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## The Effectiveness of Rehabilitation and Educational Programs for African American Men With Cocaine Addiction

Hira Chaudhary  
*Walden University*

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# Walden University

College of Social and Behavioral Sciences

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Hira Chaudhary

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Walden University  
2021

Abstract

The Effectiveness of Rehabilitation and Educational Programs for African American Men

With Cocaine Addiction

by

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MA, Arizona State University

BS, Oakland University

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Criminal Justice

Walden University

August 2021

## Abstract

Drug addiction, especially cocaine addiction is a major problem in the United States. There is a problem in Michigan regarding drugs and a high recidivation rate, especially among individuals with cocaine addiction. Evidence shows that at least 56% of the African American adults in Michigan who are being arrested for cocaine usage had been released from a rehabilitation facility in the past 3 years. Various researchers have investigated the prevalence of drug abuse among the African American population in the United States. Still, there is limited evidence on reducing the recidivation rate among African American men with cocaine addiction. Therefore, the purpose of this qualitative case study is to investigate the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African-American men with cocaine addiction to prevent them from recidivating. This study utilized data collected through phone interviews as well as historical data. Clinicians were interviewed to obtain their input, from management's point of view, on how the recidivation rate could be reduced. The theoretical framework that guided the research was the social learning theory. The main data analysis tool was content analysis, whereby the responses obtained were categorized into different themes. This study may contribute to positive social change in society by facilitating the process of developing the recommendations that will enable society to design effective measures for reducing cocaine abuse and addiction among African American adult males in Michigan and help in reducing the recidivating rate.

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## Chapter 1: Introduction to the Study

Drug abuse is a major challenge in the United States. An estimated 26.4 million people in the United States engage in use of at least one illicit drug, and the number continues to increase (Buddy T, 2018). Cocaine is ranked as the third most common illegal drug abused after marijuana and prescription drugs such as sleep medicine and codeine. It is also found that African American males are the largest population with cocaine addiction, constituting 46% of all individuals in U.S. rehabilitation centers as a result of cocaine addiction (Young, et al., 2018). The research topic of interest is the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African American men with cocaine addiction in preventing them from recidivating.

It is important to develop a more efficient and applicable cocaine addiction management intervention that optimizes the health outcomes of individuals within the rehabilitation centers. This would help them live a positive life that minimizes the chances of recidivating after discharge from the rehabilitation centers. The research findings suggest new cocaine addiction management methods that improve the health, social, and economic lives of African American men with cocaine and other illicit drugs addiction.

Chapter 1 includes the background and problem statement, which summarizes the research literature and research problem associated with this topic. Also, included in this

chapter is the theoretical framework, which describes the phenomenon that grounds this study, and a section that describes the nature of the study. The other sections include the assumptions, scope, limitations, and significance of the research.

### **Background**

Previous research on cocaine addiction has revealed disparities in cocaine (both crack and powder) use among African Americans versus other races. A study by Welty et al. (2016), which focused on disparities in drug abuse-related disorders among youths who had been incarcerated, revealed that by the age of 28 years, 65% of the African American adult males had abused at least one of the drugs, the most common being cocaine, as compared to the 18% of Whites and 21% of Hispanics who abuse drugs at the same age. Among these, it was evident that 23% of the African Americans within the same age group were addicted to cocaine. This percentage was significantly lower than for Whites (4.2%) and Hispanics (5.1%). This reveals that abuse of cocaine is a significant problem among the African American population.

Researchers have also found that the recidivism rate among people who are addicted to cocaine is significantly high. For instance, research by DeVall, et al. (2017) showed that at least 56% of the African American males who are arrested in Michigan with the crime of using cocaine had been charged with a similar crime in the past 3 years. This study also revealed that people addicted to cocaine have a higher likelihood of being rearrested shortly after being released to the community than the people who abuse other drugs. The theories considered by DeVall, et al. (2017) included social learning and

control theory, rational choice theory, cognitive-behavioral theory, and cognitive transformation theory. This study showed that the theories under investigation operate similarly among adolescents addicted to drugs in adjacent generations.

The evidence behind this trend has been captured in various literature materials. Zapolski et al. (2016) found that the main factors that contribute to cocaine abuse and addiction among the African American population include sexual abuse during childhood, emotional abuse, and stress reactivity. Another factor was found to be negative influence from peers and a lack of proper knowledge on the impact of drug abuse during their childhood ages. Although males were more addicted to cocaine than females, the difference was found to be insignificant. The availability of cocaine among the African American adolescents was also found to be a contributing factor. Research by Nicholson Jr and Ford (2019) revealed that, currently, at least 32% of African American youth can quickly get access to cocaine (both crack and powder) at any given time and at a cost that they can easily afford. Also, research reveals that those youths are not concerned about the harmful effects of the drugs.

The prevalence of substance abuse, especially cocaine, has been found to vary significantly depending on geographical factors. For instance, Mack, et al. (2017) found that African American adult males who reside in the urban areas have a higher likelihood of abusing cocaine than the African American males living in rural communities. The reason behind this was found to be the presence of high levels of stress in the urban areas as compared to rural areas. Also, urban regions were found to expose African American

males to drugs more commonly than, in rural communities. It was also found that cocaine addiction leads to various public health problems, including psychological, social, and even physical health issues. The perceived neighborhood disorder and other social problems among the African American adult male population were also found to be associated with the usage of cocaine (Sterk, et al., 2014).

The management of drug abuse addiction among the African American community has also been researched, but the evidence on these management methods' efficiency is limited. Borders et al. (2015) explored the utilization of drug abuse addiction treatment among the African- American population and found disparities in adoption and utilization. It was found that most people with substance use disorder are usually not willing to adopt the treatment and rehabilitation strategies recommended to them. As a result, this trend might affect their rehabilitation process and increase the chances of these people going back to crime after discharge from the rehabilitation center. This trend is similar for the people with substance use disorder at the rehabilitation facility or outside. Therefore, it is evident that there is a knowledge and evidence gap in the management and rehabilitation of African American cocaine users despite the evidence showing that this is a significant problem. This research was necessary to facilitate bridging this gap.

### **Problem Statement**

There is a problem in Michigan regarding the use of drugs and a high recidivation rate, especially among individuals addicted to cocaine. The problem is that there has been a significant increase in the rate at which the African American adult males, especially



those with cocaine addiction, are rearrested shortly after release from the rehabilitation facilities (DeVall, et al., 2017). DeVall et al. (2017) found that at least 56% of the African American adults in Michigan who are being arrested for cocaine usage had been released from a rehabilitation facility in the past three years. The recidivation rate among African American males in Michigan is higher than in other states such as Missouri (8%) and Indiana (9%; Gallagher et al, 2020). Currently, the government's efforts to reduce drug use, such as rehabilitation and education programs, are being made in Michigan. However, there is little data on the effectiveness of those efforts. The rate of reduction of both cocaine usage and addiction within the region is insignificant, and there is an increasing trend of the recidivation rate.

Various researchers have investigated the prevalence of drug abuse among the African American population in the United States. For instance, Jones et al. (2015) found that most cocaine abuse among African Americans is still alarming, and the most affected people were between the ages of 12 and 35 years. This research revealed that lack of adequate community awareness programs on the dangers of drug abuse, especially cocaine, is a significant factor associated with the high rates of substance abuse. None of the literature reviewed examined the perceived effectiveness of rehabilitation and educational programs through the perspective of African American adult males who are abusing and addicted to cocaine in reducing the recidivation rate. My study has helped fill this gap by contributing to the body of knowledge needed to address this problem by providing data to public policy decision-makers to formulate and or change policies to

improve programs designed to reduce cocaine use and recidivation rate. This problem impacts the American taxpayer, African American communities, drug users, and crime rates. The problem under investigation affects these community units in the sense that drug and substance abuse lead to an increase in unemployment within the community and which is associated with an increase in the rate of crime. A population with a high percentage of its young people being addicted to drugs is less productive, and its contribution to the economy is limited. As a result, the government is forced to spend more financial resources in providing for their basic needs such as healthcare.

### **Purpose of the Study**

The purpose of this qualitative case study was to investigate the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African- American men with cocaine addiction and prevent them from recidivating. The ultimate goal was to describe the experiences that African American men with a substance use disorder undergo when subjected to rehabilitation and education strategies and develop improvement recommendations. The selected research population from both African American male and clinicians provided relevant data that were analyzed to develop conclusions on whether the rehabilitation and education approaches are practical or not. The information was obtained by phone interview method and assessment of historical annual reports of the rehabilitation facility. The main areas of interest were perceived experiences of people who previously used

cocaine and clinicians on the rehabilitation and education programs and the impact of those programs on reducing recidivation rates after being discharged from the facility.

### **Research Questions**

The study focused on the following main research question:

What is the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African American men addicted to cocaine in preventing them from recidivating?

### **Theoretical Framework**

The theoretical framework that guided the research was social learning theory. Social learning theory is focused on promoting learning and positive social behavior, and it uses the philosophy that new behavior can be developed by imitating or observing others. (Fox, et al., 2016). The social learning theory also states that learning is a cognitive process that can be developed within a social context (Themeli & Giovazolias, 2014). This theory is best suited in this study because it is in line with the main purpose, and its application has yielded positive outcomes, as shown in research by Fox, et al. (2016). Themeli and Giovazolias (2014) asserted that drug abuse among youths is a severe public health issue. Theoretical models have conceptualized that peer behavior is an essential factor in influencing drug abuse behavior (Themeli & Giovazolias, 2014). The process of how social influence plays a role in contributing to substance use is an area that has been explored widely. Themeli and Giovazolias further asserted that, at the age of 18–25, young people are likely to abuse drugs because of peer influence since they

are forming their identities at this stage. According to social learning theory, drug abuse, especially cocaine abuse, is a behavior that an individual learns. If youths interact with cocaine users, they are more likely to abuse drugs. It is evident that there is a high number of African Americans who abuse drugs. Since the purpose of the study was to assess the perceived effectiveness of rehabilitation and education programs from the perspective of African American men in Michigan who are abusing cocaine, the social learning theory provided an ethical framework for explaining why cocaine abuse and high recidivation rate among the targeted population is a persisting problem and thus help in coming up with strategies that can be used in curbing the problem.

### **Nature of the Study**

The study utilized a case study research design. I selected this study design because the research focused on one specific facility and its programs. The study aimed to identify perceptions of people with cocaine addiction to better understand from their experiences with rehabilitation programs in Michigan. Another aspect investigated is the impact that the rehabilitation and educational programs play in reducing recidivation rates among people with cocaine addiction. The study participants included African American men who previously used cocaine as well as clinicians. Participants were selected using snowball sampling.

The intent was to recruit at least 10 participants who previously used cocaine and three clinicians. I collected data from people who previously used cocaine and clinicians using a phone interview method whereby the interview tool contained open-ended

questions. The presence of open-ended questions allowed the participants to provide additional information on the topic of interest, thus increasing the data's quality and reach. Therefore, it was possible to collect information regarding the participants' attitudes, feelings, and level of understanding on a specific topic. I also collected historical data from the historical records of the facility. The data collected were then organized and coded, and themes were generated from the responses to the interview questions. Content analysis was the primary data analysis technique for the questions with string responses, whereby these responses were coded and interpreted to generate valid and replicable inferences. The findings obtained from the data analysis, together with the evidence obtained from document review and existing literature, were synthesized to develop appropriate conclusions, which lead to the formulation of the recommendations of improving the quality of the rehabilitation techniques.

### **Assumptions**

Several assumptions were made in this research. First, it was assumed that all the African American men with cocaine addiction who have already been discharged from the rehabilitation facility under investigation have the same level of understanding in English. The data collection process was conducted in English. It was thus important to assume that all the research participants understood the questions being asked the same way, and the responses they give were based on the entire understanding of the questions asked. This aimed to eliminate the possibility of having a language barrier, which might affect the quality of data obtained.

The other assumption was that the African American men with former cocaine addiction would have access to the internet and have an email set up. It was important to assume that they would check their email and see the flyer and contact me to be part of the research.

Another assumption was that participants included in this study answered the data collection tool's questions in an honest, exhaustive, and candid manner. The inclusion of this assumption is important because it removes the doubts that the responses given are inaccurate. The presence of inaccurate information implies that the results obtained will be invalid, which affects the quality of research findings and recommendations.

It is also assumed that this research adopted appropriate inclusion criteria that ensured that the sample selected contains the participants that are representative of the population. This assumption implied that the African American men with cocaine addiction with different experiences were captured in the sample, meaning that the data obtained were exhaustive and representative.

There is the assumption that the participants willingly took part in the study and had a sincere interest in taking part in this research. This assumption eliminates the doubt that individuals were forced to participate or who participated due to other reasons not related to this research. This assumption implies that it is possible to conclude that the information given by participants is genuine.

### **Scope and Delimitations**

The specific aspect of the problem addressed in this research was the efficiency of the rehabilitation and educational programs in addressing cocaine abuse and recidivation rate among African American men. This aspect of the problem was addressed because there was evidence of a gap in the field of cocaine rehabilitation, whereby it had been found that there is no data on the effectiveness of the existing rehabilitation and educational programs on reducing the recidivation rate (Young, et al., 2018). This study was limited to studying male African Americans with substance use disorder because this group constitutes the largest people with cocaine addiction in the United States (Zapolski, et al., 2016). Therefore, solving addiction in this group would have an immense impact on addressing the issue of drug addiction in general. The findings of this study are transferable to other similar populations. For instance, the findings reflect the situation and experiences that African American men with substance use disorder outside Michigan go through.

### **Limitations**

This research has several limitations. First, the study participants in this research were people with substance use disorder, and the addiction might have affected their ability to remember events or feelings. The presence of this limitation would imply that the responses obtained are questionable and do not represent the events as they took place. This limitation was addressed by ensuring that the participants included in this

study are in a state of mind that does not distort their ability to remember past events (Degenhardt et al., 2008).

Another limitation is that the number of participants included in the sample might not be enough to provide representative data that would facilitate the generation of generalizable and reproducible findings. In this kind of research, it is required that the study participants are enough to provide the data that achieves saturation, which means that the data obtained is conclusive. The inclusion of additional data would not significantly change the quality of the findings. This limitation was achieved by considering the largest possible sample size, given the present financial and time constraints.

Another possible limitation is the financial constraint. Conducting such research requires huge financial capital, which might be a challenge to achieve. The presence of this limitation impacts the quality of data obtained because it would not be possible to conduct an exhaustive investigation. Also, financial constraints would lead to a reduction of the sample size, and this might affect the generalizability of the results obtained. This limitation was addressed by looking for possible donors and financiers, among the people and organizations with a special interest in this topic. The identified financiers were convinced that undertaking this research will have a significant positive impact not only on African American men with substance use disorder but also on the general population.



