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Accounting Cognate

Pragmatism

Flexible Design

Case Study Method

Substance Abuse's Impact on Public Accounting

Abstract

A case study was performed to determine best practices for handling substance use disorder (SUD) when the problem occurs in business. SUD is a common problem that affects most businesses. The problem can result in high costs to businesses and is often difficult to navigate. The problem identified in the study was investigated by answering the primary research questions established in the planning stages of the study. An exhaustive literature review was performed on the topic, and common themes were discovered during a review of the literature. After the planning stage, the researcher performed a case study. Interviews of 23 certified public accountants (CPA) who practice in the state of Louisiana were conducted. Quantitative procedures were also performed to triangulate the case study findings. 105 CPAs were surveyed during this process. The quantitative findings matched many of the qualitative findings found during the case study. This document includes a detailed discussion of the findings of the study along with a practical application guide to enable businesses to better handle SUD when it presents. The application guide provides businesses with a list of possible steps to mitigate the damage SUD causes. This study was conducted with the purpose of improving God's world and fulfilling God's purpose for business on earth.

SUBSTANCE ABUSE'S IMPACT ON PUBLIC ACCOUNTING

by

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Dedication

This work is dedicated to all individuals who suffer with SUD. Hopefully, this work will aid in the recovery process and assist the business community.

Acknowledgement

The completion of this project would not have been possible with the help of so many individuals that may not all be included herein. The contributions to this work are sincerely appreciated. I would like to provide special appreciation to the following individuals and organizations:

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God, who makes all things possible. His work and Christ's teachings inspire me every day and give meaning to my life.

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Section 1: Foundation of the Study

Substance use disorder (SUD) is a common problem that businesses face in today's business environment. The problem results in significant costs to businesses. This study sought to better understand the problem and identify best practices that can be used to effectively address the problem. A case study was performed to determine practical application strategies for addressing SUD when the problem occurs. This section of the paper provides the foundation of the case study that was conducted.

Background of the Problem

This research project investigated SUD and its impact on business. The study sought to identify best practices to help businesses mitigate damages and restore workers to health. SUD is a multi-factorial illness that involves a chronic relapse course (Gruber & Urbanowicz, 2016). The indirect costs associated with the disorder include poor performance, illegal acts, and increased healthcare costs (Gruber & Urbanowicz, 2016). Substance abuse also leads to other non-financial costs such as family problems, violence, and domestic abuse (Gruber & Urbanowicz, 2016).

The medical community defines SUD as an illness that consists of eleven distinct diagnostic criteria (Compton & Chang, 2017). All commonly abused substances have the same eleven SUD criteria that are tailored for the specific substance (Compton & Chang, 2017). People who suffer from the disorder cannot control usage despite the negative consequences (Compton & Chang, 2017). Those who suffer with SUD continue to use drugs or alcohol at any cost (Greydanus et al., 2014).

Addressing this problem could increase performance, increase employee loyalty, and lower turnover if it is handled in an effective manner (Mello, 2019). Substance abuse causes

problems for both businesses and the individuals who suffer with the condition. Mitigating the damage substance abuse causes is a key objective of most businesses. Finding a resolution to this problem can help businesses improve and is an important strategic goal. When companies assist their employees in resolving this problem it can help them improve and build a lasting and fruitful relationship with their employees.

Most companies handle substance abuse in two manners: implementation of drug free workplace policies and formation of employee assistance programs (EAPs). A drug free workplace policy should strictly forbid drug use among employees and encourage users to seek help voluntarily (Reshma, 2018). Drug free workplace policies are implemented to protect company employees and a company's image, as well as protect company property and reduce accidents (Reshma, 2018). Drug testing is used as a means for insuring compliance with drug free workplace policy.

Many companies provide EAPs to their employees in today's business environment. EAPs expanded their services from strictly alcohol related problems to provide services to other substance users and for various mental health problems. EAPs provide assessments for individuals who suspect they may have a problem with substance abuse (Waehrer et al., 2018). They also provide counseling services and referrals (Waehrer et al., 2018). Finally, EAPs manage cases for their employees (Waehrer et al., 2018).

Problem Statement

The general problem addressed in this study is SUD's impact on business resulting in high costs to firms. Gowan (2017) noted that substance abuse is a disability that impairs an employee's ability to perform at work. White (2018) noted that approximately 12% of the workforce suffers with SUD and the average cost per employee is over \$15,000 per year.

Kitterlin et al. (2015) stated that most costs related to substance abuse arise from absenteeism, workplace accidents, and loss of productivity. The specific problem addressed in this project is SUD within the public accounting industry in the state of Louisiana which results in increased employment costs to public accounting firms.

The management of people is a primary concern of public accounting firms, and this topic is specifically related to this matter. Public accounting firms must deal with this pressing issue in the operation of day-to-day activities. Public accounting is a labor-intensive business that involves a high measure of public trust. The public accounting practice requires a high degree of mental aptitude and ability. Perhaps the impact of substance abuse is more profound in the public accounting industry due to these facts. While there is less likelihood of workplace accidents due to the nature of the work, the impact on productivity is significant. Also, healthcare costs and client relations are of great concern.

Purpose Statement

The purpose of this qualitative case study was to expand the body of knowledge of SUD and the disorder's impact on public accounting practice in the state of Louisiana. The management of people is a primary concern of public accounting firms. Like most businesses, accounting firms deal with various labor issues that affect productivity and the ability to optimally serve their clients. SUD is one issue that public firms face in the management of operations. SUD's impact is present within any industry. This study aimed to explore the common problem that businesses face and identify unique experiences of public accounting firms in the state of Louisiana. The intent of the study was to inform the business community about best practices for dealing with the problem.

Research Questions

Three research questions were formulated that address the research problem stated in the previous section. The primary research question is listed first, followed by two additional research questions that addressed the stated problem statement. Relevant sub-questions were also developed that further address facets of the research questions. After the statement of the research questions, there is a discussion on how each question addressed the problem statement and how they overall addressed every aspect of the specific problem statement.

Research Question One

RQ1. What are the common experiences of public accounting firms in Louisiana regarding SUD?

Research Question Two

RQ2. How does the SUD affect public accounting firms?

RQ2a. What are the financial costs borne from SUD?

RQ2b. What are the non-financial implications of SUD?

Research Question Three

RQ3. How do firms currently address instances of substance abuse within their ranks?

RQ3a. What are the best practices firms have developed to mitigate damages caused by SUD?

RQ3b. What measures have proven to fail in the face of the SUD?

Discussion of Research Questions

Three research questions were stated that were intended to address the problem statement. Two of the questions include sub-questions that helped to fully address the facets of

the research questions and stated problem. Each question addressed the stated problem, and together, they completely addressed the specific problem statement.

Research Question One Discussion

The primary research question sought to understand the experience of members of public accounting with SUD within the state of Louisiana. Through understanding this common experience, the researcher was informed on the impact SUD has on firms within the state of Louisiana. This research question addressed the specific problem statement by assessing experiences of public accounting professionals within the state of Louisiana and gaining an understanding of their unique perspectives regarding SUD and its impact on public accounting firms.

Research Question Two Discussion

SUD involves problematic use of illicit drugs and alcohol. Substance abuse is particularly problematic for businesses. Based on a review of literature on the topic, this negative impact includes poor performance, increased absences, and workplace injuries (Kitterlin et al., 2015). The second research question, posed above, sought to understand specifically how public accounting firms were affected by SUD and directly addresses the specific problem statement by assessing the costs noted in the specific problem statement. The problem states that SUD results in high costs to public accounting firms. These costs may be financial and non-financial. The first sub-question stated: what are the financial costs borne from SUD? The first sub-question sought to understand the financial impact of SUD and supported the specific problem statement by assessing the financial costs associated with SUD. The second sub-question stated: What are the non-financial implications of SUD? The second sub-question sought to understand other negative factors that are not quantifiable. It supported the specific problem statement by

identifying other non-quantifiable costs that arise from SUD. Combined, the sub-questions helped the researcher better understand the specific costs and negative implications associated with SUD in the public accounting industry.

Research Question Three Discussion

Understanding the overall impact of SUD was important. It was also important to understand costs associated with SUD and how they were mitigated. The third question deals with how firms addressed SUD within their ranks. This is an important question because it further informed the researcher on how SUD affects firms and steps taken to minimize the overall negative impact of SUD. The two sub-questions sought to understand what worked and what did not work in practice. The first sub-question stated: What are the best practices firms have developed to mitigate damages caused by SUD? Understanding cost mitigation supported the specific problem statement by assessing overall impact of these efforts when addressing SUD. The mitigation efforts themselves are costly and assessment was important to understanding costs borne by public accounting firms. The second sub-question stated: what measures have proven to fail in the face of the SUD? This sub-question addressed the specific problem statement by assessing costs associated with wasted effort and provided valuable insight on what to measures avoid when addressing SUD.

Summary of Specific Problem Statement Coverage

The three research questions noted above fully covered the specific problem statement. As previously mentioned, the first question sought to gain a broad understanding of the experience of accounting professionals regarding the specific problem stated. The second question gets specific. By answering this question, the researcher gained a full understanding of the specific financial and non-financial costs borne by public accounting firms in the state of

Louisiana. Finally, the last question sought to understand mitigating factors: best practices from professionals in the field.

Nature of the Study

The researcher used a qualitative research method, specifically a case study design to fully address the stated problem. The section of the paper will explain case study research. Additionally, there will be a discussion of why the selected method and design best address the problem. In this discussion it will also be noted why other methods and designs were not selected.

Qualitative Research

The qualitative method of research is applied when a current knowledge about a topic is lacking or knowledge of the topic can be expanded upon (Cypress, 2019). Qualitative researchers collect evidence by immersing themselves in real-life environments and natural settings (Cypress, 2019). Qualitative researchers get close to people when they conduct research (Silverman, 2017). The researchers often collect information by interviewing research subjects (Cypress, 2019). They also engage in observations (Cypress, 2019). They collect documents, artifacts, and images as evidence when performing a project (Cypress, 2019). There are several research designs available to qualitative researchers. These designs include narratives, phenomenological studies, grounded theory, ethnography, and case studies (Creswell & Poth, 2018).

Case Study Research

Case study research is conducted in real-life environments (Yin, 2018). A case study is designed to gain in-depth knowledge or to gain a better understanding of a problem presented in a specific case (Creswell & Poth, 2018). Cases are bound by both time and place. A defining

characteristic of case studies is that they are defined by the boundaries placed upon them. Research is conducted in real-life settings and bound cases (Creswell & Poth, 2018).

Case studies share many characteristics. The case study begins by identifying one element to be analyzed. Researchers may select a single case, or two or more cases. Current and real-life cases are usually studied which enable the researcher to collect accurate evidence. Cases are bound by certain parameters. These boundaries may include time, place, or people (Creswell & Poth, 2018).

There are three different types of cases (Creswell & Poth, 2018). The first type of case is an intrinsic case. This type of case is used when the goal of the study is to describe a unique case, an unusual case, or a case that necessitates description (Stake, 1995). The next type of case study is an instrumental case study. This type of case study is used when the intent of the case study is to better understand a problem (Stake, 1995). Finally, the last case study type is a collective case study. This type of case study is used when multiple cases are investigated to further explain a problem identified in the study (Creswell & Poth, 2018).

Data collection and analysis differs depending on the case being investigated. In some cases, certain elements of a case study are analyzed. In other cases, the entire case is analyzed during the case study. Also, sometimes only one case is selected for analysis while in other instances more than one case is selected. Themes are identified during the analysis of cases and highlighted in the findings of the study. A formal report is written to summarize the conclusions drawn a case study. A written report is drafted that summarizes case study conclusions. To draw conclusions, a researcher must analyze evidence collected during the study (Creswell & Poth, 2018).

Before beginning a case study, it must be determined to be an appropriate method for addressing the research problem identified. Case studies are appropriate when the researcher has a clear case within boundaries and wishes to gain thorough knowledge about a case or cases. Once it is determined that a case study is appropriate, researcher performing a case study is to determine the goal of the project and select a case or more than one case to study. Sampling is often used to determine if a case study is an appropriate method to use (Creswell & Poth, 2018).

