 2014). These clients were recruited from 22 low-threshold care facilities, including drug consumption rooms, methadone maintenance treatment, heroin-assisted therapy, day shelter and/or night shelter, supported housing and day activity centers. Data was collected on-site through structured face-to-face interviews and findings revealed there were no significant differences between IV users with regard to age or gender (Havinga et al. 2014).

However, according to research from 2011 in rural Appalachia, males reported more lifetime drug use, including heroin. Gender differences were also present for heroin use in the past 30 days, suggesting higher rates of lifetime drug use among men. Even though the sample



of individuals that participated in this study were identified for study participation because of drug use, males still reported the use of more illegal substances (Shannon 2011). Although the research from 2011 differs from this study it is important to keep in mind heroin use has recently begun to increase dramatically in the area of study. Police in Northern Kentucky, Louisville, and Lexington began seeing a change from prescription pill abuse to heroin use in the last twelve months on the year 2013. This change has been attributed to decreased availability of prescription drugs and manufacturers ability to reformulate pain pills making them more difficult to crush and snort (Kentucky Office of Drug Control Policy 2014).

### *Hypothesis 2*

The second hypothesis suggested gender does affect level of hope in substance abuse treatment programs. Men were found to be more hopeful than women about completing substance abuse treatment and maintaining sobriety. As hope is defined, males with higher levels of hope will have more goal directed energy and planned pathways to meet the goals they set for themselves. Whereas it pertains to substance abuse treatment completion, hopeless people are more likely to become lifetime abusers (Weiss et al. 2010). This study reported women have lower levels of hope compared to men; this causes a higher risk for women to continue drug abuse. In support of this hypothesis I found women are less hopeful in substance abuse treatment programs because their needs are not being met before release. During incarceration many of the women have been exposed to communicable diseases and have other medical, education, and economic needs not adequately addressed before release from a corrections facility or from a substance abuse treatment program. Many of the women have physical and mental health needs that fall within the jurisdiction of the public health system so the help is there, however, it is not promoted through the state facilities. In a focus group study,

researchers found substance abuse, employment, and housing to be the most significant factors that facilitated or blocked successful reintegration into communities (Weiss et al. 2010).

Although substance abuse relapse is possible after treatment, other needs such as housing, employment, and childcare need to be addressed in order to reduce recidivism.

### *Hypothesis 3*

Hypothesis 3 predicted IV drug users would report being less hopeful than non-IV users. This hypothesis was also supported by data analysis showing the total number of male and female IV drug users exhibited lower levels of hope compared to their counterparts who were non-IV users. Although many studies have investigated injecting and non-injecting drug users, few have focused on differences in characteristics between these two groups. However, IV drug users have been found to be less optimistic about entering, completing, or remaining sober after substance abuse treatment. A research study conducted in the Netherlands provided several explanations for this lack of hopefulness (Havinga et al. 2014). IV drug users report having unstable housing arrangements and relying on income from illegal activities. They also have lower education levels and are more likely to drop out of school compared to non-IV users. With regard to drug use characteristics, IV users tend to start abusing drugs at a younger age, report a longer duration of drug use, a higher frequency of use, and higher rates of dependence compared to non-IV users. IV users are also more likely to use drugs other than heroin, such as cocaine and/or amphetamines, and report having poor health with higher levels of somatization and anxiety symptoms. Additionally, a quarter of participants reported public injecting due to unstable housing. As a method of harm reduction, having housing projects or supported housing programs for problematic hard-drug users was suggested as a route of prevention for recovering IV-users (Havinga et al. 2014).

#### *Hypothesis 4*

Hypothesis 4 suggested the number of times a client is in treatment will correlate with higher levels of hope. This hypothesis was also supported in this study. Both males and females that reported being in treatment multiple times were found to have higher levels of hope. Males reported entering treatment up to eight times and females reported entering treatment up to five times. Those clients who were not in treatment for the first time exhibited higher levels of hope compared to clients who were entering treatment for the first time. Another study that supports this hypothesis was conducted with 1,326 adults between 1996 and 1998 in Chicago using interviews and the ASI (Dennis et al. 2005). The exploratory results suggest that multiple episodes of care over several years are the norm. Rather than thinking of multiple episodes in terms of cumulative dosage, it is thought of as further evidence of chronicity. Therefore, we need help to develop and evaluate models of longer term recovery management. Multiple studies have demonstrated that after discharge it is fairly common for many clients to relapse and eventually return to treatment; this is more common when addiction is accompanied by one or more psychiatric problems. Retrospective and prospective treatment studies report that most participants initiate three to four episodes of treatment over multiple years before reaching a stable state of abstinence indicating clients are more hopeful each time they enter treatment. Similarly, for a given level of treatment history and current need, those who get more treatment or treatment sooner are likely to be more successful. This suggests the need for developing and evaluating approaches that focus more on continuing care and long-term recovery management. Research results also indicate that since most treatment centers work with chronic populations there is also the need to focus on integration with the healthcare system, mental health system, and the criminal justice system (Dennis et al. 2005).