### **Significance**

The issue of cocaine abuse among African American men in Michigan has endured as a problem despite government efforts to curb the vice through education and rehabilitation programs. Also, the recidivation rate within the region has been on the increase. This study aimed to fill the research gap on whether the current rehabilitation programs effectively reduce cocaine abuse and reduce the recidivation rate among the African American adult male. The findings of this research supported professional practice by revealing areas of weakness in the rehabilitation and education programs designed for people with cocaine addiction. These findings can inform practitioners on whether there is a need for strategic change regarding rehabilitation and education programs. The claims of the research strongly align with the problem statement. It is indisputable that cocaine use among young men has persisted in Michigan despite government efforts to curb the issue through traditional rehabilitation and education. This study aimed at exploring whether rehabilitation and education programs are helping in reducing cocaine abuse as well as the recidivation of crime. This research has a potential contribution to policy. The findings will be used to support the formulation of the necessary legislative regulations that facilitate curbing the menace of drug abuse and the high recidivation rate among African American men. For instance, the various legislative bodies that want to pass a policy that determines how the rehabilitation facilities within Michigan should be run and the rehabilitation interventions that they should practice might need evidence that shows that the use of those interventions will have a positive

impact on the people with substance use disorder and the population in general. This study may contribute to positive social change in society by facilitating the process of developing the recommendations that will enable society to design effective measures that will help reduce cocaine abuse among African American men in Michigan and help them lead positive lives. The implication of this is that the community would have fewer drug abuse cases, which means that the population's health condition, in general, would be improved.

### **Summary**

It is evident that drug addiction, especially cocaine addiction, is a major problem in the United States. Evidence has revealed significant disparities in cocaine use among African Americans compared to other races. African American adult males are found to be the most people with cocaine addiction. Also, it is found that there is a significant increase in the rate at which African American men, especially those who are people with cocaine addiction, are rearrested shortly after release from the rehabilitation facilities. Several factors are found to facilitate cocaine use among African American men. Some of these factors include sexual abuse during childhood, emotional abuse, and stress reactivity. Also, the drug's accessibility, negative peer influence, and low cost of the drug have been cited as major factors that encourage African Americans, especially the youth, to abuse cocaine, especially in the urban regions. Cocaine use and addiction are associated with several major health and social problems. For instance, the rate of recidivation is significantly high among people who use cocaine.

That problem in this research is that there is a high recidivation rate, especially among the African American males who are people with cocaine addiction. The government has put in place various measures to improve the rehabilitation of cocaine addiction, but there are limited data and evidence on their effectiveness in reducing recidivation rates. In this research, I aimed to investigate the perceived effectiveness of rehabilitation and education programs in reducing recidivation rates through the perspective of African American adult males who are using cocaine. The theoretical framework that guided the research was the social learning theory, which is focused on promoting learning and positive social behavior. This research was a case study in nature, whereby the data are collected using the researcher-developed interview guide. The data were analyzed using content analysis, whereby the responses were coded into appropriate themes. This study may contribute to positive social change in society by facilitating the process of developing the recommendations that will enable society to design effective measures that will help in reducing cocaine abuse and recidivation rate among African American adult male with addiction in Michigan and allow them to lead positive lives. The next chapter will comprise the literature review and synthesis related to the key variables of interest in this research.

## Chapter 2: Literature Review

Drug abuse, especially cocaine abuse, has been a significant problem not only in the United States but also globally. The number of people abusing cocaine has increased significantly over time, with the most affected racial group being African Americans. As a result, drug abuse consequences, both social and health-related, are on the increase. Over the recent past, the U.S. government has undertaken interventions that are aimed at regulating the problem of cocaine abuse, the most common being rehabilitation and education interventions. Despite this, researchers have found that these traditional government interventions are not efficient enough. As a result, a significant number of people who previously used cocaine resume drug use shortly after being released from rehabilitation centers. Therefore, the purpose of this study was to investigate the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation facility in Michigan to African American men with cocaine addiction in preventing them from recidivating. The research participants were African American men who previously used cocaine as well as clinicians. The findings of this study will be a significant contribution to addressing cocaine addiction and high recidivation rates and may form the basis for developing new and more efficient rehabilitation interventions.

This chapter focuses on synthesizing the available literature on drug and cocaine abuse and recidivation rates, with a significant focus being the African American population. The literature on current rehabilitation and education programs that have been implemented will also be reviewed. The major sections of this chapter include the

Literature Search Strategy, Theoretical Foundation, Literature Review, Related to Key Variables and/or Concepts, and Summary. In the Literacy Search Strategy section, I address the key databases accessed, the search terms used, and the search process implemented. The main variables and concepts reviewed in this chapter include drug abuse in the United States, cocaine use, recidivation rate among people with cocaine addiction, factors contributing to drug and cocaine abuse among African Americans, recidivating to drug abuse after rehabilitation, benefits, and barriers anticipated from the drug intervention programs and the government efforts in addressing the problem of drug abuse.

### **Literature Search Strategy**

The quality of any literature search process is always dependent on the appropriateness of the search strategy. The literature search strategy determines the type of articles obtained, which, in return, determines the evidence quality. The main databases I used in the literature search process included:

- EMBASE
  - ProQuest
  - PsycINFO
  - MEDLINE
  - JURIST
  - EBSCO host research databases
  - Google Scholar

The key search terms used included:

- Drug abuse in the US
- Cocaine abuse
- Recidivation among people with cocaine addiction
- Cocaine use among African American
- Substance use disorder rehabilitation programs
- Educating on substance use disorder
- African American males with substance use disorders

I searched using combinations of these keywords to increase the yield of the search. Different words were combined by using “and” or “or.” The search was also limited by publication date, whereby only articles published over the past 10 years (2009-2019) were used. This strategy was used to ensure that the evidence obtained is recent and up to date. The articles obtained were reviewed to determine their relevance to the topic. The first aspect reviewed was the article’s title, whereby I assessed to determine whether the title contained at least one of the keywords. The articles that met this criterion were subjected to an abstract review, whereby I assessed the abstracts to determine the study purpose, research methodology, and findings. Articles based on personal opinion and those that were not peer-reviewed were eliminated. I also eliminated the articles whose research purpose did not match the purpose of this study. This process ensured that only the articles most relevant to this study were included in this literature review process.

### **Theoretical Foundation**

This research was guided by the social learning theory, a theory of social behavior and learning. This theory proposes that new behavior is acquirable through imitation and observation (Horvath, et al., 2020). The cognitive learning process can occur in a social context purely through direct instruction and observation without direct reinforcement. Vicarious reinforcement involving punishments and rewards also contributes to the social learning process. Regularly rewarded behavior tends to persist, whereas constantly punished behavior tends to desist. Reciprocal determinism explains that learners are not passive information recipients and behavior, environment, and cognition tend to influence each other. As much as reinforcement plays a key role in the individual learning process, it is not entirely responsible for learning as there are other forces in play. This makes the social learning theory a pivotal framework in promoting positive social behavior learning process, more so in rehabilitation and education programs (Horvath, et al., 2020).

Addiction treatment aims to help clients accept addiction as a chronic disease and consequently accept changing their lifestyle to prevent disease progression. As a multi-dimensional phenomenon related to personal, communicational, and structural characteristics, addiction requires communicational, structural, and personal modifications and changes to eradicate. Besides treatment being pivotal in fighting addiction, recurrence among people with cocaine addiction remains a major problem. Statistics indicate that the recurrence rate is higher, mostly one month after detoxification. Heydari et al. (2014) noted that pharmaceutical treatment is not solely

sufficient, with the recidivating rate remaining high for clients referred to addiction centers. This makes finding an effective strategy to address recurrence a major challenge. Successful preventive education programs are key and should be developed based on well-known and effective models. Bandura's cognitive social theory has its basis focused on the interactive dynamic relationship between individual, personal, and environmental elements, making it a perfect theory for application in interventional strategies. The theory's main basis is on self-efficacy, self-regulatory process, and personal efficacy concepts, which improves the client's belief in the ability to succeed in overcoming addiction.

### **Origin of Social Learning Theory**

The famous Bobo doll experiments conducted by Albert Bandura during the 1960s illustrated that children are keen to observe people around them and their different behavior. These observed models, including TV characters, parents, teachers, and friends, provide behavior examples that are then imitated (Culatta, 2018). These experiments agreed with behaviorist learning theories of operant conditioning and classical conditioning in addition to two key ideas. The first idea is that there is a mediating process between stimuli and response where their surroundings, including models, stimulate behavior among people (Culatta, 2018). The second idea is that people learn behavior from the environment (McLeod, 2016). This marked the origin of the social learning theory, which has had several real-life applications in understanding the role of



observational learning in the transmission of violence and aggression and the use of social learning in teaching positive behavior to people.

Bandura's theory emphasizes the importance of observation and behavioral, emotional, and attitude modeling. In his theory, Bandura stated that if people solely relied on the impact of their actions to inform their decisions, learning would become exceedingly laborious and even hazardous (Culatta, 2018). However, through observing others, human behavior is modeled as people form an idea of their behavior's performance, consequently guiding their action. The theory's origin encompasses motivation, memory, and attention, thus spanning behavioral and cognitive frameworks. Since its founding, the social learning theory has extensively been applied in the understating psychological disorders and aggression with a major focus on modification of behavior (Culatta, 2018). The behavioral modeling technique used in training programs has its theoretical background on the social learning theory.

### **Major Theoretical Propositions**

As theorized by Bandura, the social learning theory posits modeling, imitation, and observations by people to learn from one another. The theory can be viewed as a bridge between cognitive and behaviorist learning theory since it combines elements of memory, motivation, and attention (Horvath, et al., 2020). This theory's appropriateness in the study is guided by assumptions such as utilizing social learning strategies when educating human beings; since they are social creatures, learning requires engaging the world actively and participating in the whole process. Through learning, engagement with

the world is meaningful (Horvath, et al., 2020). These assumptions align with research assumptions on the level of understanding, response to inquiries, and participant inclusion criteria. The theory will then be pivotal in answering perceived rehabilitation and educational programs' effectiveness in preventing recidivating.

Observational learning is pivotal in the psychology and behavioral science fields. As such, articulating the changes in behavior through observation should be a key area of focus among behavior analysts and those involved in education interventions to prevent recidivating among people with cocaine addiction. Fryling et al. (2011) noted that a thoroughly naturalistic observational learning conceptualization avoiding all mentalism is needed to improve outcomes in observational learning interventions. Bandura's social learning theory relies on the existence of hypothetical entities that are nonexistent in the spatiotemporal event matrix that comprises the natural world. Nevertheless, using the four-stage social learning model is a key approach through which role modeling and associated educational interventions can be made more effective and systematic. Learners and those under the guidance of role models benefit through a cognitive process where they internalize and make sense of observed behavior and reproduce the elements themselves.

Bandura's social learning theory involves matching behavior patterns and cognitive skills between those demonstrating or educators and observers. This process, however, involves four stages to be complete (Horsburgh & Ippolito, 2018). The initial stage is attention, where learners attend to the behavior. To reproduce the behavior, they

have to see and pay attention to it. Educators use this stage to share useful information and illustrations to trigger positive behavioral change among people with cocaine addiction. In the second stage, learners internalize and retain observed behavior or lessons learned (Horsburgh & Ippolito, 2018). This creates a whole difference between those recidivating after rehabilitation and those managing to keep off addiction and associated criminal activities. Through this cognitive process, learners rehearse learned behavior mentally, making it possible for them to replicate. If this process fails, the learned behavior is overcome by old habits, and learners slowly go back to drug use and addiction.

The third stage is the actual reproduction of learned behavior (Horsburgh & Ippolito, 2018). For the actualization of this stage, a conducive environment is pivotal. This should include living in a neighborhood free of drug use and not accessing the drugs quickly. This can prove a challenge where one has to go back to a neighborhood full of drug users and readily available drugs. The final stage is the motivation of learners (Horsburgh & Ippolito, 2018). The rehabilitation process ought to create an enabling environment where those rehabilitated can fend for themselves by engaging in economic activities and not overindulging drug use. Motivation can be through self-reinforcement, vicarious reinforcement, or direct reinforcement.

### **Previous Similar Applications of Social Learning Theory**

The alignment supports the social learning theory's suitability with the main study purpose and positive outcomes in earlier studies such as Fox, et al. (2016), which asserts

drug abuse among youths as a major public health issue. Adolescents with a strong bond to the conventional society, including school and parents, have a much lower likelihood of indulging in drug abuse. Exposure to deviant role models and beliefs increases the possibility of indulgence in drug abuse (Krohn et al., 2016). The theory has been used in studies showing that drug abuse rehabilitation aims at transforming abusers. Still, the community's reintegration is a major concern for the criminal justice system due to high recidivism rates (Ganapathy, 2018). The theory has also been applied in correctional rehabilitation studies concerning human functioning (Dent, et al., 2020). These applications of the theory are similar to the application in the current study.

Biology and genetics advances indicate that human behavior tends to be impacted by other factors in addition to social influences. As such, there is a need to integrate biological factors and social factors in applying the social learning theory. Fox (2017) illustrated how social learning theory and biosocial perspectives could be integrated into a more accurate and modern criminal behavior. African American males are faced with various factors with the potential of negatively impacting trajectories throughout their life span (Grant, 2016). Ecological enhancement centered on culture among Black Americans and culturally competent engagement can be achieved through understanding some of their details. Ross (2016) noted that African Americans face significant challenges that negatively impact their development. Therapeutic counseling based on the social learning model was pointed out as an effective measure that would enable interventions sensitive to the community's social, historical, and cultural development. With the world

constantly changing, this approach is key among therapists and community educators in assisting people with drug addiction in recovering and achieving behavioral change with optimal elimination of recidivating.

### **The Rationale for the Choice of Theory**

The social learning theory focuses on learning and positive social behavior promotion, which can be achieved through rehabilitation and educational programs offered by a drug rehabilitation facility in Michigan to African American people with cocaine addiction to prevent them from recidivating. This theory explains how people think and factors determining their behavior, which are the same focus elements in preventing recidivating among African American people with cocaine addiction. The theory focuses on reciprocal interaction between environmental, behavioral, and cognitive determinants to explain human behavior. Cognitive factors are social, personal factors, including attitude, expectations, and knowledge, which can be influenced by educational programs (Duwe, 2017). Behavioral factors include self-efficacy, practice, and skills and can also be affected by rehabilitation and educational programs. Community access, social norms, and influence on other people are environmental factors (Duwe, 2017). These three determinants are part of the social learning theory as theorized by Bandura, making it a perfect fit for this study.