After the determination that a case study is appropriate, procedures are developed to collect extensive amount evidence on the problem identified in the case. There are six types of evidence that are collected during case studies (Yin, 2018). Case study evidence includes documents, records, and artifacts (Yin, 2018). Evidence also includes direct and participant observations (Yin, 2018). Finally, interviews are often conducted and used in a case study as evidence (Yin, 2018). After these forms of evidence are collected, the evidence is analyzed and used as a basis for drawing conclusions. While attempting to draw conclusions, the researcher collects evidence, and analyses the information to accurately describe the case (Creswell & Poth, 2018). An analysis of themes that emerged during the case study is often performed to gain further understanding of the case (Creswell & Poth, 2018).

The last step in a case study is to draft a report explaining the findings of the case study. When writing the report, the researcher should keep the reader in mind (Stake, 1995). A vignette introduces the case to the reader, and this vignette is followed by a description of the case (Creswell & Poth, 2018). After the introduction of the case, the report includes a section on the researcher's interpretations and assertions (Creswell & Poth, 2018). Finally, the report concludes with a disclaimer from the researcher that states that the findings of the case study are limited because it is only one experience with a complex issue (Stake, 1995).

Appropriateness of Method and Design

Qualitative research is used to investigate matters in real-life environments (Cypress, 2019). The researcher desired to immerse himself in an actual setting to conduct interviews and collect evidence directly in the field. The quantitative method would not allow for this. While the method allows for a larger sample and may be more generalized, it only involves production of a survey instrument, distribution of the instrument, and analysis of data. The researcher wanted to understand the problem by asking meaningful open response questions and be able to ask follow-up and clarification questions, if necessary.

Of the available qualitative designs for the study, narrative, phenomenology, case study, and ethnography, the case study design was the most appropriate method for exploring the stated problem. The narrative approach was not appropriate. It is only appropriate to use narrative design when the researcher studies one, or a small number of people (Creswell & Poth, 2018). The problem and research questions for this study could not adequately be addressed and answered by interviewing a one or a small number of people.

Phenomenological research is performed to capture the essence of a lived experience. During phenomenological research, interviews are conducted. Research subjects are asked to report on their experience with a phenomenon. This type of research is conducted to report on intense human emotion (Merriam, 2009). This method was not appropriate for this study, because the researcher mainly sought the feedback of business professionals who have had experience dealing with the problem and their opinions and perspectives, not substance abusers themselves.

Ethnographic research deals with an understanding of culture. Ethnographies seek to describe a culture mainly through direct observation. This method was not suitable for

addressing the stated problem and research questions. The researcher mainly sought to understand how SUD impacts public accounting firms and how they address the problem. There was no exploration of organizational culture.

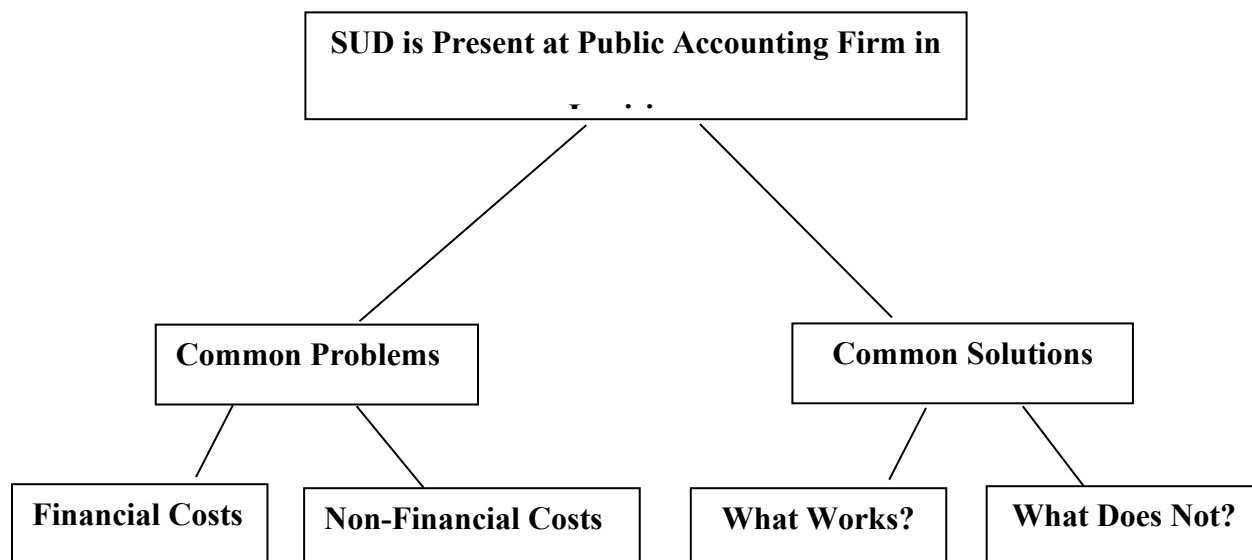
Case study research was the most appropriate design because the design allowed the researcher to immerse himself in public accounting firms and discuss the problem with several individuals with varying functions. He gained an understanding of how different individuals and different positions have experience with handling substance abuse problems when they occur.

Summary of Nature of Design

The researcher intended to conduct a case study to investigate SUD and its impact on public accounting firms. A case study is a qualitative study. Qualitative studies are conducted in natural settings to understand a phenomenon where knowledge may be lacking. The case study is used to gain an in-depth understanding of a specific case within pre-set boundaries. The researcher believes that this method was the best choice for addressing the specific problem statement because allowed him to place himself in a public accounting environment and understand the unique perspectives of relevant actors within these public accounting firms.

Conceptual Framework

The intent of this section was to provide an overview of the study's conceptual framework for the researcher's dissertation project. The framework provides a "word" picture for the specific problem statement. This framework also describes the conditions surrounding the problem and how the study is tied to the literature. This discussion includes concepts and theories the researcher identified. This section begins with a diagram of the conceptual framework at Figure 1.

Figure 1.*Conceptual Framework*

Concepts There are several concepts that are related to this research study. These emerged during a review of literature on the subject and from the case study findings. Each of these concepts are discussed which will include how the concepts relate to the research framework.

SUD is an Illness. SUD is considered an illness by the medical community. The medical community defines the disorder as a psychiatric illness (American Psychiatric Association, 2013). Users of substances cannot control their usage in the face of negative consequences (Compton & Chang, 2017). This concept related to the research problem because the study focused on how SUD affects public accounting firms. SUD is a severe illness that must be addressed in conducting business. This concept helped explain why people contract SUD.

Substance Abuse has Severe Consequences. Substance users often face severe consequences regarding relationships, finances, and health (Compton & Chang, 2017). Substance abusers continue to seek out substances despite the significant costs associated with substance

use. The concept was related to the specific problem statement because the above personal consequences impact businesses and lead to significant costs in the workplace. These costs include financial and non-financial costs as noted in Figure 1. Understanding these consequences was important to the research framework for further understanding the problem identified in the study which is included on top of the conceptual framework shown in Figure 1.

SUD is Costly. SUD can be found in most workplaces. Substance users miss work frequently and when they attend, perform poorly. Substance users cause workplace injuries when actively using or withdrawing from substances. They often commit illegal acts to support their usage, such as theft and fraud. The disorder also increases the cost of doing business by increasing healthcare expenses.

This concept was related to the problem statement because businesses pay for much of the costs associated with SUD in terms of higher healthcare and lost productivity. On all appearances, individuals who suffer with the disorder appear to be simply bad employees. As noted earlier, these employees are extremely sick. During the study, members of public accounting practices within the state of Louisiana were interviewed to understand the financial and non-financial cost as shown in the research framework in Figure 1. The findings of these procedures are summarized later in this document and match many of the themes discussed in this section.

Substance Abusers Can Recover. Businesses and individuals deal with the problem in various manners to mitigate the damage caused by SUD. In today's business environment, there are two primary means of dealing with substance abuse when it presents itself in businesses: drug free workplace policies and EAPs. The recovery process involves the psychological measures to restore an individual's well-being and increase their quality of life (Stokes et al.,

2018). To recover, substance users must abstain from usage and in recovery (Stokes et al., 2018). To recover, substance abusers must go through a period of detoxification followed by life-long treatment (Swensen, 2015).

This concept was related to the research concept because it explained possible mitigation efforts businesses can take to resolve the problem when the problem occurs. As shown in Figure 1, public accounting personnel were interviewed, and mitigation efforts was one area addressed during the interview process. There was a focus on what works and what does not. This information can also be used to understand cost borne by businesses with respect to efforts they have in place to address the problem.

Substance Abuse Causes Loss of Productivity. Employees who suffer from substance abuse have poor performance at work and are often absent (Gowan, 2017). Substances impair a user's ability to concentrate and perform certain tasks. They also impair user's ability to communicate with others. This lost productivity is the primary negative impact the disorder has on businesses. The findings of the study confirm this fact and will be discussed later in this document.

This concept is important to the overall research framework in that loss of productivity describes a common problem that businesses face and must address. When referring to Figure 1, under common costs, it was noted that this loss of productivity can affect profitability in terms of financial costs, such as errors. This productivity issue can also affect public accounting firms in terms of non-financial costs, such as frustrated supervisors.

Substance Abusers Miss Work. Employees with the disorder are often absent from work. These absences increase the cost and damage relationships (Gowan, 2017). Absences and interruptions in work impair productivity. Like loss of productivity, this concept was important

to the study and research framework in that absenteeism described a common problem that public accounting firms face with SUD. Financially, firms may pay additional time off and lose revenue due to absences. Non-financially, others work is made harder, and relationships are strained due to absences by substance abusers. The case study also found that absenteeism was a significant cost to firms and contributed to the lost productivity borne from SUD.

Substance Abuse Causes Workplace Accidents. The incidence of SUD increases workplace accidents (Abram, 2016). Employees who go to work impaired or hung-over increase the risk of workplace injuries. This concept, too, was important in describing the common problems public accounting firms face as referred to in Figure 1. In terms of financial costs, firm's worker's compensation insurance premiums can increase due to injuries. Non-financially, substance abusers may make others feel uneasy due to the impact substance use has on their ability to physically perform certain aspects that the job requires such as, operating a vehicle or performing physical inventory observations. The findings of the case study performed confirmed that workplace injuries and accidents contributed to the problems caused by SUD in the workplace.

Substance Abuse Raises the Cost of Healthcare for Businesses. The disorder increases the cost of healthcare borne by companies (Abram, 2016). Employees can recover from the condition and return to work. They can regain the respect of their colleagues and become productive members of a team. This, however, is not without costs. The recovery process may include inpatient hospital detoxification or residential treatment programs that are expensive. These cost increase healthcare costs for public accounting firms. Also, the incidence of increased workplace injuries may increase healthcare costs, as well. This concept was also important in describing costs that firms share in their fight with SUD as referred to in Figure 1. The case

study findings noted that some firms opt to fund treatment for individuals with SUD, and health insurance premiums can increase due to the cost of treatment programs.

Substance Abuse Carries a Stigma. Most people avoid discussing SUD because of the attached stigma. This stigma impairs public accounting firm's ability to be of assistance to individuals who suffer from SUD. In referring to Figure 1, public accounting firm personnel were interviewed regarding common solutions: what works and what does not. Stigma played an important role in implementation of solutions for dealing with the problem. Stigma was noted as a barrier to recovery throughout the case study interviews and can also be found in the findings section of this document.

Theories

There are several theories that exist regarding SUD. Each of these theories are noted and briefly explained in this section of the paper. These theories explain why people contract SUD.

Genetic Theory. Addiction is complex and has multiple contributing factors (Isir et al., 2015). There is a consensus in the scientific community that genetics play a substantial role in vulnerability to addiction (Isir et al., 2015). This theory was important and related to the problem statement and research framework because genetics partially explains why individuals contract SUD.

Exposure Theory: Biological Models. Some people are biologically predisposed to contract SUD. This model explains that substance abusers are biologically predisposed to substance dependence at the molecular level (Capuzzi & Stauffer, 2016). This theory was important and related to the problem statement and research framework in that the biological model partially explains why individuals contract SUD.

Exposure Theories: Conditioning Models. Some users become substance abusers because of environmental factors. This model explains that individuals are conditioned by their environment (Capuzzi & Stauffer, 2016). This theory was important and related to the problem statement and research framework in that conditioning model partially explains why individuals contract SUD.