Hope theory was used in this study to gain a better understanding of differences in men and women entering substance abuse treatment. Through utilizing hope scale measurements we were able to determine that males and females with substance addictions have different needs while in treatment. Women require more holistic treatment in order to increase their levels of hope so they can be more successful in completing treatment and remaining sober. Hope has been defined as a thinking process in which people have a sense of agency (willpower) and pathways (waypower) for goals (Pattengale 2014); if women are going to be successful in treatment, hope is a necessity. They also have different views on their outcomes in treatment; while men are hopeful and anticipate being successful with their treatment, women are not. Women are less hopeful and do not foresee a positive outcome if they finish their treatment plan. Another aspect we examined in this study is the use of IV drugs and the impact it has on both males and females regarding level of hope. Through utilizing the Hope Scale we were able to determine that clients who use IV injection were less hopeful than clients who administered drugs in other ways. Lastly, through quantitative methods we were able to determine that gender does not affect heroin use. Both men and women alike are beginning to use heroin and they are using IV injection as the route of administration.

### **Limitations of the Present Study/Suggestions for Future Research**

Limitations of this study include the use of self-report data in the interviews. While this data has been shown to be a reliable source of information in substance abuse research it is still possible the clients did not answer some or all questions truthfully. In addition, all clients were enrolled in one publically funded substance abuse treatment facility in Lexington, Kentucky, so the results may not be generalizable.

In accordance with the findings from this study a recommendation for future research would be directed in assisting women with gender specific needs so they can be more hopeful during treatment. If the needs of these women are met before they are discharged from treatment they may also have a more positive outlook on staying sober once treatment is completed. The issues that are causing the women to be less hopeful in believing they can achieve success in ending their addiction needs to be addressed. The reasons for women entering substance abuse treatment needs to be less about the Department of Corrections mandating their treatment and more about the client wanting to be in treatment for their own well-being. Many of the women we interviewed discussed the problem of not having childcare while they were in treatment. This created additional stress for the women; a stressor that men did not articulate in our interviews. When women leave their children to enter substance abuse treatment for six months to a year, they worry about the whereabouts of their children and who will be caring for them. Most women had the fear that their children would end up in foster care if a family member was unable to care for their child for an extended period of time. This was an issue the females were trying to work through while concentrating on their own treatment and well-being. If there was a program in place for women in treatment to have their children in a safe place it would ease the level of stress and possibly increase the level of hope.

## APPENDIX A

### THE TRAIT HOPE SCALE

*Directions:* Read each item carefully. Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.

- 1. = Definitely False
- 2. = Mostly False
- 3. = Somewhat False
- 4. = Slightly False
- 5. = Slightly True
- 6. = Somewhat True
- 7. = Mostly True
- 8. = Definitely True

- \_\_\_ 1. I can think of many ways to get out of a jam.
- \_\_\_ 2. I energetically pursue my goals.
- \_\_\_ 3. I feel tired most of the time.
- \_\_\_ 4. There are lots of ways around any problem.
- \_\_\_ 5. I am easily downed in an argument.
- \_\_\_ 6. I can think of many ways to get the things in life that are important to me.
- \_\_\_ 7. I worry about my health.
- \_\_\_ 8. Even when others get discouraged, I know I can find a way to solve the problem.
- \_\_\_ 9. My past experiences have prepared me well for my future.
- \_\_\_ 10. I've been pretty successful in life.
- \_\_\_ 11. I usually find myself worrying about something.
- \_\_\_ 12. I meet the goals that I set for myself.

*Note.* When administering the scale, it is called The Future Scale. The agency subscale score is derived by summing items 2, 9, 10, and 12; the pathway subscale score is derived by adding items 1, 4, 6, and 8. The total Hope Scale score is derived by summing the four agency and the four pathway items.

## APPENDIX B

### QUALITATIVE INTERVIEWS

Qualitative Interviews – Participants will be asked open-ended questions pertaining to their perception of barriers to treatment, their decision to enter treatment, and how hopeful they are about successfully completing treatment and their chances for long-term sobriety.

1. Why did you decide to enter substance abuse treatment? Was there a particular incident that prompted you to enter treatment?
2. Is this your first time in substance abuse treatment?
  - a. If not, how many times have you been in treatment before?
  - b. What was the outcome of your treatment? (how long sober? What precipitated relapse—in their perception?)
  - c. What will make you successful this time? (how will they overcome previous barriers)
3. Do you have any support while you are in substance abuse treatment? (family members, friends, etc.)
4. How do you feel about your opportunity to be in treatment? (aim to get at how hopeful and optimistic they are)
5. Do you think living in a rural/urban area makes it easier or more difficult to achieve sobriety? Do you think living in a rural/urban area will make it easier or more difficult to stay sober?
  - a. What sort of difficulties/obstacles do you face living in a rural/urban to achieve and sustain sobriety?
6. Do you think being male/female makes it easier or more difficult to achieve sobriety? Do you think being male/female will make it easier or more difficult to stay sober?
  - a. What sort of difficulties/obstacles do you face being male/female related to your sobriety?

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