There are more specific theories under the umbrella of social learning theory. The explains the perceived effectiveness of rehabilitation and educational programs in preventing recidivating among African American people with cocaine addiction. The

effectiveness is affected by elements covered by specific social learning theories. The social influence theory, for instance, emphasizes o how individual behavior can be changed by changing social norms around them, which can be achieved through tough rehabilitation and educational programs (Resource Center for Adolescent Pregnancy Prevention, 2020). The social inoculation theory emphasizes how learners, in this case, people with cocaine addiction, can be immunized through behavioral rehearsal to resist peer pressure, which would otherwise drive them to engage in risky behavior (Resource Center for Adolescent Pregnancy Prevention, 2020). The cognitive-behavioral theory relates to the educational program interventions used in knowledge, skills, and self-efficacy improvement to prevent recidivating among African American people with cocaine addiction. Therefore, the social learning theory is an umbrella theory covering these specific learning theories that are ultimately relevant to the present study.

### **Literature Review Related to Key Variables and/or Concepts**

#### **Drug Abuse in the United States**

Drug abuse and addiction are some of the most challenging issues in the United States. Every community is affected by drug abuse may be directly or indirectly. In 2017, approximately 19.7 million Americans aged 12 years and over were fighting substance abuse disorders. About 38% of adults in the same year were battling a disorder associated with illicit drug use. Approximately 6.8% of African Americans were also struggling with disorders related to substance use. Specific addiction statistics indicate that about 966,000 Americans aged 12 years and over struggled with cocaine use disorders, with

approximately 637,000 within the same age bracket receiving treatment either in their current or last rehabilitation stay (Scot, 2020). Cocaine is one of the illicit drugs in prohibited drugs under treaties on international drug control. Consumption of these drugs can result in addiction and drug dependency, which in return can have detrimental impacts on mental wellbeing, overall health, and wellbeing of other people. The prevalence of drug use disorders is highest among people in their 20s as statistics indicate that in the year 2017, the total population drug use disorder average was 3%. Still, for individuals between ages 20 and 24 years, the average stood at 9% (Scot, 2020). Drug abuse is a major issue in the United States and globally, affecting both the drug users and those around them. It can be challenging to prevent the supply of drugs, but with appropriate interventions such as rehabilitation and educational programs, demand can be reduced.

The 2020 Leading Health Indicators cover several topics on key factors affecting the population, substance abuse. As outlined under this topic, substance abuse is associated with several adverse social outcomes, including financial problems, family disruptions, failure in school, lost productivity, crime, child abuse, and domestic violence. Drug abuse is also associated with adverse health impacts, including teenage pregnancy, cardiovascular complications, sexually transmitted infections, pregnancy complications, HIV prevalence, suicide, motor vehicle crashes, child abuse, and homicide cases. The use of steroids and cocaine, for instance, is linked to abnormal functioning of the cardiovascular system, including heart attack and irregular heart rate. Injection drug use

also contributes to an approximate one-fourth HIV/AIDS cases in the United States. Also, more than half of those arrested for cases of assault, homicide, and theft are tested and confirmed to be positive for illicit drugs (Office of Disease Prevention and Health Promotion, 2020). Just by manufacturing, possessing, distributing, or using drugs, one is already considered to have committed a crime besides the additional crime outcomes perpetrated by illicit drug users (Chang et al., 2016). Of all illicit drugs, cocaine is one of the most dangerous, with high associated crime rates. Håkansson, and Jesionowska (2018), in their analysis, found that cocaine use is associated with violent crime, acquisition crime, and drug crime, among other crimes. Drug abuse has far-reaching negative impacts that warrant interventions to educate the community against drug abuse and rehabilitate drug users and continuously monitor them to reduce recidivating chances.

Cocaine use and cocaine-related problems continue to increase in the United States. John and Wu (2017) note the need for correlates of cocaine use and demographic trends to determine potential factors leading to the increase in trend and device targeted intervention and prevention strategies. Crack/cocaine use remains a major public health issue with associated high socioeconomic costs. Cocaine prevalence in the United States was at its peak in the mid-1980s in what was referred to as the crack-cocaine epidemic. In the late 1980s, the prevalence declined, and by 1994 it had reached a low point. Cocaine use rose again from the mid-1990s to 2004 with another period of decline between 2005 and 2011 in what could be attributed to supply-side factors with their impact on demand (Caulkins et al., 2015). There has been a resurgence in prevalence in recent years, as



indicated by the National Survey on Drug Use and Health (NSDUH), with a high likelihood of further increase. In 2015, cocaine production from Columbia was the highest, and this being the main source of cocaine consumed in the United States meant higher quality cocaine export in large quantities, increasing the availability for trafficking within the United States streets (U.S. State Department, 2017). This, in return, increases cocaine supply, which adds to increased purity at the retail level and a drop in prices to attract more users. To address this emerging challenge, educators and those involved in rehabilitation should prioritize the identification of at-risk groups within the population, including those recently discharged from rehabilitation centers and those within high-risk neighborhoods with a high prevalence of cocaine distribution. This then results in informed screening and improved educational programs offered by a drug rehabilitation facility in Michigan to African American people with cocaine addiction among other at-risk groups to prevent them from recidivating.

A discussion involving drug policies and strategies is mostly based on prevalence within the population as the primary performance indicator. However, other indicators should be considered to achieve better outcomes when addressing drug use and recidivating. These factors include the total expenditure on drugs, the total amount of drugs consumed, and the number of those who would be termed as heavy users. It is highly likely that focusing on reducing prevalence for a single drug such as marijuana without concentrating on the three key indicators would give a partial implication of total reduction in drug use, albeit the fall in one drug might result in the rise of another.

Caulkins et al. (2015), in their study on the fall of cocaine and increase in marijuana, found that rapid change in consumption is possible even for established drugs with the reduction in cocaine use by approximately 50% and the massive independent increase in marijuana being some of the major unanticipated occurrences by the expert community.

Dackis et al. (2012), in a randomized, double-blind, placebo-controlled modafinil cocaine dependence treatment study, found that with treatment interventions, male people with cocaine addiction can attain abstinence. This, however, might require more measures, including motivation for recovery based on the addiction severity. Compliance with rehabilitative medication is also key in achieving cocaine abstinence and consequently preventing recidivating. Cocaine dependence as a major rapid progressive disorder is associated with many devastating psychosocial, psychiatric, and medical hazards without approved Food and Drug Administration pharmacological agents, as is nicotine, opiate, and alcohol dependence. The study by Dackis et al. (2012) focused on several cocaine abuse elements, including a possible reduction in self-administration of cocaine using modafinil treatment as a measure involving euphoria blockade as a cocaine usage reduction measure in the clinical setting. This, among other clinical and educational rehabilitation measures, should be used to improve the effectiveness of cocaine use combating measures and create an enabling environment for rehabilitated male African Americans to not recidivate after undergoing the tiresome and costly rehabilitation process.

## **Cocaine Abuse in Michigan by African Americans**

According to the United States Census Bureau, there are approximately 44 million African Americans in the country, this being 13.4% of the total United States population. There is an overrepresentation of African Americans in drug users, but this huge number is also likely to seek drug addiction-related treatment. The use of crack cocaine is higher among African Americans than any other ethnic group in the United States (Kaliszewski, 2020). A report by the U.S Department of Justice indicated that the predominant criminal groups and drug trafficking organizations in the Michigan High-Intensity Drug Trafficking Area comprised African Americans. These groups were noted to distribute marijuana, cocaine, and heroin in wholesale amounts in addition to using these drugs. African Americans were noted to be involved in converting powder cocaine to crack for consumption in hotel rooms, private residences, among other locations (U.S. Department of Justice, 2007). After the conversion, they used crack cocaine and distributed it in smaller quantities within the neighborhoods.

Despite the government's efforts to curb cocaine abuse among male African Americans in Michigan through rehabilitation and educational programs, this is still a major concern with continued high recidivating rates. Approximately 2,599 deaths related to drug overdose were reported in Michigan in the year 2018. Cocaine-related deaths increased by about 20.6% in the same year. The average increase among males was 15.4% between the years 2017 and 2018. The growth was highest among blacks, which stood at approximately 27.4%. This indicates rising drug use among African Americans

in Michigan, requiring interventions to address this concern (Michigan Department of Health and Human Services, 2019). Generally, cocaine use consequences are disproportionately severe and higher among African Americans than other groups (Zapolski et al., 2016). This can be attributed to risk factors specific to African Americans, which can be targeted in the rehabilitation and educational programs to prevent recidivating among male people with cocaine addiction in Michigan.

Gavin (2016), in an article on Michigan Health Hub, posted a study that sought to pinpoint the influence of genetic markers on addiction. The research identified disparities in cocaine addiction vulnerability and relapse, establishing the cause for some people with cocaine addiction getting hooked to drugs while others get to stay clean. Hardee (2017), in a post on Michigan Health Hub, further noted that according to science, addiction is a chronic disease and not a moral failing. Understanding the role of the human brain in addiction is pivotal for breaking the addiction-related stigma and encouraging African American male adults to seek rehabilitative help, and further motivating them to avoid possible relapse. As the United States continues to face the opioid epidemic, education interventions should be used to fight cocaine addiction and prevent relapse among male African Americans in Michigan. These interventions should approach addiction more like a chronic illness requiring a holistic health care approach, which considers the whole person. Having an enabling environment, bioenergy engagement, exercise, diet, attitude, and modification of behavior, relationship, and

spiritual counseling are all key measures that can be used by drug rehabilitation facility in Michigan.

According to a report by the National Institute of Health (2015), Wayne is one of the cities in Michigan ranked among the most impoverished United States urban areas but with the highest number of people with cocaine and heroin addiction. The data presented by the treatment admission data shows that cocaine is the most common drug in the region. Since it is easily acquired, many users have used it in excess leading to an overdose. Bernstein et al. (2015) argue that 16% of the publicly funded drug treatment in Wayne County went to treating cocaine. Unfortunately, the consequences of drug abuse in the region are costing the county residents their lives because of overdose, opioid abuse, and crack cocaine. The ever-increasing overdose cases, mainly in Michigan urban areas, are causing an alarm and require the government to take immediate action. Even though the government funds treatment centers, the funds are not enough to handle the high rate of addiction to cocaine in the region. According to the National Institute on Drug Abuse (2018b), 85% of all people with cocaine addiction do not get the help they need to recover from this addiction.

### **Factors Contributing to Drug/Cocaine Exposure Among African Americans**

The risk of continued substance use, associated substance use problems, and substance-use dependence increases with substance use duration and frequency. This applies to cocaine use among male African Americans in Michigan as the risk of continued cocaine use increases with frequency and duration. Several risk factors expose

African Americans to cocaine use. One such factor is childhood trauma, where a history of abuse is related to cocaine use. Personality, particularly stress reactivity, is another factor that exposes African Americans to cocaine use as they try to adapt to stressful events. Individuals rated higher on personality traits with difficulty in stress adaptation are likely to turn to substance use to respond to stressors (Zapolski, Baldwin & Lejuez, 2016). Other contributing reasons for cocaine use exist, such as the feeling after taking drugs associated with short-lived, intense pleasure, especially those suffering from conditions such as social anxiety, depression, and stress. Bowser and Bilal (2011) note that drug use cuts across the lifespan, and even unborn babies are exposed to pregnant women's drugs, affecting their future lives.

People make choices on engagement in particular behavior based on factors such as motivation and capability. Genes act as signatures in determining how human brains and body responds to stimuli. This defines people's ability and personality traits and determines elements for the pace with which people get addicted to drugs. The exposure to drug abuse among adolescents results from their cognitive development. The availability of drugs within the community also be a source of exposure to drugs among male African Americans in Michigan. The availability of cocaine through criminal gangs made of African Americans exposes the local community to cocaine abuse and makes them vulnerable to drug abuse (Royal Oak Police Department, 2019). Cities such as Flint, Detroit, Kalamazoo, and Grand Rapids are major markets for illicit drug trade as well as distribution centers for drug peddlers with cocaine as one of the main drugs within this

region of Michigan, exposing African Americans to its use (Whitesell, Bachand, Peel & Brown, 2013). These, among other factors, contribute to cocaine and additional illicit drug exposure among African Americans in Michigan.

According to Turner and Wallace (2003), drug abuse and associated impacts have been experienced by families and children of African American adults. Many researchers have blamed the high prevalence of drug abuse in African American societies. This has been attributed to Western society eroding the values and cultural orientation, which could have played a significant part in controlling drug abuse. Due to the lack of African values and cultural orientations in African American societies, their children, youth, and families have been extensively exposed and are vulnerable to many social problems. Drug and substance abuse is one of them. Hanks et al. (2018) also argue that African Americans are poorer than their white counterparts. Goodrum et al. (2012) also note that single parents, mostly women, headmost African American families. There are high rates of unemployment, inadequate health care, and they live in crowded areas. It is found that African Americans are leading in increased use of drugs, with a prevalence of 16.6%, followed by Hispanics with a prevalence of 6.6% and the whites with a prevalence of 6.5% (Penberthy, Vaughan, & Fanning, 2015). All these factors significantly contribute to the high trade and use of drugs among African Americans. Most of the researches that have been carried out on African American drug and substance abuse has analyzed racial/ethnic differences from a comparative stance but have not made any effort to explore the

epidemiology of variability, trends, and correlations of drug use patterns, which still exist in the black community.

### **Recidivating to Drug Abuse After Rehabilitation**

Recidivism is the relapse into criminal behavior such as cocaine and other illicit drug use after undergoing interventions or receiving sanctions about previous misconduct. Nearly one-quarter of prisoners released from prisons in 15 states were involved in technical violations, including testing positive for drugs within three years. Despite the highly controlled environment in jails and prisons, illicit drugs are still used, which is one of the major factors contributing to recidivism. Even in cases where individuals are not exposed to illicit drugs in jails and prisons, their return to neighborhoods characterized by illegal drug use places them in a compromising situation, and they are tempted to indulge in the use of drugs even after rehabilitation (Chandler, Fletcher & Volkow, 2009). Criminal records available to the public are a key factor in determining employability. More employers are adopting background checks as a tool for deciding on candidates to fill vacant positions.

Individuals with a criminal record are often at a loss when this is used as a basis to assess their employability. The lack of employment contributes to increased recidivism for people still active in the labor market (Siwach, 2017). Many Americans have criminal records relating to one or more crimes, which have collateral consequences on their legal and socioeconomic repercussions. Some states offer relief to certain offenders by sealing or setting their criminal records after five years after their release from rehabilitation



centers. The set-aside makes their criminal unavailable for public view, improving their employability and reducing recidivism (Collateral Consequences Resource Center, 2018). After the set-aside, the recipients' employability likelihood stands at 1.11 times within the first year and continues to increase in the subsequent years. Employment denial affects people differently, and people at higher risk depending on their personality traits, are more likely to suffer a relapse to cocaine and other drug use.