Discussion of Relationships Between Concepts. SUD is an illness that arises from a combination of genetics, biological predisposition, and environmental factors. SUD is a severe progressive illness that causes numerous problems for individuals who suffer from the disorder. In addition to causing problems for the individuals themselves, the problem causes damage to organizations who employ individuals that have the illness. These problems include absenteeism, lost productivity, workplace accidents, among other things. Thankfully, the those who suffer with substance abuse can get help for their problem. In many instances, businesses assist employees when the problem arises. Recovery is a lifelong process, and many individuals who suffer with the illness relapse after beginning treatment. In many instances, businesses must discharge individuals for problems associated with the illness. SUD carries a stigma. This stigma can be a barrier to the recovery process and hinder businesses efforts for dealing with the disorder.

Summary of Conceptual Framework

SUD is a pressing problem that many individuals and businesses face in management of their businesses. Public accounting firms, like most other businesses, face problems with the disorder in the management of firms. This study sought to understand the problem by performing interviews of relevant actors within the public accounting industry in the state of Louisiana. Through interviews and the collection of other evidence, the research intended to further

understand the financial and non-financial costs associated with SUD. In addition to understanding costs, the researcher sought to gain an understanding of how firms deal with the problem when the illness occurs. The object of this study was to identify best practices and inform the business community of these practices.

Definition of Terms

The section will include the definition of key terms. Definitions for these terms are intended to assist the reader in understanding the terms as they are used in the context of this paper. Definitions of all key terms were derived from academic and professional literature on the subject.

Chronic Illness. A chronic illness is a health problem that requires ongoing long-term management for periods of years or decades (Jowsey, 2016).

Contemporary. Contemporary refers to research conducted in a modern- or present-day setting (Vinodkumar, 2019).

Detoxification. Detoxification is the medical treatment for the withdrawal from substances that prevents complications, such as seizures and delirium tremens from occurring. Without proper medical attention these withdrawal symptoms can be life-threatening (Timko et al., 2016).

Holistic. Holistic refers to the healing process which treats the physical, mental, emotional, and spiritual aspects of a human being (Kamba, 2016).

Instrument. The term instrument refers to a document used to collect and analyze data collected during a survey (Squires et al., 2013).

Multi-factorial. The term multi-factorial refers to diseases that result from multiple factors. These factors include genetics and environment (Stolk et al., 2017).

Relapse. The term relapse is defined as the return to substance use after a period of treatment. It is the most significant problem associated with drug addiction treatment (Kargin & Hicdurmaz, 2020).

Stigma. A sense of disgrace connected to a situation or quality of a person (Zwick et al., 2020).

Vignette. A short literary sketch introducing a case study (Stake, 1995).

Assumptions

Assumptions are facts about the study that were considered true, but they were not verified in the study. This study had several underlying assumptions. Each assumption carried risks. These risks are discussed as well as a mitigation strategy for each risk identified. Each assumption is discussed below.

Most businesses are impacted by SUD. The research assumed that most businesses and individuals are impacted by substance abuse in some manner. According to Gruber and Urbanowicz (2016), approximately 21.6 million Americans suffer with SUD. This is equivalent to approximately 7% or one in every 14 people. These statistics make it highly likely that the assumption that most businesses are impacted by substance abuse disorder is accurate. The risk this assumption carried is that some individuals may well have not had any experience with the problem or do not wish to share their experiences, perceptions, and opinions with the researcher. The researcher screened potential participants to ensure that they have some knowledge and experience related to the stated problem. Additionally, the researcher ensured participants remained anonymous and the information they provided was held in confidence.

Participants in the study will openly and honestly share their experience with SUD and how the illness impacts their firms. The study assumed the participants were open and

honest, and shared their experience, perceptions, and opinions about substance abuse candidly. The risk this assumption posed was participants would not be open and honest about their experiences. Or the participants did not want to share their experience because of the sensitivity of the topic. A key ethical issue that arose is ensuring voluntary participation, participant anonymity, and confidentiality of responses (Jasemi et al., 2018). These risks were mitigated by the researcher, who informed the participants that their participation is voluntary and could withdraw from the research at any time. The researcher ensured the participants remained anonymous and the information was kept confidential. Meeting these ethical standards increased the likelihood that participants would be candid in their responses to interview questions.

Most businesses are concerned about the problem and want to address SUD effectively when the illness occurs. The study assumed most businesses care about substance abuse and are interested in meaningful ways to address the problem when the disorder occurs. The problem is prevalent in business and leads to increased costs due to lost productivity, absenteeism, and workplace injuries (Kitterlin et al., 2015). Most businesses are primarily concerned with maximizing profitability through strategic initiatives such as reducing turnover, increasing employee performance, and maintaining a safe working environment (Mello, 2019). The risk this assumption carried was that some businesses, for various reasons, may not be interested in the problem. This may be because they had no experience or simply did not wish to address the problem openly because of stigma. This risk was mitigated by prescreening participants and ensuring they were interested in providing valuable information as the information relates to their experience with the problem and how they addressed the illness in the past.

Most businesses have either formal or informal policies and procedures in place regarding substance abuse. The study assumed most businesses have policies and procedures related to substance abuse. Most large businesses primarily address SUD through use of drug free workplace policies and EAPs (Waehrer et al., 2016). In some cases, small businesses did not have formal policies and procedures in place to deal with SUD. Some businesses simply dealt with the problem on a case-by-case basis when the problem occurred. There were not any formal or informal standard procedures that guide these firms on how to handle substance abuse. While documentation was lacking, and some participants were unable to provide information from a policy standpoint. They were able to share their experience, perceptions, and opinions. They did have some experience with the SUD and successfully dealt with the problem in the past.

Most employees of businesses have some knowledge and experience with SUD whether they themselves suffer with the illness or they know someone who does. The study assumed that most people's lives have been touched by substance abuse. The study also assumed people have had experience with friends, family, or colleagues who have had SUD. As noted earlier, SUD affects approximately 7% of the population and 12% of the workforce (Gruber & Urbanowicz, 2016; White, 2018). Given this fact, this assumption allowed the researcher to obtain information from most people about how the disorder impacts business. The risk associated with this assumption was that participants may have little or no experience to share about the problem. To mitigate this risk, potential participants were prescreened to ensure that their participation was meaningful.

Participants in the survey will have knowledge of the financial and non-financial costs associated with the illness. The study assumed that SUD is a costly problem and that participants were aware of the cost that arise from the illness. SUD is a pervasive problem that

affects an employee's ability to perform work duties (Gowan, 2017). This inability to perform work duties leads to significant cost borne by businesses due to SUD. The study also assumed that participants were able to provide meaningful answers that help the researcher to understand financial and non-financial costs associated with the disorder. The risk was that participants may not be able to provide such data; that they could not provide this information or may be unclear about the costs. To address this risk participants were selected from appropriate positions within the businesses that have knowledge about financial and non-financial factors of incidences of SUD.

Participants in the survey will be aware of effective measures used to combat the damage borne from the disorder. The study assumed participants had knowledge about what works for addressing the problem and mitigating business damage when the problem occurred. Management is concerned with implementation of effective human resources policies and procedures to mitigate costs of risk factors identified in business (Mello, 2019). The risk was participants would not be aware of what works for addressing the problem. This was where the selection of participants was important. To mitigate these risks, participants with knowledge and experience with the problem were selected. This was important so best practices could be identified, which was the primary goal of the study.

Participants in the study will be aware of measures that have failed to effectively mitigate the problem. The study assumed that participants had knowledge of measures that should be avoided when addressing SUD in a business setting. Management and others perform a cost-benefit analysis to determine the effectiveness of policies and procedures and their preference between alternative courses of action (Belanger et al., 2017). Management is aware of what does not work and should be avoided. The risk was that individuals selected did not know

or have adequate experience in dealing with the issue. Selection of participants was the key to mitigating this risk. As noted throughout this discussion of assumptions, participants were screened and selected based on their ability to provide meaningful feedback on the topic.

Limitations

Limitations are potential weaknesses of the study. Several limitations were identified. There will be a brief discussion of each limitation identified below.

A case study of this size may be too small to generalize. The study sought to understand how public accounting professionals address SUD when the illness arises. The study also sought to understand and develop a document that provides best practices for handling SUD when the problem arises. The primary method of collecting information was interviews and reviewing documentation related to policies and procedures. The number of participants was limited, so the findings could be difficult to generalize. This limitation was mitigated by selecting a cross section of participants. The selection of participants is discussed in the section on limitations below.

Access to data may be limited due to the sensitive nature of the topic. SUD is an illness. Businesses are required to keep personal health information private; therefore, the discussion during interviews was limited regarding sharing private health information or specifics about certain situations. The topic is a sensitive topic, and professionals may have not wanted to give specific information about cases they have experienced in the past. The study mitigated this limitation by ensuring all participants and their information was kept anonymous and confidential.

The stigma associated with substance abuse may impair participant's ability to be candid. Substance abuse carries a mark of disgrace for those who suffer with the illness. This

stigma leads many people to avoid talking about the problem. Even people who do not have the illness avoid talking about the problem due to the attached stigma. This stigma can act as a barrier to personal recovery and damage efforts business make in mitigating costs associated with the problem. This stigma also created a limitation in this study. The study mitigated this limitation by ensuring all participation was voluntary and participant information was kept anonymous and confidential.

Time constraints may arise in conducting the study. Public accounting is an extremely busy industry. To serve clients and meet deadlines, public accounting professionals work long hours. Time is very precious in the industry; therefore, time constraints was a limitation associated with this study. Difficulty could have arisen when arranging meetings with perspective participants due to the nature of their work. They may not have wanted to set aside time to participate in the study. If they did agree to participate, they may have been a chance they would rush through the interview. Selection of time and place was an important matter to consider. To mitigate this limitation, participants were able determine the time and place of the interview.

Gaining access to participants may be challenging. For all the other limitations discussed, such as the sensitivity of the topic, the attached stigma, and time constraints of public practice may be difficult to gain access to accounting professionals. These individuals may simply not have wanted to participate. Gaining access to professionals was difficult and was a limitation of this study. This limitation was mitigated by conducting the interviews during slower periods for public accounting professionals and these professionals were able to determine the time and place of interviews.

Delimitations

Delimitations refer to the boundaries and scope of the study. This section defines who the perspective participants of the study were. This section also defines the sample size of the perspective participants and their geographical location. The selection of participants, locations, and firm sizes were made so that the findings of the study can be more generalized.

Research Participants

The actors in this study were CPAs in the state of Louisiana. These participants were interviewed to gain an understanding of their unique experience with SUD. Each of these participants are identified in this section of the paper. The unit of analysis for the study was individual CPAs.

Public accounting firm partners

Partners are the owners of public accounting firms. Partners are involved in the day-to-day management of firm employees and deal with issues such as SUD. Partners were able to provide valuable information about decision making regarding personnel policy, as well as how they deal strategically with the problem.

Public accounting firm staff

The firm staff are the rank-and-file accountants at the various levels within the firm. These actors worked with substance abusers or had SUD themselves. It was likely that these firm members have worked directly with someone who suffered with SUD. They were able to offer valuable feedback from the perspective of a colleague.

Scope of Participants

The researcher is a CPA licensed to practice in Louisiana. He has experience in public accounting and a significant number of contacts. He drew on his experience and contacts to

facilitate his research study. To investigate the problem, he selected professionals from firms of varying sizes that operate throughout the state of Louisiana. His research focused on practitioners from large multi-national firms, medium sized regional firms, and small firms. The unit of analysis was the CPAs themselves. The CPAs were selected from firms of various sizes and locations. These variables are discussed below.

National Firms

There are four major multi-national firms that operate throughout the world. These firms are known as the “Big 4.” They firms include Ernst & Young, LLP, Deloitte, KPMG, and Price Waterhouse Coopers (PwC). All four of these firms have offices located in New Orleans, LA. The researcher intended to conduct one-third of his interviews focusing members from multi-national firms and their experience with SUD when operating within the state of Louisiana.

Regional Firms

Regional firms are localized to a specific region. For the purposes of this study, regional firms were selected from each of Louisiana’s metropolitan areas. These areas include New Orleans, Baton Rouge, Lafayette, Lake Charles, Alexandria, Monroe, and Shreveport. For the purposes of the study, the researcher selected members of firms with approximately 50– 300 employees. The researcher interviewed individual CPAs. Approximately, one-third of the interviews conducted were derived from this pool.