Recidivism is not any lesser crime than the initial one for which one was convicted. It indicates that rehabilitation efforts were futile and that the corrections department ought to invest more resources in educational and rehabilitation programs to reform those recidivating. The age at which once is incarcerated has a role to play in future reentry into rehabilitation centers such as prisons. Incarceration at a younger age among men robs them of the opportunity to establish congenial social ties. This sets the life-course trajectory characterized by cycles of future rehabilitation and imprisonment, among other adverse outcomes, including low mental and physical well-being and economic hardships (Arditti & Parkman, 2011). Statistics available indicate that the number of releases from rehabilitation centers between 1999 and 2002 was approximately 10,985, with a recidivism rate of 38.0%. The number of releases increased for the period between 2004 and 2007 to approximately 14,217, and the recidivism rate was reduced to approximately 31.0% (Pew Center on the States, 2011). Despite the decrease in recidivism, Bob McDonnell noted in 2011 that the rate was still too high, and its reduction would mean fewer prison costs due to fewer victims.

A recent report by the Michigan department of corrections indicated that the rate of recidivism in Michigan had fallen to its lowest in state history based on the number of individuals released from prisons in 2016. The recidivism rate had stagnated at approximately 30.0% despite a significant drop from 45.7% in 1998. Recidivism can represent a return to rehabilitation due to a new crime commission, making recidivism a representation of a new crime or parole condition violation. One is recalled for the resumption of rehabilitation for earlier crimes or drug use. Michigan's lowest recidivism rate was in 2018 at 28.1%, placing it among the top 10 states with the lowest recidivism rate in the country, where Virginia announced the least rate at 23.1% (Michigan Department of Corrections, 2020). This success was attributable to the Michigan Department of Correction's rehabilitation and educational program efforts, which included educating prisoners, and offering job training to equip them with skills in high-demand fields, consequently increasing their chances for stable careers after incarceration and reducing recidivism.

It is not easy for people with cocaine and other drug addiction to break from maladaptive behavior, including drug addiction. Cocaine addiction among African Americans in Michigan and within the population is associated with severe health complications. People with drug addiction also seek medical help for issues such as pain management. Still, several factors, including the amount and nature of abused drugs, comorbidities, concomitant nondrug addictions, and the nature of pain, affect the choice of treatment and outcomes (Laroche, et al., 2012). Treatment approaches in cocaine use

rehabilitation start with detoxification, which is usually accompanied by withdrawal requiring medical management, and this characterizes the first stage of rehabilitative treatment. The detoxification stage involves the clearance of drugs from body systems in which dangerous physiological effects of not using drugs have to be managed. This implies that people with cocaine addiction should be assessed formally and referred for drug addiction treatment. Continuous rehabilitation and educational programs offered by a drug rehabilitation facility in Michigan then come in handy to address the unpleasant and potentially fat side effects associated with detoxification and withdrawal in addition to outpatient or inpatient drug administration to achieve medically managed withdrawal (National Institute on Drug Abuse, 2018). Therefore, the risk of recidivism can be minimized with these interventions in additions to running support programs to offer economical and emotional support to reformed people with drug addiction to skill training for promising careers to eliminate the possibility of a relapse. However, the outcomes are dependent on individual personality, attributes, and attitude and might vary for different individuals.

### **Benefits Anticipated From the Drug Intervention Programs**

Drug intervention programs aim to convert users to non-users, consequently reducing the demand for drugs such as cocaine within the community. A significant benefit and the focus of this research is achieving a reduction in recidivism among those exposed to rehabilitation and educational programs. Cocaine, in particular, is highly addictive and with the potential to alter the brain's chemical makeup of those using it,

making it a challenge to quit without help offered through rehabilitation, medication, and educational interventions, among others (Scot, 2020a)). The American Addiction Centers lists the signs of cocaine abuse as social isolation, excitability, risky behaviors, financial difficulties, changes in sleeping patterns, and other socioeconomic and medical issues that people should watch out to identify those requiring help (Scot, 2020a). Rehabilitation and educational drug intervention programs aim to address these adverse effects of cocaine addiction and improve the quality of life for reformed drug users. Prevention of potentially tragic outcomes calls for recognition of these warning signs and applying necessary interventions.

In most cases, people with cocaine addiction face the criminal justice system before coming into contact with social networks. This presets opportunities treatment, among other interventions either instead of, before, during, or after incarceration. The combination of drug treatment and sanctions by the criminal justice system has the overall effect of reducing drug abuse alongside related crime. People with cocaine and other drugs addiction exposed to rehabilitation under legal coercion stay in treatment for much longer and tend to exhibit better outcomes than those on interventions not under legal pressure. Prisoners who commence drug abuse treatment interventions while in prison and continue upon release tend to have minimal criminal behavior and are at a lower risk of recidivating (NIDA. 2018)). Evidently, in Michigan, interventions implemented have been seen to bear fruits, such as achieving the lowest recidivism rate in 2018 at 28.1%, placing Michigan among the top 10 states with the lowest recidivism

rates in the country (MDC, 2020). This success was attributable to the Michigan Department of Correction's rehabilitation and educational program efforts with interventions such as educating prisoners and offering job training to equip them with skills in high-demand fields, consequently increasing their chances for stable careers after incarceration and reducing recidivism.

Residents of Detroit, Warren, Greenville, Ann Arbor, Haslett, and Marquette, among other Michigan cities, have access to cocaine addiction treatment and detoxification programs. These programs aim to address cocaine impact in Michigan as it is a harsh drug that makes it difficult for people with drug addiction to quit on their own and is associated with relapse after rehabilitation. Cocaine tends to take over the person's life using the drug altogether, and only a thorough and complete cocaine detoxification and rehab program can get a person out of dependence (Gemme, 2020). The rehabilitation programs available in Michigan work by availing support groups as a major element since cocaine addiction can hardly stop without support groups. The cocaine usage rate in Michigan stands at 2%, with most users being African American making adults. Michigan still faces the challenge of cocaine being distributed within the community in both large and smaller quantities (Gemme, 2020). Violence on Michigan streets is attributed to cocaine abuse, rampant, with continued supply being a challenge. Rehabilitation programs recognize the detrimental impacts of cocaine on the users, including damage to the mind and body of people with drug addiction. In as much as it is

not easy to cut on the supply as suppliers are proactively finding new ways of distributing the drug within the community, rehabilitation programs aim at cutting the demand for the drug. Gemme (2020), in the article on rehabilitation, notes that having drug detoxification facilities is not the final solution in the fight against all forms of addiction and asks people with drug addiction to ensure seeking short-term rehabilitation support after the main detoxification program. Rehabilitation programs are just enough to lay a foundation for the long-awaited journey of treating drug addiction. Without effective sensitization through education programs, short-term rehabilitation support after the main rehabilitation, and the use of support groups, chances of recidivating among rehabilitated people with cocaine addiction are relatively high. Anticipated benefits include achieving a holistic approach to addressing cocaine addiction among African American male men with cocaine addiction, ensuring continued abstinence, and minimal recidivating chances.

### **Barriers to Effective Rehabilitation/Education**

There is a statistically higher number of people with substance use disorder for the African American community than the general population. This is due to several factors that inhibit the effectiveness of educational and rehabilitation interventions. One such factor is the poverty characterizing urban areas inhabited by many African Americans and the associated inferiority complex. These residential areas also tend to have a high concentration of illicit drug sales. Education apathy traps many African Americans in illiteracy, and this presents a major barrier to educational interventions. African Americans live in neighborhoods where they see people obtaining and abusing

drugs with ease and indulging in drug abuse even after rehabilitation. Educational interventions are countered by role models within the African American community who regularly abuse drugs. The neighborhoods dominated by drug lords controlling African American families with debt lead them to sell drugs to supplement the inadequate family income. These are some of the challenges the African American community faces. Even after rehabilitation, when they rejoin the rest of the community, the exposure to drugs increases their recidivating chances.

Pullen and Oser (2014) noted that illicit drug abuse is a major concern in urban and rural areas, and they're still significant barriers to rehabilitative treatment. Among barriers identified included inadequate funding where counselors emphasized the challenges faced in meeting client needs and attracting qualified counselors in rural and urban settings. Another major challenge in the achievement of rehabilitation and educational intervention outcomes is transportation challenges for counselors. Bureaucratic challenges also pose a major barrier as drug addiction counselors spend a considerable amount of time navigating these obstacles, which would have otherwise been spent in the delivery of rehabilitative, therapeutic services.

Several factors influence recovery from substance abuse disorders. Length of stay in rehabilitative treatment has the potential to hinder the effectiveness of the interventions. There is a high relationship between the length of stay in rehabilitative treatment and the level of abstinence. The longer a drug addict is exposed to rehabilitation and educational program interventions, the lower recidivism chances,

implying effective intervention duration increases. Another key factor is the completion of the program. Effectiveness is much higher among individuals who complete the rehabilitation program. Post-rehabilitation monitoring also counts as a key element in improving employed interventions (McPherson, et al., 2017). The effectiveness of rehabilitation and educational programs can be assessed by looking at relapse cases within the community. Michigan's recidivism rate had stagnated at approximately 30% until recently when the rate dropped to 28.1, owing to the department of correction (MDC, 2020). Given this, the structure and areas of focus in the rehabilitation and educational programs can pose a barrier where the approach is only focused on addressing drug withdrawal complications without looking at the root cause.

### **Making Rehabilitation/Education Programs Effective**

Similar to addictions, effective rehabilitation and treatment programs are personal. This implies that a rehabilitation program may be effective for one person and not for someone else. Improving rehabilitation programs involves combining drug treatment alternatives such as partial hospitalization, incorporating therapeutic communities, residential treatment, adopting 12-step involvement, medical detox, outpatient care, and inpatient care. Detoxification marks the beginning for the most rehabilitation program, and this is a crucial initial step that involves the body ridding itself of drugs. This is associated with withdrawal symptoms managed through the rehabilitation process using appropriate medication throughout the transition. Since rehabilitation effectiveness can be assessed through relapse cases, outpatient treatment is key in improving rehabilitation



and educational programs intervention through maintaining sobriety. Given the chronic nature of addiction, the treatment should be long-term to minimize the chances of relapse (American Addiction Centers, 2020). Here the length of time one stays in rehabilitation and educational programs is a major factor.

Ensuring adequate funding for rehabilitation and educational programs is also key to improving effectiveness. Inadequate funding is one of the major barriers identified by drug rehabilitation counselors. Addressing the bureaucratic and transportation challenge as well as key in improving the effectiveness of rehabilitation programs. A Message by the National Association of Addiction Treatment Providers (NAATP) CEO captured some of the measures needed in improving rehabilitation efficiency. The CEO noted that more needs to be done to confront ethnic and racial rehabilitative treatment and outcomes disparities in the message. This requires addressing social determinants of health and ensuring inclusivity for the achievement of equity to improve access to rehabilitative treatment and improve on the effectiveness of these programs. Self-examination is necessary for organizations engaged in drug abuse rehabilitation and educational programs among African Americans in Michigan. Advocating for equity and inclusivity among marginalized and diverse people within Michigan is key in improving rehabilitation effectiveness. NAATP and similar institutions should partake in elevating the voice of African Americans through recruiting them as board members and in other official capacities to understand better factors contributing to drug addiction within the community and how rehabilitation can be improved to address them (National

Association of Addiction Treatment Providers, 2020). The recent decrease in recidivism in Michigan indicates the improved effectiveness of rehabilitation and educational programs, and more improvements should be sought for the achievement of lower relapse cases.

The effectiveness of rehabilitation programs can be improved by eliminating possible health disparities within the United States, more so in Michigan. Noonan et al. (2016) note that the high cost of effective medication and treatment on cocaine and other drug addictions is an important barrier among African Americans among other minority groups. According to Turner and Wallace (2003), African Americans are twice as likely as whites to be in drug and substance abuse. As a result, many of them are likely to seek medical care compared to white Americans. However, African Americans have fewer resources, unlike the rest of the population in America. The common barriers to drug treatment include poverty and lack of insurance, making these people see it difficult to seek medical attention. The government understands that most people start using drugs during their adolescent ages. As they grow into young adults, a few of them drop the behavior while most of the advance and become addicted to drugs and other serious social problems (National Institute of health, 2018). Therefore, they have adopted an early prevention strategy for the use of drugs. Also, when children advance into middle school, they face new problems including social, family, and academic situations and are more likely to try out drugs like alcohol, tobacco and later on progress to cocaine in a bid to try and solve their problems if not given proper attention, advice, and counseling.

When in high school, teens are exposed to a larger array of drugs and easy availability, and they may be tempted to try out new things (National Institute of Health, 2018). With these observations, the government initiated to reach out programs like NIDA, Preventing Drug Use among Children and Adolescents, and developing research-based guides that parents, educators, and leader in the community can use in achieving a positive balance between the risk and protective factors against the abuse of cocaine and other illegal drugs. These, among other measures, add to making rehabilitation programs more effective.

Efforts by the government support the communities' efforts to revive cultural values that can help teach adults and younger generation the harmfulness of cocaine, among other drugs, and how they can keep off from abusing it without recidivating. Other measures that improve the effectiveness of rehabilitation and educational intervention include advanced research and developed technologies by National Institute on Drug Abuse, which has consistently produced technology-based solutions and knowledge to improve individual and public health cocaine and other drug abuse awareness (Penberthy, Vaughan, & Fanning, 2015). According to the National Institute of Health (2018), such technology is based on developing improved strategies to prevent the use of drugs and its consequences, developing new, improved treatments to help people in drug addiction, and use technology including social media to increase public awareness in drugs and its implications on the social, financial, and health repercussions of drug abuse.

## **Rehabilitation/Education Intervention Outcomes**

Effective rehabilitation interventions should be guided by drug addiction treatment principles, as outlined by the National Institute on Drug Abuse (2018a). The principles recognize the complexity of cocaine and other drug addiction, albeit treatable with adverse effects on human brain functions and behavior. Effective rehabilitation should address the alteration caused by the addiction to the human brain's structure and function associated with long persistence changes continuing beyond the abuse. This persistence contributes to high cases of relapse, which is likely even after a long period of abstinence. Another major principle is the acknowledgment of the fact that no single treatment is appropriate for everyone. Drugs and patient characteristics are key elements to be considered to improve rehabilitation and educational intervention outcomes. This aids in achieving ultimate success for people with cocaine addiction to return to productive functioning in their families, workplace, and society. The readily available treatment makes it possible for people with cocaine addiction to take advantage of the available services as soon as they are ready for treatment as cocaine-addicted individuals may be uncertain about entering treatment.

Cocaine addiction is not different from other chronic illnesses where outcomes are highly dependent on how early treatment and other interventional measures are applied. Rehabilitation outcomes also address multiple needs and not just cocaine abuse among African American males in Michigan. There are other associated concerns, including the presence of HIV/AIDS among people with cocaine addiction, tuberculosis prevalence,

Hepatitis B, and C, among other infectious diseases requiring both treatment and educational interventions for sensitization in the form of counseling (National Institute on Drug Abuse, 2018a). The principles recognize the possibility of relapse after rehabilitation and during the process. The monitoring process ensures that interventions are adequately adjusted to meet better the needs of those being rehabilitated. Most importantly, the principles recognize the need to use sanctions or enticements from employment settings, family, and the criminal justice system to increase entry into rehabilitation programs and eliminate the possibility of recidivating.

People struggling with addiction to drugs such as cocaine stand to benefit by joining rehabilitation and educational programs. These programs offer a conducive environment to overcome addiction and cope with the healing process. A comprehensive rehabilitation program includes individualized treatment plans, educational programs, and offering correctional support on addiction-related crimes and training on high demand skills to address the issue of unemployment after incarceration to lower chances of relapse. Rehabilitation outcomes include overcoming addiction, achieving behavioral productivity, and an overall decrease in recidivism (MDC, 2020). Prisoners face personal, economic, and social challenges as they try to reintegrate into the community after correction. This is likely to result in relapse contributing to reconviction shortly after release from prisons. Therefore, prisons should embrace a rehabilitative approach alongside correctional measures to prepare people with cocaine addiction for life after

prison (United Nations Office of Drugs and Crime, 2018). This is a key factor contributing to the low rate of recidivism in Michigan's 2018 report.

Educational programs have the potential to boost drug abstinence through the reduction of risk factors associated with the knowledge gap. African American males have been seen to serve a longer time in incarceration than other races due to drug abuse (Scott & Easton, 2010). This is both in first-time offenders as well as cases of recidivism. With educational program interventions and rehabilitation, such cases can be reduced. Effective rehabilitation and educational programs affect reversing the negative impacts of cocaine use among African Americans in Michigan. These include reducing the community's crime rate as those affected by cocaine addiction undergo behavioral change and manage to abstain from drug dependence. The interventions also result in a reduced number of road accidents as fewer people are seen to drive under the influence of cocaine, among other illicit drugs. The use of rehabilitation and educational programs in curbing drug abuse achieves both prevention and treatment goals towards achieving the Healthy People 2020 objectives, where drug abuse is one of the leading health indicators.

### **Summary**

Drug abuse involving cocaine, among other illicit drugs, is a significant issue in Michigan, among other parts of the United States. The review of the literature reveals that cocaine is one of the most abused drugs. The availability and affordability of cocaine in the US make it a leading consumer in the world. Cities like Wayne in Michigan tend to have many people addicted to cocaine, even though it is among the US's most

impoverished urban areas. Poverty, peer pressure, lack of social support, depression, stress, and social anxiety are some of the risk factors for cocaine use among African American males in Michigan. The cognitive development among adolescents results in their exposure to drug abuse. Crack cocaine is the most abused drug among African Americans. Being part of criminal gangs involved with drug distribution in major cities like Kalamazoo, Flint, Detroit, they are more vulnerable to drug addiction.

There is a need to improve rehabilitation and educational programs' effectiveness to reduce recidivism reduction in the US significantly. The rate of recidivism has been consistently above 30% in Michigan. Still, the department of correction efforts, including the incorporation of education and job training with skills in fields with high demand contributing to career stability after rehabilitation, resulted in the lowest 28.1% rate. Effective rehabilitation programs aim to treat drug addiction and educate the community on dangers associated with drug abuse to prevent them from using drugs. The social learning theories are useful for positive social learning behavior through rehabilitation. Very few research works have tried to assess the perceived effectiveness of rehabilitation and educational programs by a drug rehabilitation facility in Michigan to African American people with cocaine addiction in preventing them from recidivating. This gap, therefore, supports the need for this research.

### Chapter 3: Research Method

Drug abuse and addiction in Michigan is a major problem that mostly affects African American adult male. Statistics reveal that 26.4 million people in the United States engage in the use of at least one illicit drug (Buddy, 2018). The number continues to increase, with cocaine being ranked as the most common illegal drug after marijuana and prescription drugs. Recidivation is a major challenge among people with cocaine addiction, especially in Michigan. Statistics reveal that at least 56% of the African American adults in Michigan arrested for cocaine usage had been released from the rehabilitation facility over the past 3 years (Buddy, 2018). The government's efforts to reduce drug use, such as rehabilitation and education programs, are being made in Michigan, but there is little data on those efforts' effectiveness. Therefore, in this study, I investigated the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African American men with cocaine addiction in preventing them from recidivating. In this chapter, I describe the research design for this study, my role as the researcher, the methodology, the plan for data analysis, the issues of trustworthiness, and the ethical issues related to undertaking this study.

#### **Research Design and Rationale**

The research question that this study aimed at answering was “what is the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African American people with cocaine addiction in



preventing them from recidivating?” I used a case study research design because this research was designed to undertake an in-depth, multi-faceted investigation on the ways of reducing recidivation rates among people who previously used cocaine.

### **Role of the Researcher**

I had the sole responsibility of conducting and overseeing the research to its successful completion. Specifically, I actively identified research participants, selected the sample participants, collected and analyzed the data, reported the results, and interpreted the findings. I undertook the role of protecting the identity of the research participants. Also, I did not have any personal relationship with the participants.

### **Methodology**

#### **Participant Selection**

The study’s target population was African American men who previously used cocaine and have been discharged from a rehabilitation center. The participants selected from this population were, at the time of the study, not under any treatment program.

The inclusion criteria for this group were that the participants selected were African American men and that, in the past, they had been admitted to rehabilitation for at least 3 months. Another group of participants comprised clinicians who were expected to have worked within the facility for at least 3 months. This requirement was necessary to ensure that they clinicians participating in the study are well conversant with the facility’s procedures and programs. The sampling strategy employed was snowball

sampling, a type of non-probability sampling, whereby the identified study participants identified and referred other study participants who would take part in the investigation.

To ensure that the data were collected to saturation, I used a sample size of 10 people who previously used cocaine and three clinicians. This size was arrived at after considering several factors, such as the financial and time constants. Also, this sample is large enough to provide data that can be seen to represent the target population. Both categories of participants were recruited through a flyer emailed to them by the drug rehab facility. The flyer had the information about the research, the intent of the research and my contact details, including phone number and email address. The participants interested in the research would have an opportunity to contact me via phone or email.

Participants were educated on the importance of participating in this study and were informed that they could choose to either take part or not to participate. Those willing to participate were emailed the consent form, and I audio-recorded the verbal consent before proceeding with the interview.

### **Instrumentation**

The data from African American men who previously used cocaine and have been discharged from a rehabilitation center were collected through a phone interview, which was audio-recorded. I developed and used an interview data collection tool (see Appendix A) to collect data on the perceived effectiveness of rehabilitation and educational programs in preventing recidivism. The interview comprised a set of open-ended questions. Each of the participants were asked the same questions and in the same

manner. The data from clinicians were also collected through a recorded phone interview using an interview tool that I designed (see Appendix B), whereby they were asked their opinion, based on management point of view, how the recidivism rate can be reduced.

The data collection tools used for both samples were developed based on the research purpose and the research questions to be addressed. This means that the data collected was sufficient to answer the research questions because it contained relevant and related to this research. I collected additional data through document review and existing literature. The historical documents relating to the rehabilitation methods already in place and recidivating rates among the people addicted to cocaine within a drug rehab facility were collected and analyzed. These data were synthesized to develop appropriate conclusions, which led to the formulation of recommendations for improving the quality of the rehabilitation techniques.

### **Recruitment, Participation, and Data Collection**

I collected the data on the sample participants (people who previously used cocaine and clinicians) using the phone interview method which was audio recorded. The collected data were recorded on the interview sheet, based on the responses obtained from the interview. Both the people who previously used cocaine and the clinicians were recruited using a flyer that were emailed to them by the drug rehab facility. The flyer talked about conducting the research and the researcher's contact details, including phone numbers and email addresses. Anyone who met the criteria would contact me via phone or email. Participants were contacted via phone and were educated on the importance of

participating in this study and informed that they could choose to either take part or not participate. Those willing to participate were emailed a consent form. Once verbal consent is audio-recorded, the participants were recruited in the research.

Data were collected only once for each participant, and each phone interview lasted 30 to 45 minutes. I asked the participants the questions on the interview tool and wrote down respondent's responses.

### **Data Analysis Plan**

The main data analysis method was content analysis. After collecting the qualitative data through interviews as well as historical document review, I coded the data coded into appropriate themes, based on the responses provided. Each of the responses were placed in a proper theme, and simple descriptive statistics such as frequencies and graphs were used in summarizing the data. Descriptive statistics were used in analyzing continuous demographic data. The historical data were analyzed by the use of thematic analysis as well as proportions and bar graphs. Thematic analysis included categorization of the obtained data into themes and subthemes, and this was used to obtain the main concepts related to this study. The proportions showed the percentage of people with substance use disorder who relapse into addiction after they are released from the facility every year. In contrast, the bar graph was used in comparing these percentages for over 5 years. The main data analysis tool used was Microsoft Excel.

### **Issues of Trustworthiness**

It is always important to ensure that the findings obtained are accurate and can be trusted. The credibility of the results is an important aspect to consider. Research credibility in a qualitative study is a measure of research trustworthiness, which is defined as the extent to which the study results are believable from the research participants (Shenton, 2004). In this research, I established credibility by using two techniques, triangulation and member checking. Triangulation is defined as using several different data sources to gain a deeper understanding of the phenomenon under research. The analyst triangulation method was implemented. Multiple analysts were brought on board and asked to review the findings to identify any inconsistencies or blind spots in the analysis process. The second method of checking credibility was member checking. Here, this research's findings were shared with the research participants for them to review and identify any possible errors or any information that they would deem necessary.

Another issue that affects the trustworthiness of research is the transferability of the findings. The study findings are transferable if they can be applied in other similar populations, contexts, or situations. It is not the researcher's work to prove that the findings provided in the research are transferable. Still, the researcher should provide the appropriate database that enables the readers to judge the transferability of the findings (Lincoln & Guba, 1985). The transferability was assured by using a thick description technique whereby I provided a detailed description of data collection experiences. The

information provided included how the data collection process was undertaken, where the interviews took place, and other aspects of data collections that would enable the reader to understand the research setting.

Dependability is an aspect of trustworthiness, which ensures that the research findings are repeatable and consistent. If a different researcher obtains the raw data used in the study and conducts an independent analysis, they would get similar results and interpretations regarding that data as those obtained in that research (Shenton, 2004). Dependability in this research was established by using an external audit technique, whereby an external researcher was asked to conduct an inquiry audit of the study. This external researcher was asked to review the various research processes, such as data collection and analysis, to establish if everything was done with the required accuracy and if the data support the findings obtained.

The last criterion of trustworthiness to be considered is confirmability. Confirmability is the measure of the extent to which the participants' experiences and narratives shape research findings instead of the potential researcher bias. An audit trail technique was used to ensure that the research is confirmable. This means that an independent qualitative researcher was asked to check the various steps of the research process, such as data collection, analysis, and coding, to ensure no researcher bias instances. The findings were based on the information provided by the participants.

## **Ethical Procedures**

Any research involving humans as the study participants should ensure that it is based on a strong ethical background. Before undertaking this research, I obtained approval from the Walden University Institutional Review Board (02-24-21-0753582), along with the rehabilitation facility's approval. The research participants (both people who previously used cocaine and clinicians) were also provided with all the necessary information regarding this study, together with what they were expected to do, and they were given a chance to choose to or not to participate in this research. The participants were also given the freedom to leave the research at any point without being required to provide any additional explanation.

I upheld the privacy and confidentiality of the participants at all times by ensuring that no sensitive data, such as names, related to the participants, were collected. The responses collected were treated as anonymous to other parties who are not part of this study. Each of the participants was assigned a random number, making it hard to link the participant to the responses. The raw data, both soft and hard copies, were stored safely in a secure computer drive and safe, respectively, and the access key is in my possession. These data will be retained for 5 years, after which they will be permanently destroyed. These strategies were meant to ensure that the participants are treated with the utmost confidentiality.

## Summary

In summary, my primary role as the researcher was to oversee the entire research process and take an active role in the selection of the study participants, data collection, analysis, and interpretation of the findings. The target participants in this study were African American men who previously used cocaine and clinicians. The sample was selected through the snowball sampling technique. The participants were recruited by the use of flyers emailed by the drug facility to the clients who previously used cocaine and clinicians. The data were collected from a sample size of 10 participants who previously used cocaine and three clinicians. The data were collected through a recorded phone interview method, whereby I developed interview guide, called the participants, asked questions, and recorded their responses in the interview sheet. In addition, historical data were collected. The main data analysis tool was content analysis, whereby the responses obtained were categorized into different themes. Lastly, the various issues of trustworthiness, such as research credibility, transferability, dependability, confirmability, and ethical concerns such as participant confidentiality, were appropriately addressed.



## Chapter 4: Data Analysis

Drug abuse, especially cocaine abuse, has been a significant challenge in the United States, affecting African American males. The rehabilitation facilities play an important role in addressing drug addiction, whereby they are tasked with the sole purpose of facilitating the process of recovery among the people dependent on drugs. In some cases, the rehabilitation and educational programs offered by these facilities are not as efficient as expected since there has been a significant increase in the rate at which African American men with cocaine addiction problem are rearrested shortly after release from the rehabilitation facilities (DeVall, et al., 2017). Therefore, the primary purpose of this research was to investigate the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African-American men with cocaine addiction in preventing them from recidivating. The research question was “what is the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African American men addicted to cocaine in preventing them from recidivating?”

This chapter is organized in sections, with the first section being Setting, in which I describe the conditions that influenced the participants during the data collection exercise. The following section is Demographics, which represents the demographics characteristics of the participants. The Data Collection section covers the number of participants, duration, location, and frequency of data collected, and how data was collected and recorded. Lastly, we have the Data Analysis section, where I explain how

data were analyzed (the coding process), and the Results section, in which I describe the patterns and themes presented by the data.

### **Setting**

The interviews took place from March 20, to April 9, 2021. Data were collected from a sample size of 10 participants who previously used cocaine and three clinicians. I collected the data through a recorded phone interview using an interview guide I had developed.

I got approval from Walden's IRB on February 24, 2021 and started the recruitment process by emailing flyers to the pain management facility that forwarded them to former cocaine abusers who had been discharged from the facility and clinicians. Those interested in the study contacted me, and I reached out to them to schedule interviews. All participants were informed about the consent form that outlined the purpose of the study. The verbal consent of all 13 participants was audio-recorded.

There was minimal disruption of the participants since the data were collected at the participants' convenient time and day. There was no trauma or any pressure experienced by the participants, both the ex-cocaine users or the clinicians.

### **Demographics**

The data were collected from two types of participants: (a), African American men who had a history of cocaine misuse and who had been discharged from the rehabilitation facility and (b) the clinicians from the facility.