Small Firms

For the purposes of this study, small firms were included. These practices that have one to five CPAs. The researcher primarily conducted interviews in the Acadiana region of Louisiana. The researcher focused on public accounting practices in small towns and small cities

in this region. CPAs themselves were the interview subject in this pool. Approximately, one-third of the interviews selected from this pool.

Significance of Study

Thus far, there has been a discussion of SUD and how the problem impacts businesses. Addressing this problem effectively can help businesses reduce damages caused by SUD. In this section of the paper, there is a discussion of how this study fills gaps in the existing literature on the topic and contributes to the existing body of knowledge on the subject and the business community. The discussion includes a section on how the work conformed with biblical principles. Finally, there is a discussion on how the topic is related to the field of accounting.

Reduction of Gaps

Substance abuse is a problem that plagues society. Many people suffer with the disorder. This study focused on how SUD impacts public accounting practice within the state of Louisiana. By conducting this research, the findings of the study were intended to benefit society by providing documentation of the best practices as they relate to dealing with the problem in a business setting. The aim of the study was to determine practices that work to mitigate damages caused by SUD and help restore those who suffer with the illness to good health.

Interviews were conducted to determine the common experiences of professionals in the field. This information contributes to the existing body of knowledge on the subject. The study helps the reader to understand the cost associated with the problem, both financially and non-financially. The project also helps the reader to understand common solutions for dealing with the problem. The study addressed measures that work and those that do not. The study yielded a document that the business community can use when they are faced with the problem within

their ranks. The findings can be used as a tool to build knowledge of the subject and help businesses learn from other's experience.

The study can be used to further understand the issue as is experienced in the business community. The results serve as a tool to increase public awareness of the matter. As noted in the conceptual framework of this document, SUD carries a significant stigma. This stigma often acts as a barrier to those who attempt to recover from the problem and acts as a barrier to businesses who must address the problem. By increasing public awareness of the problem and having an open dialogue, this research work may help to reduce the stigma associated with the problem and reduce the barriers to resolving the problem. Helping these individuals to recover can increase the success of businesses. The management of people is a primary concern of businesses. This research project can assist businesses in realizing more success by providing information about solving this pressing problem.

This academic pursuit helped the researcher further understand the problem as it is experienced within the public accounting industry. The valuable information that was gained from the project can be used to enrich the body of knowledge on the topic while providing a practical guide for addressing SUD in a business setting. Most importantly, it may well assist those who suffer with SUD to recover from their condition. Resolving this problem in an appropriate manner can increase performance, increase commitment, and lower attrition. A key goal of human resource management is to invest in employees and increase their value to the organization (Mello, 2019).

This study sought to gain a better understanding the problem from both from an employee's viewpoint and the employer's viewpoint. This study was used to identify best practices for mitigating damages caused by the disorder. The study identified the financial and

non-financial costs associated with the disorder. The study also identified measures that have worked in the face of the disorder. Finally, the study sought to understand measures that should be avoided.

Implications for Biblical Integration

All work is divine. Business can be used as a medium for helping others and serving God. Specifically, businesses can use biblical principles to assist employees in their recovery. The use of chemicals is an example of a sin that man engages in during their lifetime. A resolution to sin can be found in the Lord Jesus Christ. Through effective practices, people trapped in the cycle of addiction can be healed. Identifying the best practices for addressing problem was the purpose of this case study.

SUD is a growing problem that many face today. Substance abuse is a complex problem that is present in most enterprises. Businesses must take measures to address the problem effectively to minimize cost associated with the disorder. Historically, companies had no tolerance for substance abuse within their ranks. In today's business environment, many companies seek to help for those who are afflicted.

The findings of this case study can improve God's world in many ways. Most recovered substance abusers say that recovery is impossible without God. Altruism is an important element in the recovery process. Helping others find a solution to their problem is a passion for many people who have overcome substance abuse issues. The case study findings can help businesses and individuals to solve their problem and return to good health.

A primary goal of this case study was to find an answer for those who suffer with substance abuse. Jesus Christ the answer to all of man's problems (Keller & Alsdorf, 2012). God

sent His Son to earth and those who have faith in Christ are saved (John 3:16). The main purpose of this work was to glorify God and help individuals find an answer to their problem.

Relationship to Field of Study

Public accounting is a labor intense process, and the management of people is a primary concern of public accounting firms. Like most other businesses, the public accounting industry face SUD within their ranks. The study was related to the field of accounting because it focuses on the management of accounting practices and people within the industry. The work served the entire business community because some of the findings may be able to be generalized; however, in some instances public accounting professionals may have unique experiences given the nature of the work. Public accounting involves a high degree of public trust. Accounting also requires a high degree of mental aptitude and abilities. Substance abuse can impair trust and affect mental ability. Addressing the problem with accounting practices is of high importance.

Summary of Significance of Study

Substance abuse is a problem that most businesses face when managing their people. This research work can assist businesses by providing them with documentation of the best practices for dealing with this pressing problem. It can also help individuals in their recovery journey. Biblical principles were used to guide the study, and the study was intended to glorify God by serving others. The work was related to the field of accounting because it focused on management of public accounting practices in the state of Louisiana.

A Review of the Professional and Academic Literature

A literature review was conducted on the topic of SUD and the illness' impact on business. The literature review contains three major sections. The first section explains SUD. This discussion includes the diagnostic criteria and symptoms of the disease. In addition to

discussing the diagnostic criteria for the disorder, this paper presents a discussion of theories on why people contract SUD. The section explaining SUD also discusses commonly abused substances found in the literature. In addition to discussing commonly abused substances, there is a discussion of the damages SUD causes individuals with the condition. Finally, the first major section concludes with a discussion of other substance related issues such as polysubstance abuse, co-occurring disorder, tolerance, and withdrawal.

The second major section of this paper discusses SUD and disorder's impact on business. In most cases, the personal problems created by the disorder spill over into their work lives. There will be a discussion of the specific problems SUD creates for businesses. These problems include loss of productivity, absenteeism, workplace accidents, increased healthcare costs, damaged relationships, loss of business, insubordination, and dishonest acts. The second major section of the review of literature also discusses how businesses address SUD. These measures include drug free workplace policies, drug testing, employee assistance programs (EAPs), and terminations.

The final major section of this literature review will discuss the SUD recovery process. The recovery process begins with detoxification. A period of mental and behavioral treatment follows detoxification. Finally, post-treatment measures must be utilized to maintain abstinence from substances. Post-treatment options are discussed in this section, with an emphasis on a relationship with God in most recovery programs. The third major section of this literature review concludes with a discussion of barriers to recovery, such as denial, stigma, and relapse.

Substance Use Disorder Explained

Substance Use Disorder (SUD) presents a pressing problem that exists throughout the world. This section of the literature review explains the problem. This discussion includes an

explanation of symptoms and how and why people are diagnosed with SUD. There is a discussion of commonly abused substances that are found in the literature. SUD often involves the use of multiple substances concurrently. SUD can be exacerbating to other psychological disorders and often co-occurs with these disorders. SUD causes significant damage to individuals who suffer with the problem. There will be a detailed discussion of the personal problems SUD causes.

Diagnostic Criteria and Symptoms

The medical profession defines SUD as a mental illness that exists along a spectrum (American Psychiatric Association [APA], 2013). The criteria for SUD diagnosis are discussed in this section of the paper. The symptoms and defining features of the illness is also highlighted.

Diagnostic Criteria. According to McLellan (2017), the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, (DSM-V) has 11 diagnostic criteria for SUD. These diagnostic criteria are as follows:

- a. Using a larger amount of the substance for a longer period than intended.
- b. Having a desire to quit but being unable to.
- c. Spending a lot of time to acquire, use, and recover from substance use.
- d. Experiencing cravings.
- e. Failing to manage commitments due to substance use.
- f. Continuing to use a substance even when using causes problems in someone's relationships.
- g. Sacrificing important activities because of substance use.
- h. Continuing to use a substance even in the face of danger.

- i. Continuing to use even when the use of the substance exacerbates physical and psychological problems.
- j. Increasing tolerance for the substance. Use of the substance increasing to get the same affect.
- k. The presence of withdrawal symptoms.

(APA, 2013)

As noted, the severity of SUD exists along a continuum. If a person has two or fewer of the above symptoms, they are not considered to have SUD. A mild condition has two to three of these symptoms. A moderate condition has the presence of four to five of the above criteria. Severe conditions are characterized by six or more of the criteria (McLellan, 2017).

Symptoms Discussion. The human brain prioritizes and seeks to achieve pleasure (Greydanus et al., 2014). Genesis 3:6 explained the consumption of the forbidden fruit by Adam and Eve in the garden of Eden. By eating the fruit of the tree, man sinned and fell into sin. Today, man continues to fall short and struggle with sin. Substance abuse presents as one example of sin in the world today.

Medical professionals classify SUD as a chronic medical condition. Excessive substance use and dependence characterize the disorder. When individuals attempt to discontinue substance use, they often lapse in their recovery. They also must use more of a substance to get the desired effect and become very ill when they try to discontinue use of substances. Individuals with SUD usually begin to use substances to experience pleasure. After using substances for an extended period, they develop maladaptive use patterns. This maladaptive pattern of use leads to physical dependence (Nazeer & Liepman, 2014).

After this physical dependence has materialized in someone's life, they find quitting virtually impossible once they start using. They lose control of their behavior which represents a cardinal feature of addiction (McLellan, 2017). Individuals with SUD cannot stop using on an ongoing basis without receiving medical assistance. Even with medical assistance, SUD results in a continuous relapse course. People who suffer with SUD begin to withdraw from life and spend most of their free time acquiring, using, and recovering from use. They begin to stop attending to their needs and obligations. They often sacrifice their health and welfare to use the substance despite the consequences. As the problem gets worse, they must use more and more of the substance to get the same resulting pleasure. When they are not using the chemical, they become physically and mentally sick from withdrawal symptoms.

Theories

One may wonder why a person would become so psychologically ill that they are willing to sacrifice their life for harmful and dangerous substances. Theories exist that explain why people contract the illness. There are three theories found in the literature that explain SUD prevalence. First, people are genetically predisposed to contracting SUD. The second explains that the disorder results from biological factors that make a person predisposed to suffer from SUD. Finally, the third theory explains that humans contract the illness because of environmental factors. SUD has multiple factors. The disorder has multiple risk factors including genetics, environment, and actual changes to the brain structure and function (Gruber & Uranowicz, 2016). There is a brief discussion below of the literature found on these theories.

Genetic Theory

As noted in the conceptual framework section of this document, addiction presents complex and multiple contributing factors (Isir et al., 2015). Scientists agree that genetics play a

substantial role in determining whether a person contracts the disorder (Isir et al., 2015). In many cases, SUD traits are inherited. SUD qualifying symptoms are passed down through parents, from generation to generation.

Exposure Theory: Biological Models

This theory states that people are prone to contracting SUD because they are biologically predisposed to contract the disorder. This occurs at the molecular level (Capuzzi & Stauffer, 2016). In some cases, the brain changes over time through use of substances, and people become dependent on the substances.

Exposure Theories: Conditioning Models

Another contributing factor to contracting SUD results from environmental factors. People can become conditioned by environmental factors. (Capuzzi & Stauffer, 2016). These environmental factors may include such things as childhood abuse and neglect, hostile work environment, or financial stress.

Distinctions Between Substance Types

There are many different types of harmful substances that people abuse. Before discussing the most abused substance types there is a distinction between substance types. Some substances are legal, while other substances are illegal. Therefore, there is a brief discussion of the distinction between licit and illicit drugs.

Licit Drugs

Licit drugs are substances that can be legally obtained either by purchasing directly from a retailer or procuring a prescription from a medical doctor. The most used licit drugs are alcohol and nicotine. These substances can be easily and legally obtained in most areas throughout the world; however, according to the World Health Organization, use of alcohol and nicotine causes

significant disability throughout the world (Platt et al., 2019). These substances are extremely harmful, especially in the event of excessive and prolonged usage.