Table 1 shows the demographic characteristics of the ex-cocaine users. The sample contained a total of 10 participants who had an average age of 23.9 years (minimum age = 19 years, maximum age = 27 years). Also, the average stay of these participants within the facility was 7.8 months (minimum length of stay = 4 months, maximum length of stay = 15 months). These results reveal that all the participants were young (below 27 years of age) and had stayed within the facility for at least 4 months which is more than the minimum duration required for participation in this study, which was 3 months. Figure 4.1 shows the frequency distribution of the year in which the participants were discharged from the rehabilitation facility, and Figure 4.2 shows the participants' level of education. These results reveal that all the participants were discharged between the years 2016 and 2019. The year 2018 and 2020 had the most participants (three each), and the year 2016 and 2017 had two participants each. Figure 4.2 shows the level of education of the participants. This output reveals that most participants' maximum level of education was high school (four people), followed by the "less than high school" with 3 people, then college education with 2 people, and lastly 1 person with bachelor's degree.

Table 4.2 shows the demographic characteristics of the clinicians. This output shows that there were three clinicians considered in this study who had an average age of 38.7 years (minimum age = 35 years, maximum age = 43 years). Also, the average length of stay in the rehabilitation facility among the clinicians was 6.7 years (minimum = 6 years, maximum = 8 years). This result shows that the clinicians had a significantly high

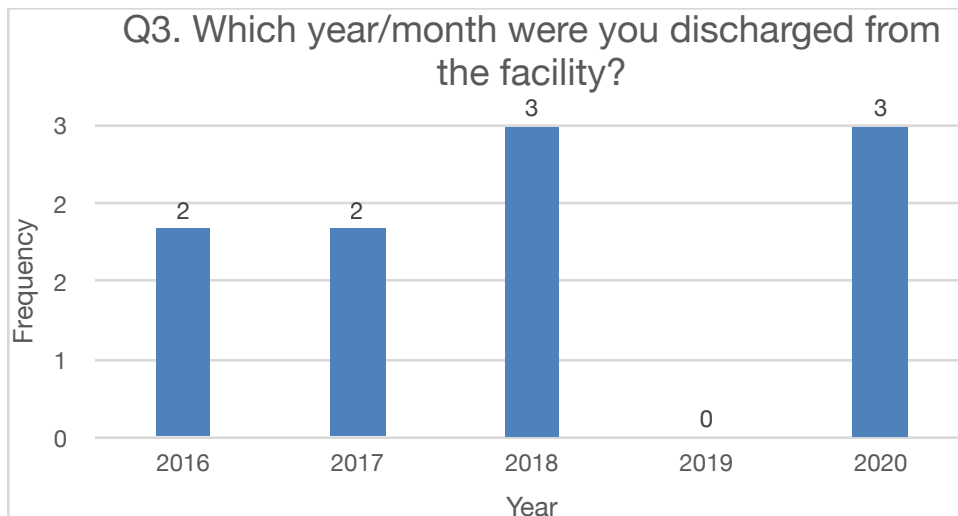
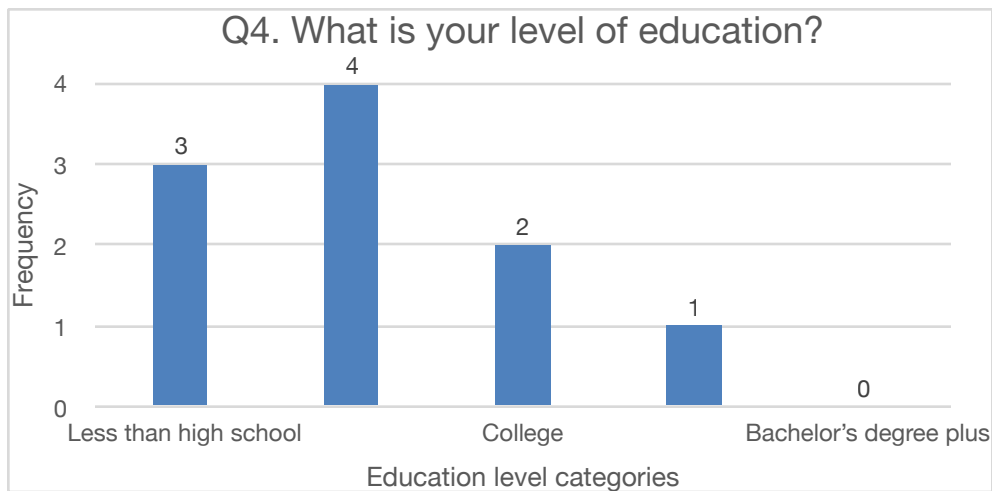
level of experience and stayed in the facility for a long time, which is sufficient to understand how the facility operates entirely.

**Table 1***Descriptive Statistics of Ex-Cocaine Users*

	Q1. What is your age (in years)	Q2. How much time did you stay within the facility? (in months)
Mean	23.9	7.8
Standard error	0.874960317	1.152774431
Median	24	8
Mode	26	4
Standard deviation	2.766867463	3.645392831
Sample variance	7.655555556	13.28888889
Kurtosis	-0.493381526	-0.007747996
Skewness	-0.657794077	0.664695696
Range	8	11
Minimum	19	4
Maximum	27	15
Sum	239	78
Count	10	10

**Table 2***Descriptive Statistics of Clinicians*

	Q1. What is your age (in years)	Q2. How long have you worked within the facility as a clinician? (years)
Mean	38.66666667	6.666666667
Standard error	2.333333333	0.666666667
Median	38	6
Mode	#N/A	6
Standard deviation	4.041451884	1.154700538
Sample variance	16.33333333	1.333333333
Skewness	0.722108646	1.732050808
Range	8	2
Minimum	35	6
Maximum	43	8
Sum	116	20
Count	3	3

**Figure 1***Q3 Bar chart***Figure 2***Q4 Bar Chart*

### **Data Collection**

I collected data from a total of 10 ex-cocaine users and three clinicians. All participants were contacted via phone, and participants in each category were asked identical questions based on the corresponding interview guide. Participants' responses were recorded on the interview guide paper, then transferred as raw data to an Excel spreadsheet. The only deviation from the data collection plan described in Chapter 3 was that the participants took more time to respond to the questions than previously planned in some cases. The plan was that each participant would take a maximum of 45 minutes, but two of the participants took up to 1 hour. Despite this, I made sure that all participants fully understood the questions and allocated enough time to give their responses. Historical data from the rehabilitation facility were also collected. The data of interest were the total number of cocaine users admitted by the facility every year, the average age of these patients, the period of stay of the patients, and the number of patients readmitted back within 6 months of discharge. These data were collected over 5 years, from 2015 to 2019.

### **Data Analysis**

The qualitative data collected from both sets of participants were analyzed thematically. Participants' responses were categorized into different themes, and the data were coded and analyzed using Excel. Relevant themes were developed based on the participants' responses, whereby it was ensured that each of the responses would fit the



exact theme. Themes developed from the ex-cocaine user's interview responses and the clinician's' interview responses are shown in Tables 3 and 4, respectively.

**Table 3***Themes From Ex-Cocaine User Data*

Interview question	Themes
Could you describe your experience and satisfaction with the programs provided in the facility in each of the experiences below?	<ul style="list-style-type: none"> <li>▪ Unsatisfied</li> <li>▪ Satisfied but improvements needed</li> <li>▪ Very Satisfied)</li> </ul>
How do you think the current rehabilitation and education programs could be changed to improve the experiences of the patients?	<ul style="list-style-type: none"> <li>▪ Incorporate new technology</li> <li>▪ Patient involvement</li> <li>▪ Experts involvement</li> <li>▪ Adopt new programs</li> </ul>
How do you describe the effectiveness of the programs offered by the facility in reducing the likelihood of recidivating?	<ul style="list-style-type: none"> <li>▪ Not effective</li> <li>▪ Minimal effectiveness</li> <li>▪ Effective</li> <li>▪ Very effective</li> </ul>

**Table 4***Themes From Clinician Data*

Interview question	Themes
Could you describe your experience and satisfaction with the programs provided in the facility in each of the experiences below?	<ul style="list-style-type: none"> <li>▪ Unsatisfied</li> <li>▪ Satisfied but improvements needed</li> <li>▪ Very Satisfied)</li> </ul>
How do you think the current rehabilitation and education programs could be changed to improve the experiences of the patients?	<ul style="list-style-type: none"> <li>▪ Involve both patients and experts</li> <li>▪ Use new technology in developing programs</li> <li>▪ Develop evidence based new programs</li> </ul>
How do you describe the effectiveness of the programs offered by the facility in reducing the likelihood of recidivating?	<ul style="list-style-type: none"> <li>▪ Effective but needs improvement</li> <li>▪ Not effective</li> </ul>

The coded data were then analyzed using frequency distribution tables and histograms. The histograms were utilized to make it easier to compare the responses across different themes visually. All the analysis was done using Excel.

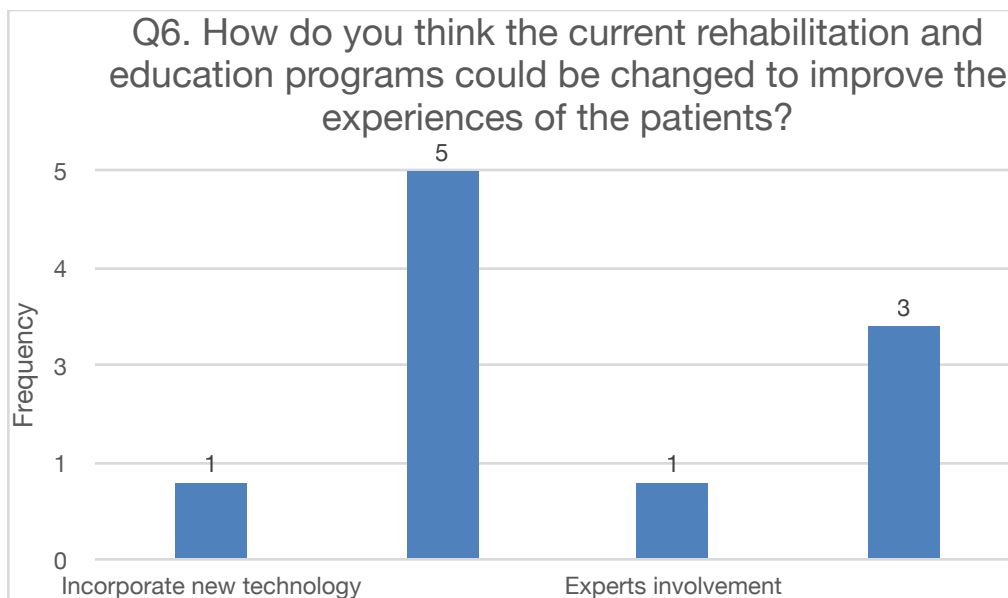
## **Results**

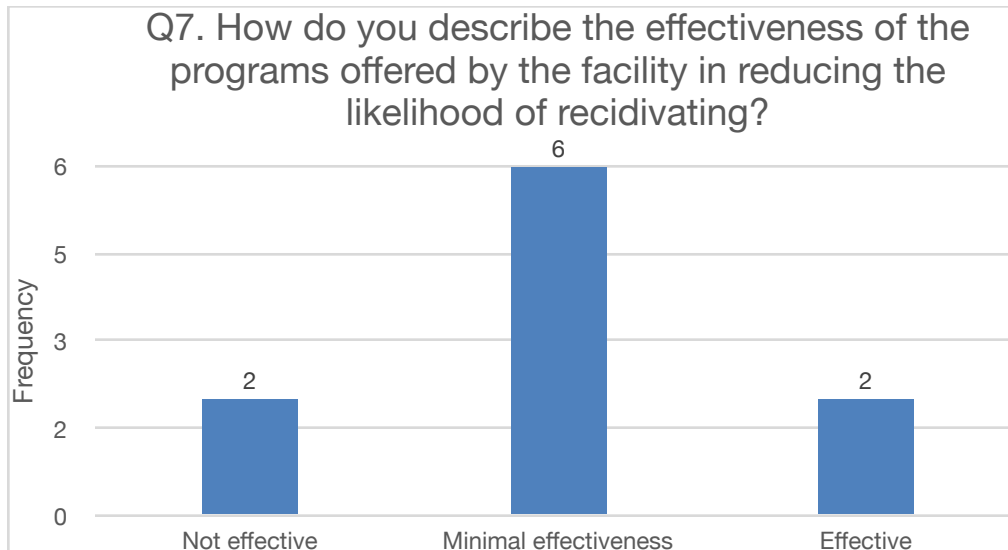
### **Results of Ex-Cocaine User's Data**

Figure 4.3 shows the results of the participant's' experiences and satisfaction with the programs provided by the rehabilitation facility. This output reveals that most participants were very satisfied with the facility's programs in promoting personal development (n = 6), and four of the participants were satisfied but recommended some improvements on the programs. On the second aspect of building up self-confidence, most participants were not satisfied with the facility efforts (n = 5), with three stating that they were satisfied with improvements needed. Only two said that they were very satisfied. The results also show that most participants did not find the facility's programs as helpful in improving the attitude and behavior towards overcoming drug addiction (n = 7), with two participants being unsatisfied and one being very satisfied with the facility's efforts. Lastly, 6 out of the 10 participants were not satisfied with the facility's efforts in reducing recidivating among the patients being discharged, with four of them being satisfied but recommending improvements. This output reveals that the participants were only satisfied with the facility's efforts in promoting personal development but expressed dissatisfaction with the other three aspects (i.e., building up self-confidence, improving

attitude towards overcoming addiction, and reducing recidivating).

Figure 4 shows the result of the question that addressed how the participants think the current rehabilitation and education programs could be changed to improve the patients' experiences. From this output, it is evident that most participants recommend patient involvement in developing better and more efficient programs (n = 5). Implementation of this recommendation would lead to patient-based interventions, which the participants think would yield better and positive results. In addition, three of the participants recommend adopting new interventions, and one participant recommends incorporating new technology in the existing programs and experts' involvement in improving the current programs. Lastly, the most significant number of participants (6 out of 10) stated that the current interventions that are aimed at reducing recidivating have minimal effectiveness (see Figure 4.5). Only two participants noted that these programs are not effective. This shows that most ex-cocaine users did not find the facility's programs helpful in preventing them from going back to addiction shortly after the discharge from the facility.

**Figure 3***Q5 Bar Graph***Figure 4***Q6 Bar Graph*

**Figure 5***Q7 Bar Graph***Results of Clinicians' Data**

The clinicians were asked the same questions as the ex-cocaine users to get their opinion on the facility's efforts to address the issue of cocaine addiction and reduce recidivism. All the three clinicians were satisfied with the facility's efforts to promote patient's personal development, with one recommending some improvements to the existing programs. In addition, it was evident from the data collected that 2 of the clinicians were satisfied with improvement recommendations on the facility's efforts in helping improve the patients' attitude and behavior towards addiction and build self-confidence. Lastly, all the three clinicians were unsatisfied with reducing the likelihood of patients recidivating after being discharged. This showed that the facility has a

significant problem in this aspect, based on the fact that both the ex-cocaine addicts and clinicians have the same level of dissatisfaction.

The clinicians also gave several recommendations on how the facility could improve the rehabilitation and education programs. One of the recommendations was the involvement of both the patients and experts in developing patient-centered programs. This recommendation was similar to that given by the ex-cocaine users, implying a major issue that the facility should consider. The second recommendation was the development of evidence-based programs. Lastly, the clinicians were for the view that recent technology should be incorporated into the existing programs.

### **Results of Historical Records Data**




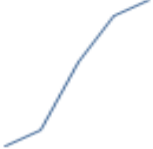
Figure 6 below shows the results of the historical records data, with sparklines showing the trends over time. This output reveals that the average number of cocaine users admitted in the facility over 5 years (between 2015 and 2019) was 104.6, with the least number observed in 2015 and the higher number in 2019. The associated sparkline shows that this trend has been increasing, implying cocaine use has increased over the past few years. The participants' average age was 22 years (min = 18.3 years, max = 25.1 years), and the average period of stay in the facility was 5.4 months (min = 4 months, max = 7 months). Lastly, the data shows that the average percentage of the ex-cocaine users who were readmitted to the facility within 6 months was 50.56% (min = 40.0% in 2015, max = 60.6% in 2019). The associated sparkline reveals that the recidivation rate has been on a steep increase over the 5 years. This result is consistent with the responses



from the ex-cocaine addicts and clinicians that the facility does not have adequate measures that reduce the likelihood of recidivation.

## Figure 6

### *Summary of Historical Data*

	Year					Average	Sparklines
	2015	2016	2017	2018	2019		
Total number of cocaine addiction African American male	71	93	82	131	146	104.6	
Average age of these patients (years)	18.3	20.8	25.1	23.6	22.2	22	
Average period of stay within the facility (months)	4	7	6	6	4	5.4	
Percentage of those readmitted within the facility within a period of 6 months	40	42.1	51.8	58.3	60.6	50.56	

## Summary

This chapter is aimed at analyzing the data obtained from 10 ex-cocaine users, 3 clinicians, and historical records obtained from 2016 to 2019. The interview data is qualitative in nature and is analyzed using the thematic analysis technique. The themes were selected based on the participants' responses and were fully inclusive, implying that each response could only be categorized into only one theme. The data from the ex-cocaine users revealed that the participants were only satisfied with the facility's efforts in promoting personal development but expressed dissatisfaction with the facility's

efforts in building up self-confidence, improvement of attitude towards overcoming addiction and reducing the likelihood of recidivating. Most of these participants recommend that for the facility to improve the patients' experiences, they should consider patient involvement in developing better and more efficient programs. The data collected from clinicians revealed that they were all unsatisfied with the facility's efforts in reducing the likelihood of patients recidivating after being discharged. As a result, they gave several recommendations on how the rehabilitation and education programs could be improved. The main recommendation was the involvement of both the patients and experts in developing patient-centered programs. Also, the clinicians recommended that the recent technology should be incorporated into the existing programs. Lastly, the historical data revealed that the recidivation rate has been on a steep increase over the 5 years. This result is consistent with the responses from the ex-cocaine addicts and clinicians that the facility does not have adequate measures that reduce the likelihood of recidivation.

## Chapter 5: Research Findings and Recommendations

### **Introduction**

This qualitative case study was conducted to investigate the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African American men with cocaine addiction in preventing them from recidivating. The study assessed the perceived efficacy of educational and rehabilitation programs based on their ability to reduce the use of cocaine and to prevent recidivism among African American men. The end goal of the study is to come up with recommendations based on the description of experiences among African American men after educational and rehabilitation programs. Clinicians, as well as people who previously used cocaine, were included in the study to allow for the collection of relevant data to answer the research question “What is the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African American men addicted to cocaine in preventing them from recidivating?”. The study was also guided by the social learning theory, which focuses on promoting learning and positive social behavior under the philosophy that new behavior can be developed through imitation or observation. The theory aligns with the study’s main purpose, and its application in other studies has been shown to yield positive outcomes (Fox et al., 2016).

A case study research design was used to define the nature of the study. This design was a perfect fit for the study as it focused on educational and rehabilitation programs offered by a specific facility in Michigan. Through this case study design, I

further sought to uncover the perceptions of cocaine addicts based on their experiences with educational and rehabilitation programs in Michigan. This also involved an understanding of the impact of rehabilitation and educational programs on recidivism among cocaine addicts. Snowball and criterion sampling methods were used to select study participants. The sampling method was aimed at selecting 10 participants and three clinicians to provide required data through phone interview method using a questionnaire containing open-ended questions to allow for the provision of additional information by participants on the topic of interest, consequently increasing the quality of research and data. Assumptions in the research design and data collection method included that all African American men with cocaine addiction who have already been discharged from the rehabilitation facility have the same understanding of the English language and that they have access to the internet and have email set up. Another assumption was that participants included in the study were honest and exhaustively responded to the data collection tool questions. It was also assumed that the participant selection criteria I used were appropriate for inclusion of a representative sample and that participants willingly participated in the study and had a sincere interest in participating.

Three clinicians were involved in the study with an average age of 38.7 years, the youngest being 35 years old and the oldest 43 years old. The clinicians had an average stay of 6.7 years in the facility. The shortest stay was 6 years and the longest 8 years, which made them a perfect fit and representative of the population due to their experience within the facility. Ten ex-cocaine users were also involved in the study. Phone interviews

were conducted with each of the participants, with the longest interview lasting 1 hour. In addition to the interviews, historical data from the facility were collected, mainly to determine the total number of cocaine users admitted in the facility every year, the average age of the patients, the period of stay, and the number of readmissions within 6 months of discharge. The data from ex-cocaine users revealed that participants were only satisfied with the facility's efforts in promoting personal development but expressed dissatisfaction with the efforts by the facility in building self-confidence, attitude improvement towards overcoming addiction, and reduction in the likelihood of recidivism.

### **Interpretation of the Findings**

Qualitative data were collected from clinicians and ex-cocaine users and subjected to thematic analysis. I categorized participants' responses into various themes then coded and analyzed the data using Microsoft Excel. The themes were defined by different interview questions for both ex-cocaine users and clinicians. Frequency distribution tables and histograms were then used to analyze the coded data. The use of histograms allowed for easy visualization and comparison of responses across different themes. This then enables straightforward interpretation of findings.

#### **Ex-Cocaine Users**

All 10 ex-cocaine user participants responded to the question on experience concerning satisfaction with programs provided in the facility allowing for inferencing. The focus areas for this question included promoting personal development, building

self-confidence, improving attitude and behavior towards overcoming drug addiction and reducing the likelihood of recidivating among patients who have been discharged.

Themes defined under this question included satisfaction levels as to whether unsatisfied, satisfied with the need for improvement, and very satisfied.

All participants were satisfied that the programs provided in the facility promote personal development. This shows that rehabilitation and educational programs have a major role to play in promoting personal development among African American cocaine addicts. Also, out of the 10 participants, four indicated that there is still a need for some improvements at the facility to achieve a higher level of satisfaction with the promotion of personal development. This confirms that therapeutic counseling based on the social learning model is an effective measure to enable interventions sensitive to the community's social, historical, and cultural development as this applies at a personal level (Ross, 2016). Therefore, the facility was successful in promoting personal growth and should consider improving rehabilitation and educational programs for better personal development.

Five out of 10 participants expressed dissatisfaction with the facility's programs in building self-confidence among cocaine addicts. On improving attitude and behavior towards overcoming drug addiction, there is a need for improvement as noted by the response from seven participants who noted that though they were satisfied, there is a need for the facility to improve educational and rehabilitation approach to better improve attitude and behavior on overcoming addiction. Another finding is according to the

response by 6 of the 10 participants who expressed dissatisfaction with the facility's interventions on reducing the likelihood of recidivating among discharged cocaine addicts. The findings from responses to the first question indicate some levels of satisfaction with all the aspects. Still, they show a need to improve the educational and rehabilitation interventions by the facility for better results. The findings agree with the findings by Heydari et al. (2014) that pharmaceutical treatment is not solely sufficient as the recidivating rate remains high for clients referred to addiction centers. This shows that education and rehabilitation interventions need to be improved to address the high recidivating rate among ex-cocaine addicts discharged from the facility.

Findings from responses to the first question indicate the need to improve educational and rehabilitation programs at the facility. The participants need to focus on all the four elements, including incorporating new technology, patient involvement, experts' involvement, and adopting new programs. Addiction and effective rehabilitation and treatment programs are personal, and this implies that a rehabilitation program can be effective for one person and not for someone else. Multiple approaches ought to be employed to improve the effectiveness of rehabilitation and educational programs by the facility, and these can combine drug treatment alternatives such as partial hospitalization, therapeutic communities' incorporation, residential treatment, medical detox, inpatient and outpatient care. The treatment should be personalized, and as per the findings from the responses, improvement should mainly focus on patient involvement to offer long-term treatment, educational, and rehabilitation interventions to minimize chances of

relapse (American Addiction Centers, 2020). Other improvement elements should not be overlooked, as the respondents suggested each element has a role to play in improving the overall outcome.

The third question sought to address participants' views on the effectiveness of the programs offered by the facility in reducing recidivism. The themes involved were whether the programs are effective, very effective, not practical, or have minimal effectiveness. The findings indicate that the programs by the facility did not achieve the desired level of effectiveness. Only two participants termed the programs as effective in reducing recidivism, with two noting that the programs are not effective at all. Responses from six participants indicated that the programs only have minimal effectiveness in reducing recidivism. This is in line with the need for improving facility programs through patient involvement to develop more personalized educational and rehabilitation interventions. These findings confirm that people struggling with addiction to drugs such as cocaine stand to benefit by joining rehabilitation and educational programs; however, there is a need to constantly improve the programs based on patient-specific characteristics, which can only be identified through patient involvement (MDC, 2020). The findings also extend the knowledge as captured in the literature that rehabilitation outcomes include overcoming addiction, achieving behavioral productivity, and achieving an overall reduction in recidivism with appropriate improvement through patient involvement.



### **Clinicians and Historical Data**

Findings from the three clinicians show that the facility has made adequate efforts to promote the patient's personal development. The response from one of the clinicians agrees with the findings from ex-cocaine users that there is a need for improvement to achieve better outcomes. Another finding indicated a need for improvement in the facility's rehabilitation and educational programs to improve patient's attitudes and behavior towards addiction and build self-confidence. This also follows the findings from participant responses that action needs to be taken to ensure the program effectively builds self-confidence among ex-cocaine addicts. Another finding from clinicians' responses is that the efforts by the facility failed to achieve a satisfactory reduction in the likelihood of patients recidivating after being discharged. This can be interpreted to mean that the facility has major problems in reducing the rate of recidivism among discharged addicts as the responses by ex-addicts and clinicians agree on dissatisfaction with this intervention. In addition, clinicians proposed recommendations on how the programs by the facility can be improved, and one that stood out was the need for patient and clinician involvement in developing patient-centered programs. The clinicians were also in agreement with the need to incorporate technology, develop new evidence-based programs, and expert consultation as measures to improve the effectiveness of the programs.

The findings from the historical data analysis substantiate the results from ex-cocaine addicts and clinicians' responses that the facility programs need improvement to

reduce the likelihood of recidivism among discharged patients. According to Pullen and Oser (2014), illicit drug abuse is a major concern, and there are still significant barriers to rehabilitative treatment. The findings are a life of this fact noting that responses and findings from historical records data suggest a relatively high recidivism rate with an average readmission rate of 50.56% within 6 months of discharge. The results, therefore, confirm knowledge in the discipline in line with the available literature and extend knowledge in some areas noting that in as much as rehabilitation and educational programs are important, they can be made more effective through improvement involving aspects such as patient involvement, expert consultation, new technology, and new programs.

### **Theoretical Framework**

The social learning theory is focused on promoting learning and positive social behavior using the philosophy that new behavior can be developed by imitating or observing others. Learning, therefore, is a cognitive process that can be developed within a social context such as a rehabilitation facility using educational and rehabilitation frameworks. This theory fits the study's main purpose, and the findings can be linked to its application which has been shown to yield positive outcomes (Fox, et al., 2016). According to Themeli and Givazolias (2014), drug abuse is a severe public health issue, and peer behavior is an essential factor in influencing drug abuse behavior. Social influence through interventions such as the program implemented by the facility has a role in rehabilitation efforts for cocaine addicts because drug abuse, especially cocaine

abuse, is a behavior that involved individuals learn over time through interaction with cocaine users. In the same way, exposing them to a cocaine-free environment and activities that do not support cocaine use can reverse the addiction to leave them free and at the same time prevent recidivism after discharge from rehabilitation facilities. This is in line with the social learning theory mechanism, and the findings from the study as per data analysis can be linked to this theoretical framework.

The interview questions to the ex-cocaine users sought to establish the satisfaction, improvement proposals, and effectiveness of the programs in instilling positive social behavior using the philosophy that new behavior can be developed through imitation and rehabilitation programs. The findings indicate that new behavior was promoted through the programs provided in the facility as all the participants expressed their satisfaction with the promotion of personal development among cocaine addicts rehabilitated and discharged from the facility. This confirms that the old ways of deterioration and criminal mindset associated with cocaine addiction were utterly unlearned. New principles supportive of personal development were learned through continued exposure throughout admission. Despite this great achievement, the respondents also confirmed that the effectiveness of the social learning theory is highly dependent on the quality of the intervention measures implemented by the facility. As such, 50% of the participants expressed dissatisfaction with how the programs provided in the facility build self-confidence among cocaine addicts. This can result from the degree of behavioral deterioration and the effort/resources and techniques needed to

achieve positive behavioral change. Findings from the third question indicate a need to improve the program to such a level that the desired improvement of attitude and behavior towards overcoming drug addiction among cocaine addicts can be achieved.

An area of concern from the findings is the effectiveness of the programs to reduce the likelihood of recidivating. This supports the social learning theory and perhaps creates the need for the facility's programs to be further developed. They do not terminate at the point of discharge but continue afterward to ensure chances of exposure to drug abuse and cocaine addiction behavior are eliminated. Patient involvement is the most preferred improvement, and this could achieve personalized care and in combination with the other proposed improvement measures such as the adoption of new programs and incorporation of technology, the programs by the facility can be extended to patients at their respective areas of residence to prevent exposure to adverse behavior and consequently reduce the likelihood of recidivating. Findings from the responses by clinicians coincided with responses from the 10 ex-cocaine addicts. A major finding from responses by both groups is that the facility needs to improve on patient and expert involvement in the rehabilitation and educational programs to achieve better results on promotion of self-confidence and reducing the likelihood of recidivating. The historical data analysis revealed an increase in recidivism rates among patients discharged from the facility over 5 years. This is an indication of failure in the programs by the facility to address post-discharge behavioral change. This further supports the recommended

involvement of patients in the programs to understand better them and what factors in their community setting can contribute to recidivism after discharge.