In addition to alcohol and nicotine, prescription drugs are also licit drugs, if they are obtained by legal means. This means that someone possesses a valid prescription to obtain and possess the substances. If these substances are used properly, according to the directions of the prescribing physician, they can be beneficial to the user. These substances include opioids, sedatives, tranquilizers, and stimulants.

While prescription drugs have significant benefits, their misuse has become an epidemic (Kanouse & Compton, 2015). These substances are misused in several different manners. Schepis et al. (2018) noted there are three different ways these substances are misused. Medical misuse occurs when substances are used in ways that the prescriber did not intend (Schepis et al., 2018). For instance, medical misuse occurs if someone uses more than the recommended dosage or at a different time than intended. Nonmedical misuse occurs when a person uses a substance without a prescription (Schepis et al., 2018). In this case, someone illegally purchases the substance from an individual who has a valid prescription. Finally, mixed misuse occurs when a combination of medical and nonmedical misuse is present (Schepis et al., 2018). This often occurs when someone possesses a legal prescription and uses the entire supply before the refill date. They purchase additional supplies illegally to supplement their habit.

Licit drugs are legal but can be extremely harmful if misused and abused. The most misused medications are opioids, stimulants, sedatives, and tranquilizers (CBHSQ, 2016). The most abused and harmful legal substance in the world is alcohol. Abuse of alcohol prevails because the substance is legal, inexpensive, and readily available. The literature on each of these substance types will be discussed later in this literature review.

Illicit Drugs

Illicit drugs are substances that are bought, sold, and manufactured illegally. These substances include cannabis, amphetamines, cocaine, crack, ecstasy, heroin, LSD, crystal meth, amyl nitrates, and other non-prescribed drugs (Paquette et al., 2017). These drugs are extremely dangerous. Lack of quality control procedures in the manufacturing process causes these substances to be extremely dangerous (Day et al., 2018). The content of some of these drugs can vary widely (Day et al., 2018). Therefore, the user of the substance may think they are using a safe amount, yet unwittingly overdose (Day et al., 2018). In addition to purity issues, manufacturers of these illegal drugs often include undesirable additives which can have unexpected affects that are extremely harmful (Day et al., 2018).

Illicit drugs are more commonly used by young people (Inchley et al., 2016). The effects of these drugs carry significant risks and result in harmful behavior. Use of these drugs cause people to engage in risky sexual behavior that can lead to the contraction of sexually transmitted diseases (Schmidt et al., 2016). These drugs significantly impair decision-making (Schmidt et al., 2016). Using these illegal drugs can also have extremely negative side effects, such as hyperthermia, seizures, hyponatremia, rhabdomyolysis, and multi-organ failure causing death (Schmidt et al., 2016).

Buying, selling, and manufacturing illicit drugs place users of these substances at risk for severe legal consequences. These drugs are sold on the black market often by extremely dangerous criminals who can potentially harm users. From a financial perspective, these substances are often extremely expensive. Use of illicit drugs often brings about financial ruin. In the next section of this literature review, there will be a substance-specific discussion about

commonly abused substances. Later, there is a discussion about the severe consequences of SUD.

Discussion of Substance Type

Substances are psychoactive compounds that have the potential to cause harm to health, lead to social problems, and result in addiction (McLellan, 2017). Approximately one in every ten adults will develop a non-alcohol use disorder involving cannabis, cocaine, heroin, hallucinogens, inhalants, prescription opioids, sedatives, stimulants, or other drugs during their lifetime (Grant et al., 2016). In this section of the paper, there is a discussion of commonly abused substances that are found in the literature. The discussion first begins with the most used substance: alcohol.

Alcohol

Alcohol is the most used psychoactive substance in the world (Han et al., 2016). The substance is present in most places, easy to obtain, and relatively inexpensive. Many people can use alcohol safely to relax or be less inhibited in social situations. Some like the taste of alcohol. Most people drink for the effect alcohol produces. Some people are unable to use alcohol safely in any form. They develop Alcohol Use Disorder (AUD). The underlying diagnostic criteria for AUD present as relatively the same as the criteria for SUD but tailored to be alcohol specific.

Historically, the DSM has split alcohol related disorders into two categories: alcohol abuse and alcohol dependence. The DSM-5 combined the two disorders into a single disease. People that suffer with AUD exhibit behaviors that fall into four main categories. First, they have impaired control over their drinking. Second, they become socially impaired because drinking negatively impacts them at home and work. Third, they exhibit risky behavior, such as drunk

driving. Finally, they become physiologically altered through the increase in tolerance for the substance and begin exhibiting withdrawal symptoms (Gilpin & Weiner, 2016).

Many people commonly refer to people who suffer with AUD as alcoholics and label the disease as alcoholism. Historically, the disease has been divided in alcoholic subtypes (McDowell et al., 2019). First, AUD is physiological dependence on alcohol. Neuroadaptation characterizes AUD (McDowell et al., 2019). Second, lack of self-control, aggressiveness, frequent irresponsibility, and dysfunctional relationships characterizes the disorder (McDowell et al., 2019).

People who suffer with AUD use excessive amounts of alcohol and often become extremely intoxicated. They consistently have strained relationships with friends, family, and co-workers. They often cannot fulfill their obligations at work and home due to the heavy usage of alcohol. They cannot control how much they drink and cannot stop drinking. People with SUD are intoxicated most of the time. They develop health related issues due to the heavy and prolonged use of alcohol. They sacrifice important activities to drink instead. They develop a high tolerance for alcohol, so they must drink increased amounts of the substance to become intoxicated. When they stop using, they develop withdrawal symptoms (McDowell et al., 2019). In most cases, people with AUD drink with the intent of becoming intoxicated. They risk dying from alcohol poisoning in the process (Han et al., 2016).

Alcohol Intoxication

Most people drink to relax and be socially uninhibited. These people drink moderately and in a responsible manner. Others cannot control themselves. Most people drink to enjoy the effect alcohol produces. Depending on the level of alcohol in a person's blood stream, the blood content influences different symptoms of intoxication. Some of these symptoms produce

pleasure, while at more extreme intoxication levels, one may experience more undesirable symptoms. The stages and symptoms of alcohol intoxication are listed below. They are as follows:

- a. Low-level intoxication occurs when a person has had very little to drink and exhibit little or no signs of intoxication.
- b. Euphoria occurs after a person has consumed two to three drinks. Euphoria increases a person's confidence and lowers their inhibitions. When this occurs reaction, time decreases which makes driving and operating equipment unsafe.
- c. Excitement occurs usually after a person has had three to five drinks in only one hour. Judgement and memory become impaired. Vision problems can occur. The person can become drowsy and lose balance.
- d. If a person consumes even more alcohol, they can become confused. They may stagger when they walk or even be unable to stand up. They may not be able to remember anything during this period.
- e. As intoxication worsens, a person can possibly enter a stupor. Under these conditions they do not respond, may pass out, and lose control of bodily functions among other things.
- f. If intoxication becomes even worse, a person can fall into a coma.
- g. The last and final stage of extreme intoxication can result death by alcohol poisoning (Cirino, 2020).

People who suffer with AUD place themselves at risk of death to experience the euphoria and excitement that result from drinking. They drink for these effects which can be extremely pleasant; however, they cannot quit drinking one they start.

Cannabis

Cannabis is the most popular illicit substance abused worldwide (UNODA, 2016). There has been an increase in cultivation, and this increase in cultivation and availability resulted from decriminalization and legalization of the substance in many regions (Miech et al., 2015). Cannabis has grown in popularity due to the medicinal use of the substance (Hayley et al., 2017). The substance has become widely accepted and used. Approximately 10% of the people that use marijuana develop cannabis use disorder (Hayley et al., 2017). Many individuals who use cannabis also develop use disorders for other substances and are more likely to use other illicit substances. Cannabis is considered a gate-way drug that leads people to use other more dangerous illicit substances. Although many states in the United States have legalized the substance, the federal government considers the substance dangerous and has banned interstate transactions involving the substance. The federal government does not recognize that the substance has any valid medical usage (Patel & Marwaha, 2020). According to the federal government, the substance has high abuse potential (Patel & Marwaha, 2020).

Young people widely use cannabis (Patel & Marwaha, 2020). Like alcohol, people use cannabis because of the pleasurable effects that the chemical creates. People who develop cannabis use disorder lose control and are unable to control their use of the chemical. Continued usage despite the impairment of psychological, physical, and social functioning defines cannabis abuse (Patel & Marwaha, 2020). The DSM-5 criteria are the same yet tailored to all substances. Like alcohol, people use the substance for the beneficial effects that the substance creates during usage. Even though the substance can be harmful, people continue to use the substance. Some lose the ability to control usage and cannot stop using the chemical, despite negative consequences.

Cannabis Intoxication. Cannabis can be consumed either by smoking the substance or ingesting the product orally. When consumed, cannabis has intoxicating effects. People use cannabis to “get high.” Use of the substance can result in relaxation and euphoria (USNLM a, 2020). Many people also use the substance for pain relief. Although the substance has positive effects, usage can have dangerous side effects. These common side effects include loss of memory, impaired perception and motor skills, panic, paranoia, hallucinations, and acute psychosis (USNLM, 2020). Use of the substance can be deadly because of some of the more serious side effects such as heart rhythm disturbances, heart attack, seizures, and stroke (USNLM, 2020).

Despite the dangers of usage, people continue to consume cannabis. Many people can safely use the substance for enjoyment or medical purposes. However, some people develop a severe usage disorder that impairs them and significantly interferes with their ability to function. They start using the substance and cannot quit despite the negative consequences. Many people now feel that marijuana can be a safe and effective treatment for many medical ailments or simply just a means to experience responsible enjoyment; however, the substance can be extremely dangerous and harmful if misused. Due to genetic or biological predispositions, certain people cannot safely use this substance without developing severe usage problems that significantly interfere with their lives.

Cocaine

Cocaine is an illicit drug that affects the central nervous system. Cocaine derives from the coca plant (USNLM, 2020). Cocaine can be snorted through the nostrils, smoked in a glass pipe, or injected intravenously. The drug releases higher than normal levels of certain chemicals in the brain creating a sense of intense euphoria (USNLM, 2020). While users report extreme pleasure

from use of the substance, use of cocaine can be extremely dangerous. There are numerous consequences from use of the drug such as risk of poisoning, suicide, homicide, unintentional injury, infections, and premature death (Walker et al., 2017). Cocaine use can result in deleterious cardiovascular and prothrombotic effects such as acute coronary syndromes, heart failure, cardiomyopathies, and aortic dissection (Lucas et al., 2016). The use of cocaine has recently been linked to stroke, kidney disease, and cognitive dysfunction (Novick et al., 2016).

Despite all the negative consequences associated with cocaine use, people continue to use the drug due to the pleasure they gain from the substance. The use of cocaine has resulted in a major public health crisis with high socioeconomic costs (National Drug Intelligence Center, 2016). There has been an increasing trend of usage of the drug in recent years (Schneider et al., 2018). In a survey taken in 2018, almost 1% of the population in the United States reported using cocaine in the last 30 days (SAMHSA, 2019). Due to the increase in cocaine use, the incidence of cocaine use disorder has increased in certain demographic groups (John & Wu, 2017). Cocaine use disorder has become a serious problem in the United States. Approximately 900,000 adults met the criteria for cocaine use disorder in 2014 (Chan et al., 2019).

With all the negative consequences, one may wonder why someone could possibly use and abuse a dangerous substance like cocaine. Cocaine abuse and misuse results because addictive properties borne in the substance. The pleasurable results and rewards associated with use, cause cocaine to be extremely addictive. When people are exposed to things that make them happy, such as tasty foods or sexual experiences, the brain creates a chemical called dopamine. Dopamine signals to the brain that the behavior or event should be repeated. Drugs like cocaine prevent dopamine from being immediately reabsorbed, creating tremendous pleasure. After a certain period, to make corrections, the brain stops making dopamine which causes the user to

crash. Despite this crash, the user continues to want to recreate the intense pleasure and continues to use the substance to remain normal and avoid withdrawal symptoms. Cocaine rewires the reward system of the brain. Those who use the substance may feel as though they need to use the substance just to feel normal again (American Addiction Centers, 2020).

Cocaine Intoxication. According to the DSM-V (2013) there are several symptoms of cocaine intoxication. People who are actively using cocaine are often restless, irritable, and fearful. At the same time, they feel a great sense of superiority and euphoria. Their energy increases. They become very talkative. They may steal or borrow to try to procure more of the substance. They engage in odd and sometimes violent behavior. They become reckless. They have a decreased need for sleep, a loss of appetite, and their heart races. Psychologically, they may experience paranoia, severe mood swings, psychosis, and hallucinations. They are unable to make sound judgements and rationalize their drug usage.

Dopamine rewards survival-based activities such as reproduction and eating. The chemical rewards the brain for the activities people need to do to survive and thrive. Cocaine creates such a great reward in terms of dopamine release that the substance “tricks” the brain into prioritizing cocaine use over all other survival activities. The substance creates the illusion that the user’s very life depends upon use. Usage of the substance becomes paramount to anything else, even eating, raising a family, and earning a living.

Heroin

Heroin is an illicit opioid drug made from morphine. Morphine is derived from seed pods in the poppy plant which can be found in Asia, Mexico, and Columbia. Heroin comes in different forms. Heroin can be a white or brown powder, or black tar. Heroin can be ingested in various manners. The drug can be smoked, snorted, or injected. Heroin binds to the opioid receptors in

the brain and produces a sense of euphoria. These receptors control pain and pleasure, as well as heart rate, sleeping, and breathing (Los Angeles County Government, 2020).

Heroin use has become an epidemic in the United States (Jiang et al., 2017). Heroin was once a product peddled in poor communities; however, the substance has now entered many middle-to-high-income communities due to the drug's low cost and high potency (Gruber & Urbanowicz, 2016). Due to the crack-down on prescription opioids, many people are turning to heroin as a means of pain relief. The prescription opioid crisis and subsequent measures of the government to control these medications has led to the widespread availability and use of heroin. Heroin users have doubled, and overdose deaths have tripled since the beginning of 2000 (Rudd et al., 2016).

Heroin use creates a host of problems and results in severe consequences for users. Heroin users are unproductive. Heroin use leads to premature death, hospitalizations, enrollment in drug treatment programs, absenteeism, and unemployment (DOJ, 2020). Heroin has been associated with high crime rates and incarceration (Teesson et al., 2015). Finally, heroin use has been associated with contraction of infectious diseases such as Hepatitis C and HIV (Jiang et al., 2017).

Heroin Intoxication. As with all harmful substances, people use heroin for pleasure. When people use heroin, they report a powerful and pleasurable sensation they describe as a "rush." When repeated, these sensations cause user's lives to revolve around the substance. They begin to prioritize drug use over all their obligations and relationships (Drug Policy Alliance, 2020).

Commonly abused substances differ in their effect on people. Unlike cocaine, people who use heroin report symptoms of warmth, relaxation, and decreased anxiety. The substance relieves

aches and pains. People who use the substance mainly use heroin to avoid or reduce pain, rather than to feel good. Compared to other drugs, heroin use presents as a means of self-medication. Heroin Use Disorder has been shown to have co-morbidity with depression and anxiety. People who use heroin often use the substance to reduce the symptoms of these psychological disorders (Drug Policy Alliance, 2020).

Hallucinogens

Hallucinogens have been used throughout history by different cultures for various reasons. Hallucinogens can be found in nature. For instance, certain mushrooms can produce hallucinations when ingested. In modern times, hallucinogens have been synthesized and manufactured into potent illicit drugs. In most cases, the possession and use of hallucinogens is prohibited in the United States. The exception to this prohibition exists when Native American tribes use these substances during religious ceremonies. The most used illicit hallucinogens include psilocybin (mushrooms), lysergic acid diethylamide (LSD), 3,4-methylenedioxy-methamphetamine (MDMA), and phencyclidine (PCP) (Hardaway et al., 2016).

Like all other abused substances, people use hallucinogens for the effect they produce. People who use these substances do so to induce a state called “tripping” which produces hallucinations and other pleasurable effects (Hardaway et al., 2016). While hallucinogens can produce pleasure, they can also lead to significant impairment and loss of function during use. Specifically, hallucinogens lead to intense, unpredictable, cognitively impairing reactions that often mimic psychosis (Carhart-Harris et al., 2016). Use of hallucinogens can also permanently damage the brain. They can lead to chronic health issues such as Hallucinogen Persisting Perception Disorder (Parnes et al., 2020). These chronic disorders impair daily functioning even in the absence of intoxication.

Hallucinogen Intoxication. People use hallucinogens to produce hallucinations and other pleasurable effects. Hallucinogens cause users to see images, hear sounds, and feel sensations that seem real but do not exist. The short-term effects of intoxication lead to increase heart rate, nausea, increased sensory perception, and changes to the ability to sense time. Blood pressure increases, users lose their appetite, and cannot sleep when using these substances. Users also report spiritual experiences and feelings of relaxation during use. These substances can also cause extreme paranoia and psychosis when used (National Institute on Drug Abuse, 2020).

Inhalants

Inhalants refer to chemical vapors that are inhaled for the purpose of getting “high.” These chemicals include aerosols, gases, nitrates, and solvents. They are most used by young people. When inhaled, these substances are absorbed through the lungs. After inhalation into the lungs, the substances begin to affect the brain within seconds. Use of these chemicals leads to feeling of excitement and happiness. This intoxication mimics feelings of being intoxicated by alcohol (USNLM, 2020).

The use of inhalants can be harmful. The chemicals can lead to bone marrow damage. Excessive use of these chemicals can cause users to fall into a coma. These substances also lead to hearing loss and heart problems. Loss of bowel and urinary function can also occur. These substances can cause mood changes, violent behavior, confusion, and hallucinations. Permanent nerve damage can occur. Finally, use of these chemicals can be fatal. Death may occur by heart failure or suffocation (USNLM, 2020).

Repeated use of inhalants can lead to dependence. People who use these chemicals can develop a tolerance. They must use more and more of the substance to get the desired effect they seek. Withdrawal symptoms result from use interruptions. Users may contract inhalant use

disorder. This disorder describes the problematic and intentional use of inhaled chemicals that lead to significant clinical impairment (APA, 2013). Compulsive use, increasing frequency of use, higher dosage, inability to abstain, craving, tolerance, persistent use despite negative consequences, and dysfunctional living characterize this impairment (APA, 2013).

Prescription Opioids

Like heroin, prescription opioids are derived from the poppy plant. Prescription opioids are licit drugs that are prescribed for the treatment of pain. People who are injured are prescribed prescription opioids by a physician. The medications are manufactured legally and subject to quality control standards. Even though these drugs are manufactured legally and have legitimate medical uses, they pose a significant risk to individuals who take the substance due to the potential for misuse and abuse. Prescription opioids are highly addictive.

People who experience chronic pain are prescribed prescription opioids for the alleviation of pain. Approximately 100 million people in the United States suffer with pain. About 10% of these individuals suffer with chronic or persistent pain. Many of these individuals take prescription opioids and benefit from appropriate pain management for treatment of their condition. While pain management benefits many people who suffer with pain, physicians have also witnessed the devastating results of prescription opioid misuse and abuse. Many individuals who take prescription opioids for pain develop opioid use disorder (Califf et al., 2016).

In addition to pain management, patients who develop a use disorder from the substance, in many cases prescription opioids, are diverted to individuals for whom the prescription was not intended. Misuse, abuse, and diversion are the subject of an aggressive effort by the United States government to minimize the negative consequences caused by prescription opioids. There is a difficult balancing act taking place in the United States. Opioids benefit many people who

take them yet have severe negative consequences due to the abuse potential of the drugs (Califf et al., 2016).

Prescription opioid abuse and addiction constitutes a major public health crisis in the United States (Compton et al., 2015). Rudd et al. (2016) noted that misuse of prescription opioids has become an epidemic due to opioid-related morbidity and mortality. The misuse and abuse of these drugs lead to negative consequences such as overdose death and the transition to the use of heroin (Compton et al., 2015).

Prescription opioids are mainly intended for oral ingestion. These substances are misused by people when they are used in unintended manners. The drugs are often inhaled, snorted, smoked, or injected by those who abuse them. These non-oral routes of abuse lead to faster delivery of the drug which intensify the euphoric effects that opioids produce. Non-oral uses also increase an individual's vulnerability to addiction. These non-oral use routes, especially injecting, increase the severity of abuse potential and increase the risk of overdose (Jones et al., 2017).

Prescription Opioid Intoxication. Prescription opioid intoxication is like heroin intoxication. Those who use these substances report feelings of warmth, relaxation, and decreased anxiety. Prescription opioids reduce pain and provide users a sense of well-being. Use of prescription opioids can result in euphoria. These feelings are intensified when the substances are used by snorting, smoking, or injecting. These non-oral uses lead to rapid intoxication and cause a “rush” like the intoxicating feeling described in the section related to heroin intoxication.

Sedatives

Sedatives, or tranquilizers, are licit prescription medications used primarily to treat anxiety and sleep disorders (McCabe, Veliz et al., 2017). Barbiturates, benzodiazepines, and

sleep medications are examples of sedatives (HHS, 2020). There has been an upward trend in the prescription of these medications in the United States in the past two decades (Boyd et al., 2018). This upward trend has been paralleled by the misuse of these drug classes (Boyd et al., 2018).

According to Boyd et al. (2018) misuse of these drugs can be divided into two different behaviors that are found in the literature. First, misuse involves the use of these drugs without a prescription. This occurs when the drugs are diverted to another party for non-medical use (McCabe et al., 2017). In most cases, the diversion takes place for the purpose of pleasure rather than to treat underlying medical conditions. Sedative drugs have a high prevalence of diversion (McCabe et al., 2017). Boyd et al. (2018) also noted use of the sedative in a manner that results in use inconsistent with the prescriber's intent. For instance, the party receiving the prescription may take more of the substance than prescribed with the intent of getting "high" from the medication.

Misuse of prescription sedatives can be problematic. Misuse of these drugs increases adverse consequences such as emergency department visits and overdose deaths (McCabe et al., 2017). Ellis et al. (2020) noted that the misuse of prescription sedatives can lead to accidents. Sedatives can lead to respiratory distress when misused (HHS, 2020). These substances are also commonly used as date-rape drugs (HHS, 2020). Misuse of these drugs also increases the likelihood of contracting sexually transmitted infections such as HIV (HHS, 2020). When used in combination with alcohol, they can lead to a dangerous decrease in heart rate, shallow breathing, coma, or death (HHS, 2020).

Sedative Intoxication. People use sedatives to reduce anxiety and to sleep better. Sedatives have high abuse potential. Substances create a sense of euphoria and well-being. Use of the substances can cause drowsiness, sedation, and slurred speech. Sedatives can lead to poor

concentration, confusion, and dizziness. These drugs impair judgment, coordination, and memory. Use can lower blood pressure, slow breathing, and slow the central nervous system. Excessive use can lead to coma or death (HHS, 2020).

Stimulants

Stimulants include a wide range of substances. Stimulants can be either licit or illicit. Illicit stimulants include drugs such as cocaine and methamphetamines. Licit stimulants include medications such as Dexedrine and Ritalin. Prescription stimulants are used to treat medical conditions such as attention-deficit hyperactivity disorder, obesity, and narcolepsy (National Institute on Drug Abuse, 2020; Park & Hanning, 2016). In general, stimulants increase alertness, attention, and energy (National Institute on Drug Abuse, 2020).

Stimulants have a high abuse and misuse potential (Avellaneda-Ojeda et al., 2018). Substances create euphoria when used. In some cases, people also use these substances as an appetite suppressant to lose weight (Park & Hanning, 2016). When misused these substances can have devastating effects. Misuse of stimulants can lead to paranoia and psychosis (Avellaneda-Ojeda et al., 2018). Misuse can also increase the risk of stroke (Avellaneda-Ojeda et al., 2018). The abuse of stimulants can be associated with high-risk behavior (Park & Hanning, 2016). Ronsley et al. (2020) noted that the abuse of stimulants can be associated with a wide range of health and social problems. These problems include psychiatric and cardiovascular problems (Ronsley et al., 2020). People who misuse stimulants also have a high risk of contracting infectious diseases (Ronsley et al., 2020). Stimulant abuse can also be associated with crime and homelessness (Ronsley et al., 2020). Stimulant misuse also results increased risk of suicide (Sanchez et al., 2018).