### **Limitations of the Study**

Limitations in a study can be inevitable, and they can exist concerning factors such as research design or methodology, which significantly impact the findings. Some study limitations are related to sample selection, sample size, and previous similar studies in a similar facility. The study participants in this research were people with a history of substance use and substance use disorder, and this might bias their responses due to their inability to remember the exact events and feelings under the influence of drugs. This limitation might affect the ability to obtain responses on the events as they took place, making them subject to further review and questioning. To address this limitation, efforts were made to only include participants who appeared to be in their right state of mind to avoid biased responses due to distorted ability to remember past events. Another limitation to this study is that the sample size was relatively small, and responses obtained might not be representative of the larger population. The financial and time constraints were considered to overcome this limitation, and the optimal sample that could fit the constrained resources was selected. Another limitation is financial and time constraints which impacted sample selection and the conduct of an exhaustive investigation. The generalizability of the results and findings could be affected by this limitation. As a result, further research on the same topic in other facilities using different sample sizes is recommended. Trustworthiness in a qualitative study is about establishing

credibility, transferability, confirmability, and dependability of the study findings (Elo et al., 2014). These are the essential components of establishing a trustworthy research study.

### **Credibility**

This is a measure of the level of confidence the qualitative researcher has in the truth of the research study findings (Korstjens & Moser, 2018). Credibility in the research was achieved by using several questions on the research topic to all the participants, and the responses were not guided. Still, participants were allowed to give open-ended responses with examples and expound their responses in as much as they could manage. Each participant was allowed enough time to respond through the phone interviews. Even though the budgeted time per participant to respond to all three questions was 45 minutes, the interview was not terminated due to the expiration of the allocated time. Still, participants were allowed to respond to the questions, with some taking up to an hour comprehensively. Data was collected using phone interviews with audiotaping, and at the same time, the responses were recorded on the interview guide paper for transfer into an excel sheet. In addition, all participants had the questions explained to them to give them a clear understanding and enable them to respond comprehensively. The thematic analysis technique was used to analyze the qualitative data after categorizing the responses into different themes. Different questions had different themes to allow for a prolonged engagement and ensure credibility (Korstjens & Moser, 2018). Triangulation was also achieved by using phone interviews, recording data in the interview guide paper,

involving clinicians and ex-cocaine addicts, and using data collected from responses and historical records data. The participants selected were of different ages, different levels of education, and the clinical participants had different years of experience working at the facility. A limitation that arises in relation to trustworthiness is the use of different data analysis techniques, as only one technique was considered in data analysis using Microsoft Excel. Future research on this topic should consider other analysis techniques and modify the research to incorporate quantitative techniques.

### **Transferability**

This element of trustworthiness measures how the qualitative researcher demonstrated that the findings from the study could be applied to other contexts (Korstjens & Moser, 2018). This means application in similar situations, similar populations, and similar phenomena. This research study is conducted in a rehabilitation facility in Michigan, and the participants include African American ex-cocaine addict males. The findings from the study indicate that rehabilitation and educational programs are effective in promoting personal development and improvement of attitude and behavior towards overcoming the addiction. Still, there is a need to improve the programs by incorporating patient involvement and expert consultation, new and better programs, and technology to address gaps associated with the increasing recidivism rate and improve building self-confidence among cocaine addicts discharged from the facility. These findings can be applied in other rehabilitation facilities in Michigan and other similar settings with closely related populations of African American male adults. The

findings can also be applied generally to improve rehabilitation programs in different settings.

### **Confirmability/Dependability**

This is the degree of neutrality in the research study findings. This is a confirmation that the findings were purely based on participant's responses without any potential bias or personal motivation of the researcher (Korstjens & Moser, 2018). The interpretations of the findings are purely grounded on the data without a personal viewpoint. The interpretation process is embedded in the data analysis and specific outcomes therefrom without undue modification of the results. Details of the data collection method were provided, and there was an auditable trail of the entire process. The transparency of the research path can be studied easily. This then achieves the study dependability as other researchers can easily study and repeat the entire process to confirm the consistency of the findings.

### **Recommendations**

Drug abuse, especially cocaine, remains a significant problem in the United States. The number of people abusing cocaine continues to increase significantly over time, with the most affected African Americans. A major challenge in the fight against drug abuse and addiction is the high recidivating rate among African Americans as an indication of gaps in the rehabilitation programs. According to the social learning theory, the new behavior is acquirable through imitation and observation. The cognitive learning process can occur in a social context purely through direct instructions and observation



without direct reinforcement (Horvath, et al., 2020). This is the basis of rehabilitation and educational programs aimed at promoting personal development, improving the attitude and behavior among drug addicts, and preventing recidivism. The basis of the process is helping clients accept addiction as a chronic disease and embrace lifestyle change to prevent disease progression and recidivism.

Addiction is a multidimensional phenomenon related to personal, communicational, and structural characteristics, and its treatment requires communicational, structural, and personal modification and changes to eradicate it. According to Heydari et al. (2014), pharmaceutical treatment is not solely sufficient in the absence of other interventions involving social learning and cognitive behavior as recidivating rates tend to remain high for clients referred to addiction centers, and pharmaceutical treatment is considered the sole intervention. When people solely rely on the impact of their actions to inform their decisions, learning would become exceedingly laborious and even hazardous (Culatta, 2018). Therefore, it is recommended to include in addiction treatment and rehabilitation process settings where clients get to observe others in an educational setting to model their behavior as they form an idea of their behavior's performance, consequently adapting to reformed actions.

The research findings indicate that between 2015 and 2019, the total number of African American male cocaine addicts admitted in the facility increased from 71 to 146, a worrying trend confirming the increase in cocaine addiction over the years. The readmission rate, which reflects recidivism among ex-cocaine addicts, also increased

from 40% in 2015 to 61% in 2019, again a worrying trend showing the worsening state of the war against cocaine addiction among African American males. Responses from ex-cocaine addicts and clinicians at the facility also confirm that there are inadequate measures to reduce the likelihood of recidivating among discharged ex-cocaine addicts. This is contrary to the expected rehabilitation outcomes, including overcoming addiction, achieving behavioral productivity, and an overall decrease in recidivism (MDC, 2020). This can be attributed to several factors such as personal, economic, and social challenges faced by the discharged ex-cocaine addicts as they try to reintegrate into the community after successful treatment. Therefore, it is recommended that the facility and other rehabilitation centers embrace a rehabilitative approach alongside disciplinary and educational measures to prepare discharged ex-cocaine addicts for reintegration into the community (United Nations Office of Drugs and Crime, 2018). This is in line with the research findings that educational programs have the potential to boost drug abstinence through the reduction of risk factors associated with the knowledge gap and rejection in the community.

Behavioral interventions have proven to be effective in both outpatient and inpatient settings. In some cases, behavioral therapies are the only available and effective treatments for many drug problems such as cocaine and other stimulant addictions. Behavioral interventions are, however, less effective when used as the sole treatment for cocaine addiction. It is therefore recommended to integrate behavioral, educational, and pharmacological treatments to achieve optimal outcomes ultimately. One of the

recommended behavioral therapy interventions that is highly effective in achieving positive results is contingency management or motivational incentives. To prevent relapse, cognitive behavior therapy is recommended as it helps patients develop critical skills that support long-term abstinence.

The findings from this research study also indicate that education and rehabilitation programs promote personal development and improve the attitude and behavior towards overcoming drug addiction. This is in accordance with McLeod (2016) that people learn behavior from the environment, and it is through exposure in the rehabilitation facility's environment and surrounding behavior that the addicts underwent behavioral, attitude, and developmental change. However, the findings from the study do not provide enough evidence to show that the current rehabilitation without the recommended improvements is effective in building self-confidence among discharged cocaine addicts, and it also lacks enough evidence that the programs reduce the likelihood of recidivating among discharged patients. This was further confirmed by the historical records data analysis, which indicated an increase in the recidivism rate. Further research is recommended on the same topic in a different rehabilitation facility to confirm the consistency of these findings. Further research is also recommended with the proposed program improvements such as patient involvement, new programs, technology, and expert consultation incorporated to assess the impact of these improvements on each theme. This should include analysis of historical records data with an extended

observation period of 10 years to assess the impact of the improvements on recidivism within the facility or in another facility with a similar setting.

## **Implications**

### **Positive Social Change**

Substance use disorders are associated with numerous psychiatric, medical, psychological, spiritual, family, legal, economic, and social problems. At the family level, the impacts include emotional burden, economic burden, relationship distress or dissatisfaction, family instability, developing fetuses and children, and effects on parents (Daley, 2014). The findings from the research study indicate that with rehabilitation and educational programs, personal development at all levels will be achieved, which will directly impact the social aspects of the family and prevent the adverse impacts of substance abuse disorders. This will also include achieving an improved attitude and behavior towards overcoming drug addiction. Also, with the necessary improvements, rehabilitation and educational interventions will aid with overcoming recidivism among discharged patients and continue with life having undergone a positive social change.

### **Individual/ Organizational Level**

The impact at the individual level includes the achievement of personal development, which includes indulging in social settings such as family, business, friendships, and employment without discrimination or being disadvantaged due to drug addiction. At an individual level, one can lead a legal life without indulging in illegal activities such as drug abuse and criminal activities such as violence associated with

cocaine addiction. This research study and the findings positively impact organizational relations at the organizational level by preventing illegal operations associated with cocaine addiction. Organizations can also confidently employ discharged ex-cocaine addicts taken through the improved rehabilitation and educational programs as they have been proven to improve personal development, attitudes, and behavior towards overcoming drug addiction and, consequently, recidivism. This research study also has implications for the policy. The findings give a guideline on policy modification to incorporate proposed improvements and the introduction of assessment criteria for rehabilitation and educational programs in relation to cocaine and other drug addicts. The implications on the society include improved productivity, peace, and healthy coexistence without discrimination against ex-cocaine addicts since, according to the research findings, the transformation at the individual level is adequate and permanent with minimal chances of recidivism.

Methodological implications indicate that a case study research type is a good fit for this study and other similar research settings. This is particularly important for cases where the research is designed to focus on a specific facility and programs within that facility. This research type was effective enough and allowed for data collection, analysis, interpretation, and inferencing within the study objectives. The theoretical framework employed was also a good fit and proved to be effective for this and similar research studies with main focus behavioral change such as the one associated with rehabilitation and educational programs for cocaine addicts.

The recommendations to practice from the study findings are that rehabilitation and educational programs are practical tools for promoting personal development and improving attitude and behavior towards overcoming drug addiction. Rehabilitation facilities should therefore incorporate rehabilitation and educational programs within their programs on cocaine addiction interventions. Also, rehabilitation and educational programs were shown not to effectively build self-confidence among discharged cocaine addicts and were not effective enough in reducing the likelihood of recidivating among discharged patients. A recommendation for practice is that there is a need to improve educational and rehabilitation programs by incorporating proposed improvements such as patient involvement, expert involvement, incorporating new technology, and adopting new programs developed given emerging trends. With the findings indicating a steep increase in recidivism over 5 years, it is recommended that broader research be conducted to establish whether there are other factors such as availability of drugs, the price of drugs, distribution outlets within the patients' environment, lack of patient follow-up, and poverty among other factors which contribute to the high rate of recidivism.

### **Conclusion**

The United States faces a major drug addiction problem, especially addiction to cocaine. Michigan, in particular, faces a major drug use problem, and despite rehabilitation efforts, there is a relatively high recidivism rate, especially among cocaine addicts. Prevalence of drug abuse among African Americans in the United States has been covered under various research works, and this research study sought to answer the

question, “What are the perceived effectiveness of rehabilitation and educational programs offered by a drug rehabilitation center in Michigan to African American men addicted to cocaine in preventing them from recidivating?”. This research was advised by the fact that despite the government putting in various measures, including rehabilitation, limited data exists on their effectiveness in reducing recidivism. From the literature review, it was evident that there need to be measures aimed at improving rehabilitation and educational programs’ effectiveness to reduce the likelihood of recidivism for discharged patients. After analyzing responses, the findings supported this fact and even achieved key gaps that should be addressed as a priority. As noted from the research findings, the main area of improvement was the need for patient improvement, followed by adopting new and better programs developed to view emerging trends in cocaine and drug addiction. Other considerations in improving rehabilitation and educational programs included expert involvement and incorporating new technology. Of utmost importance is the need for further research as the review of the literature indicates that the availability of cocaine in the United States makes it a leading consumer, with cities like Wayne in Michigan tending to have many cocaine addicts with the possibility of multiple factors being contributing to high rate of recidivism.

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## Appendix A: Ex-cocaine Users Interview Guide

## Interview questions guide

1. What is your age (in years): \_\_\_\_\_
2. How much time did you stay within the facility? \_\_\_\_\_
3. Which year/month were you discharged from the facility? \_\_\_\_\_
4. What is your level of education?
  - Less than high school
  - High school
  - College
  - Bachelor's degree
  - Bachelor's degree plus
5. Could you describe your experience and satisfaction with the programs provided in the facility in each of the experiences below?
  - i. Promotion of personal development
  - ii. Building up self-confidence
  - iii. Improvement of the attitude and behavior towards overcoming drug addiction
  - iv. Reducing the likelihood of recidivating among patients who have been discharged
6. How do you think the current rehabilitation and education programs could be changed to improve the experiences of the patients?

7. How do you describe the effectiveness of the programs offered by the facility in reducing the likelihood of recidivating?
8. How do you want to receive the results? Please provide the contact details (postal address or email) to be used. You can also click on the link to view results.  
<https://docs.google.com/document/d/1pSa7J697zI4tERUhn3wb4lhke-ChqRMznckowDow0U/edit>.

## Appendix B: Clinicians Interview Guide

## Interview questions guide

1. What is your age (in years): \_\_\_\_\_
2. How long have you worked within the facility as a clinician? \_\_\_\_\_
3. Could you describe your satisfaction with the programs provided in the facility in each of the experiences below? Describe your satisfaction based on the impact these experiences on the patients.
  - i. Promotion of personal development
  - ii. Building up self-confidence
  - iii. Improvement of the attitude and behavior towards overcoming drug addiction
  - iv. Reducing the likelihood of recidivating among patients who have been discharged
4. How do you think the current rehabilitation and education programs could be changed to improve the experiences of the patients?
5. How do you describe the effectiveness of the programs offered by the facility in reducing the likelihood of recidivating?
6. Would you wish the summary of the findings of this paper to be shared with you?  
If yes, please provide the contact details (postal address or email) to be used.