Stimulant Intoxication. People who use stimulants report feeling a “rush.” The substance increases a user’s energy level. When using the substance, users report decreased appetite and need for sleep. The substance increases user’s alertness. Physical symptoms of intoxication include increased blood pressure and heart rate. Breathing also increases because the substance opens-up breathing passages. Blood sugar can also increase during usage (National Institute on Drug Abuse, 2020).

Other Substance Related Issues

Thus far, SUD was defined and the criterium for diagnosis was discussed. Commonly abused substances can be either licit or illicit. Literature related to each commonly abused substance was examined. In this section, other substance related issues found in the literature is addressed.

Polysubstance Abuse

In many cases, people who abuse substances prefer one substance; however, some substance users use multiple substances when engaged in substance abuse. Polysubstance abuse results from the misuse of multiple substances. Those with polysubstance abuse disorder are more likely to encounter problems related to substance abuse than users of one substance.

Polysubstance use can be associated with childhood abuse, low education, and socioeconomic disadvantage. The use and abuse of multiple substances leads to a higher risk of suicide, infection, and other health related problems. Polysubstance use has been shown to lead to increased instances of deviant behavior, arrest, and incarceration. Polysubstance abuse can result in severe medical and psychiatric comorbidities (Bhalla et al., 2017).

Co-Occurring Disorders Impact

Most people abuse substances to experience the pleasure that can be derived from their use. In some cases, substances are abused for the user to treat the symptoms of an underlying psychiatric condition. Users often attempt to self-medicate symptoms of an underlying mental illness. Many mentally ill individuals' resort to substance use to soothe psychiatric conditions or to counter-act the side-effects produced by psychiatric medications (Maremmani et al., 2019). In some cases, SUD can lead to mental illness. When a person has both a mental illness and a SUD, they have co-occurring disorders or dual diagnoses. SUD and mental illness have a high level of comorbidity (McDowell et al., 2019). Those with psychiatric illnesses are three times more likely to develop SUD within their lifetime (Grant et al., 2015). Approximately, one-half of all SUD patients have co-occurring disorders (Gruber & Urbanowicz, 2016). Common mental illnesses that are associated with SUD include generalized anxiety disorder, depression, bi-polar disorder, schizophrenia, and post-traumatic stress disorder (PTSD). Literature related to SUD and each of these psychiatric illnesses was examined and will be discussed below.

Generalized Anxiety Disorder

People who have generalized anxiety disorder have excessive anxiety and worry that has lasted for a period greater than six months. They show an inability to control worry. Those who suffer with the disorder are often restless, get tired easily, find concentrating difficult, and are irritable. They have tense muscles and find falling asleep difficult. The symptoms of the disorder cause significant distress which impacts social, work, and other important areas of functioning (APA, 2013).

Comorbidity between anxiety disorders and SUD are prevalent and a major health concern (Wolitzky-Taylor et al., 2018). The disorders have been found to co-occur in community and clinical samples (Dixon et al., 2018). There are three principal pathways for comorbidity

found in the literature: (a) individuals who suffer with anxiety disorders use substances to self-medicate, (b) individuals who suffer with SUD contract anxiety disorders through profound changes to the brain due to substance use, and (c) individuals contract co-occurring SUD and anxiety due to genetic or environmental factors (Haddad et al., 2019). Approximately 75% of cases anxiety disorders precede SUD, which gives weight to the self-medication theory (Haddad et al., 2019).

Individuals who suffer with anxiety disorders often reach for substances to alleviate the short-term symptoms of anxiety (Haddad et al., 2019). While substance use provides short-term relief for anxiety symptoms, SUD only makes matters worse. The co-occurrence of these disorders has numerous adverse outcomes (Dixon et al., 2018). The co-occurrence leads to increased anxiety symptom severity (Dixon et al., 2018). The anxiety symptoms pose great treatment challenges and early relapse to substance use (Dixon et al., 2018). Substance consumption increases with the presence of anxiety symptoms (Haddad et al., 2019).

Depression

Individuals who suffer with depression display a depressed mood most of the day, almost every day. They have decreased interest and gain little pleasure from daily activities. They may gain or lose a significant amount of weight. Thoughts and physical activity slow down during bouts of depression. Individuals with depression report fatigue or loss of energy. They also report feelings of worthlessness and excessive guilt. They cannot concentrate and have difficulty making decisions. There are recurrent thoughts of death and suicide. In severe cases, depression can lead to suicide (APA, 2013).

Individuals with major depressive disorders are twice as likely to use substances. Those who have SUD are three to six times more likely to have major depressive disorders.

Environmental factors such as family problems, abuse, and trauma lead to the early onset and comorbidity between SUD and major depressive disorders. Young people with major depressive disorder begin using substances at a young age, use more substances, and use more frequently than non-depressed individuals (Hinckley & Riggs, 2019).

Individuals often turn to substances to mitigate the symptoms of depression. Although, in some cases, depression can be substance-induced. Comorbid depression and substance abuse commonly presents and those who experience both conditions have poorer outcomes than those with either disorder alone (Hides et al., 2019). The presence of SUD in depressed individuals causes depression to be more severe (Hinckley & Riggs, 2019). Antidepressants are less effective in the presence of comorbid SUD (Brenner et al., 2019). The presence of depression has been associated with greater SUD severity (Hinckley & Riggs, 2019). People with depression use more amounts and more frequently.

Comorbid depression and SUD are shown to lead to family dysfunction, interpersonal difficulties, legal problems, and abuse potential (Hinckley & Riggs, 2019). The co-occurring conditions also increase the likelihood of suicide (Hinckley & Riggs, 2019). People with co-occurring depression and SUD are more likely to drop out of treatment and relapse than those who have one of the disorders alone (Hinckley & Riggs, 2019).

Bi-Polar Disorder

The presence of both mania and depression characterizes bi-polar disorder. People with bipolar disorder often cycle between mania and depression during their life. In some cases, they may cycle rapidly between the two conditions. Bipolar disorder can be severe. Individuals with a severe case of bipolar disorder may have major manic episodes and experience psychosis. The disorder may impair normal life functioning. In other cases, bipolar disorder may be mild. Individuals with a mild case may experience less severe bouts of mania or depression. The condition may not impair their functioning. For this reason, the disorder has two diagnostic criterium: Bipolar Disorder I and Bipolar Disorder II (APA, 2013).

Those meeting the criteria for Bipolar I have experienced a major manic episode. Several symptoms characterize mania. People who experience a major manic episode experience at least three of the following symptoms to a significant degree and are noticeable deviations from their normal behavior:

- (a) Individuals with mania often have an inflated self-esteem and grandiosity.
- (b) Individuals experiencing mania may have a decreased need for sleep.
- (c) During a manic episode, individuals are often talkative and feel the need to keep talking.
- (d) Individuals with mania often have a flight of ideas and their thoughts race.
- (e) Individuals with mania are easily distracted.
- (f) A marked increase in goal-driven activities.
- (g) People with mania engage in risky behavior that has the potential for harmful consequences.

(APA, 2013).

To meet the criteria for Bipolar I diagnosis, the individual's social and occupational function must be impaired, hospitalization required to prevent self-harm or harm to others, or the presence of psychosis. To meet the conditions of Bipolar I, the above symptoms cannot be attributed to use of a psychoactive substance (APA, 2013).

Those meeting the criteria for Bipolar II have had at least one hypomanic episode and a major depressive episode. Also, those meeting the criteria have never had a major manic episode. Hypomania is a mild form of mania characterized by elevated mood, irritability, and increased activity. The symptoms may impair social and occupational functioning. Psychosis does not present in individuals with Bipolar II (APA, 2013).

People with bipolar disorder have one of the highest rates of SUD of all the mental health illnesses. In many cases, those who suffer with bipolar disorder use substances to treat the symptoms of the disorder. Also, when using substances, the symptoms of bipolar disorder are exacerbated by the effects of the substances. Some substances cause depression, such as alcohol. While other substances may trigger mania in individuals who suffer with bipolar disorder. Use of substances as a means of self-medication often leads to substance dependence. The co-occurrence of these conditions often leads to poor treatment outcomes. SUD prevents effective treatment of bipolar disorder. Substance use impairs the effectiveness of psychotropic drugs. Likewise, the symptoms of bipolar disorder impair an individual's ability to refrain from substance use (Hunt et al., 2016).

Schizophrenia

Schizophrenia is a severe mental illness that affects approximately one 1% of the global population (Khokhan et al., 2017). The condition is characterized by debilitating symptoms that negatively impact a person's quality of life (Bernard, et al., 2017). The DSM-V noted that

individuals with schizophrenia display five distinct symptoms: (a) individuals with schizophrenia may experience delusions, (b) those who suffer with the condition may experience hallucinations, (c) people with schizophrenia often have disorganized speech, (d) they often display grossly disorganized catatonic behavior, and (e) they have negative symptoms such as low motivation and inability to express themselves effectively. Diagnosis of schizophrenia requires the presence of two or more of the above symptoms (APA, 2013).

SUD is common among patients who have schizophrenia. Presence of the two conditions drastically reduce the effectiveness of clinical treatment. In the presence of schizophrenia, genetic determinants make patients particularly vulnerable to SUD. Those who suffer with schizophrenia are three times more likely to have serious problems with drugs and alcohol during their lifetime. Many people who suffer with schizophrenia turn to substances to lessen symptoms or decrease the side effects of antipsychotic drugs (Khokhan et al., 2017).

Post-Traumatic Stress Disorder

Individuals with PTSD have been exposed to an actual or threat of death, serious injury, or sexual violence, either by experiencing these conditions themselves, witnessing, or learning about an event that occurred to a family member or close friend. Those who suffer with PTSD have recurrent and intrusive memories, distressing dreams, dissociative reactions, prolonged psychological distress, and other reactions which symbolize an aspect of the traumatic event. Individuals with the condition persistently avoid stimuli associated with the event. They experience negative alterations in cognition and mood that are in association with the event. They may experience angry outbursts, self-destructive behavior, hypervigilance, problems with concentration, and inability to sleep (APA, 2013).

PTSD and SUD frequently co-occur and the combination of these two disorders leads to poor health outcomes and mortality. Alcohol prevails as the most common substance abused in PTSD patients. SUD is two to three times more likely among individuals with PTSD than the general population. Both conditions increase the likelihood of suicide, and together they present a higher risk of suicide than when experienced alone. Many people with PTSD use substances such as alcohol, cannabis, and opiates to reduce their chronic state of hyperarousal. In some cases, SUD may precede PTSD. People with SUD are more likely to experience traumatic or stressful events due to SUD lifestyle. These lifestyle factors include overdoses, victimization, HIV exposure, sexual violence, and other violence related incidents (Shorter et al., 2015).

Tolerance

Tolerance presents as a hallmark of addiction. Tolerance occurs when an individual no longer responds to a drug in the same manner as after their initial use. An individual must use higher doses and more frequently to achieve the same effect as previous substance use. This occurs due to adjustments made in the human brain. Substances flood the brain with neurochemicals that react by binding to receptors. This abnormal flood of neurochemicals creates a “high” for substance users. The human brain also seeks to achieve equilibrium. When the brain repeatedly experiences a rush of neurochemicals, neurochemicals within the brain adjust to maintain a proper balance. Thus, the brain produces less neurochemicals. Also, the brain’s receptors are damaged by floods of neurochemicals and damaged receptors are not replaced. As a result of the brain’s balancing act, the baseline for achieving a “high” increases so that more of a substance must be used to achieve the same effect. In most cases, after a time, chronic substance abusers use only to feel normal (National Institute on Drug Abuse, 2020).

Withdrawal

As noted in the section on tolerance, the human brain adjusts to attempt to achieve a balance. The presence of excessive amounts of neurochemicals causes the brain to produce less neurochemicals. Excessive amounts of neurochemicals damage receptors which are not replaced by the brain in the attempt to attain equilibrium. This creates a “new normal.” When substance users discontinue use or interruptions occur, they begin to experience withdrawal symptoms. During the withdrawal process, the body attempts to reach a new state of homeostasis. During this process, brain chemicals fluctuate which results in significant negative mental and physical symptoms. Many of these withdrawal symptoms can be dangerous, and in some cases, life-threatening (American Addiction Centers, 2020).

Damage SUD Causes to Individuals

SUD involves the problematic use of substances. The presence of SUD causes damage in those with the condition. Much has already been said about the damage SUD causes in the analysis of commonly abused substances presented earlier in this paper. In this section of the paper, the problems that arise from SUD found in the literature are discussed and analyzed.

Poor Health

SUD causes significant damage to the health of individuals who are diagnosed with the illness. The excessive use of substances damages the organs of the body and impair their functioning. Health problems that arise from substance abuse will be highlighted in this section of the paper with an analysis of substances’ effect on the major organs of the body.

Brain

The most profound organ damaged through the misuse and abuse of chemicals is the brain. The literature suggested that chronic substance abuse of addictive substances adversely

affects neuropsychological functioning. Substance abuse is characterized by an inability to control one's behavior. The abuse of substances despite the awareness of negative consequences suggested that addictive behavior involves deficits in inhibitory control, decision-making, and regulation. Based on neuroimaging studies, substance abuse impairs the frontal cortical networks that are used to make logical decisions and judgements. The damage presented by SUD also damages attention, short-term memory, visuospatial abilities, postural stability, and executive functions, such as problem solving and decision-making. These cognitive performance problems worsen in proportion with the frequency and duration of substance use. SUD also may trigger certain mental illnesses (Yucel et al., 2007).

Heart

In addition to the brain, substance abuse damages the heart. For instance, the use of stimulants such as cocaine, methamphetamine, and prescription amphetamines can cause acute heart problems such as hypertension, chest pain, acute coronary syndromes, myocardial infarction, major vessel dissection, and strokes (Duflou, 2019). Use of these substances can also cause chronic cardiac disease in the form of hypertensive heart disease, ischemic heart disease, and other various forms of cardiomyopathy (Duflou, 2019). Excessive consumption of alcohol damages the heart. Heavy consumption of alcohol increases cardiovascular mortality (Day & Rudd, 2019). Abuse of alcohol can have acute effects such as depression of cardiac contractility, cardiac rhythm disturbances, arterial hypertension, and sudden death (Day & Rudd, 2019). High doses of alcohol can also have chronic effects such as ventricular dysfunction, atrial dysfunction, arrhythmia, alcoholic cardiomyopathy, and heart failure (Day & Rudd, 2019).

Lungs

Those with SUD are more likely to develop lung-related health problems, particularly for those individuals who use substances that are inhaled, snorted, or smoked. Studies have identified co-morbidities between SUD and lung cancer and COPD (Salman et al., 2017). People who use heroin are more likely to develop lung diseases than any other SUD substance (Salman et al., 2017). Tobacco use disorder and SUD are highly comorbid. Individuals with SUD smoke at high rates (Campbell et al., 2017). Tobacco consumption severely damages the lungs and leads to lung diseases, such as lung cancer and COPD.

Liver

Another major organ affected by substance abuse is the liver. Those with SUD are disproportionately affected by the liver disease Hepatitis C (Zeremski & Martinez, 2017). This is particularly the case for those individuals who inject drugs such as cocaine and heroin (Zeremski & Martinez, 2017). This is because, in many cases, these individuals share needles and use dirty needles which cause them to contract hepatitis C. High alcohol consumption can cause liver disease and significantly increase chronic liver damage (Zeremski & Martinez, 2017). The excessive consumption of alcohol can also lead to cirrhosis of the liver (Ulrich & Hanke, 2015).

Impaired Functioning

Individuals with SUD display an inability to function well in their daily lives. High levels of substance consumption are associated with functional impairments (Han et al., 2016). Cognitive abilities are impaired by the consumption of substances. Individuals with SUD have difficulty making decisions, fail to exercise good judgement, or have difficulty concentrating during and after use. Some substances impair motor skills and cause difficulty performing basic life tasks, such as operating electronics, driving a motor vehicle, or operating equipment.

People with SUD have difficulty caring for themselves. They are unable to perform basic life tasks like cleaning the home, caring for children, or maintaining good personal hygiene. Excessive substance use can cause difficulty performing in an occupational setting. In many cases, those with SUD find it difficult to maintain employment because of the effect substances have upon their functioning. Even when those with SUD are not using substances, functioning is difficult, due to the onset of withdrawal symptoms.

Accidents

People with SUD are accident prone. They are more likely to be involved in, or cause accidents during heavy substance consumption (Campbell-Sills et al., 2018). Heavy substance use impairs an individual's ability to concentrate and make good decisions (Yucel et al., 2007). People who use substances lack good judgement (Yucel et al., 2007). During the use of most substances, concentration and coordination are impaired during periods of intoxication and withdrawal. This lack of good judgement and coordination creates a significant risk to individuals who suffer with SUD. For instance, during substance use, an impaired individual might operate a motor vehicle. Operating a vehicle while under the influence can be dangerous. Wakefield (2015) noted that substance abuse can lead to a greater risk of automobile accidents. Although the most common forms of accidents arise from operating an automobile or equipment while intoxicated, a simple task such as walking can be difficult for individuals who are severely intoxicated. People who abuse substances are also impulsive and likely to engage in risky behavior which can lead to accidents (McDowell et al., 2019).

Legal Consequences

Individuals with SUD are more likely to suffer legal consequences and problems than the rest of the population (Campbell-Sills et al., 2018). The most obvious and direct consequence

occurs during the use of illicit drugs. In most jurisdictions, the law imposes strict consequences for the possession and distribution of controlled and dangerous substances. In many cases, those who use illegal substances are caught while obtaining or using the substances. In some cases, substance abusers sell drugs to support their habit. These violations of law lead to legal consequences such as fines, probation, and incarceration.

Besides the possession and distribution of illegal narcotics, people who abuse drugs may suffer other legal consequences. Heavy drinkers may operate a motor vehicle during periods of usage. Operating a motor vehicle while intoxicated is illegal. Most jurisdictions impose significant penalties for operating a vehicle while intoxicated. If caught, individuals may face fines, civil penalties, and incarceration, due to charges related to driving while under the influence of alcohol or other intoxicating substances.

Substance use has been associated with rule breaking and aggressive behavior (Greenfield et al., 2017). Individuals with SUD may commit crimes to support their habit such as burglary and theft. These crimes can lead to significant legal consequences. SUD has also been associated with aggression and violence (McDowell et al., 2019). During substance use, those with SUD are more likely to engage in fights with others. Additionally, substance users are more likely to be engaged in incidents of domestic violence. Fights and domestic violence incidents can lead to significant legal consequences.

Financial Consequences

Individuals with SUD face significant financial consequences due to their illness. Most substances are expensive, and heavy usage can create a huge financial burden. Obtaining substances involves paying high prices. Many people with SUD sacrifice other financial obligations to obtain their substances. For individuals with SUD, using substances becomes a

priority. Many people with the disorder buy substances before paying bills such as rent, electricity, and other important financial obligations. Failing to meet important financial obligations can lead to evictions, repossessions, and discontinuance of other important services. Functional impairments related to substance use may prevent individuals with SUD from maintaining employment (Han et al., 2016). Without gainful employment, people with SUD cannot take care of financial obligations as they become due. The imposition of fines and other related legal costs due to substance abuse can cause additional financial burdens.

Marital Problems

SUD is a family illness (Ahluwalia et al., 2018). The disorder negatively impacts both the substance user and their family (Ahluwalia et al., 2018). SUD has been associated with marital problems (Zargar et al., 2019). Individuals with SUD use excessive amounts of substances and are intoxicated most of the time. When not using chemicals, they spend most of their time obtaining substances or recovering from substance use (APA, 2013). Because much of their waking hours are consumed by the illness, they cannot engage in a meaningful relationship with their spouses and families. The other problems borne from this illness create bitterness and frustration within the family unit. Financial strain, loss of employment, and health related problems create frustration and bitterness. SUD often leads to divorce.

Damaged Relationships

Abuse of substances creates relationship problems (Campbell-Sills et al., 2018). Individuals with SUD are preoccupied with using and obtaining substances. Most of their waking hours are spent in this effort. Substance users often isolate themselves and cease engaging in life's meaningful activities (APA, 2013). This includes relationships with friends and family. In addition to strained relationships with family and friends, people with SUD find maintaining

employment difficult. The use of substances impairs the ability to function in an occupational environment (Campbell-Sills et al., 2018). This inability to perform at work can create a damaged relationship between the substance user and their employer. The illness can also damage relationships with colleagues.

Premature Death

As noted in the section on poor health, SUD leads to significant health problems. The action of substances on the human body damages major organs and often leads to premature death. Many substances bear a significant risk of overdose death (Gryczynski et al., 2016). This is particularly true with substances that are injected such as heroin and cocaine. Accidents during substance use can also lead to premature death. SUD has been associated with suicide. Individuals with SUD are more likely to commit suicide than others in the general population.

SUD and Business

SUD is a severe mental illness that leads to numerous personal problems for individuals with the disorder. Many of these personal problems spill over into the work environment, creating significant issues for businesses who employ people with SUD. Literature on the subject was analyzed and several problems related to SUD in the workplace have been identified. These problems are discussed and analyzed below.

SUD and the disorder's impact must be addressed when conducting business. Businesses address substance use in several ways. Literature on the matter points to two ways in which businesses seek to address substance abuse. The first way involves the implementation of drug-free workplace policies. The second way involves use of employee assistance programs. Literature on each of these methods is discussed. In many cases, people with SUD are discharged

due to problems related to their condition. There is a brief discussion of terminations that result from the negative consequences of SUD in the workplace.

Reported Impact

SUD presents numerous problems for businesses in the operation of their daily activities. People with SUD are less productive than their counterparts. They often miss work due to their illness. They are prone to accidents during periods of intoxication and withdrawal. They have poor health and increase the cost of healthcare. They have difficulty maintaining relationships due to their illness. They cause businesses who employ them to lose customers and clients. They engage in insubordination and dishonest acts. Each of these negative consequences of SUD found in the literature are discussed and analyzed below.

Lost Productivity

SUD has been associated with loss of productivity (Sarkar & Ghosh, 2019). People with SUD are impaired mentally and physically, both when using substances and recovering from use. When using substances or recovering from use individuals with SUD have difficulty concentrating. This lack of concentration slows down their work product. Those with SUD also make poor decisions and exercise poor judgement. This lack of decision-making capability leads to inefficiencies in their production and may result in rework. SUD impairs physical abilities. Motor skills are affected by SUD. People using substances, or recovering from use, lack proper coordination and take longer to complete basic tasks. Those with SUD are also prone to make mistakes that increases the costs associated with the disorder and leads to an overall loss of productivity for businesses (Patil et al., 2017). Loss of productivity results in the highest costs associated with SUD occurrence in business.

Absenteeism

Individuals with SUD are frequently absent from their jobs (Patil et al., 2017). Frequent absences lead to disruption in work and loss of productivity. Individuals may miss work because they prefer to stay home and use substances. Individuals with SUD also miss work when recovering from substance use. Absences by employees are costly for employers. Employers may pay sick leave while an affected employee misses work yet lose the productive capacity of the job for the period of absence. In other cases, affected employees may have to be replaced by other employees, and this replacement may result in the payment of additional compensation such as overtime. When the employee with SUD misses work, his work falls on other people within the business, which has the potential to lead to frustration on the part of co-workers and supervisors.

Workplace Accidents

Individuals with SUD cause workplace accidents (Abram, 2016). As discussed in the section related to personal problems caused by SUD, those with the condition are prone to accidents. These personal problems spill over into the workplace. Individuals with SUD are often impulsive and engage in risky behavior. They make bad decisions and exercise poor judgement. Hasty and bad decisions can result in accidents. When intoxicated or recovering from use, people with SUD have poor coordination and their reactions are impaired. Just as in their personal lives, they are involved in, or cause accidents. Operating machinery and equipment can be particularly dangerous in the workplace. In many cases, people are required to work near others which increases the likelihood of accidents occurring. Workplace accidents and injuries increase the cost of doing business.

Increased Healthcare Costs

SUD contributes to societal burdens in terms of high-cost healthcare use (Gryczynski et al., 2016). Studies have shown that SUD is associated with high-cost services, such as inpatient hospitalizations and emergency department visits (Gryczynski et al., 2016). Many health conditions are exacerbated by SUD (Gryczynski et al., 2016). Medical consequences can also be directly linked to SUD. These medical consequences include overdose, soft tissue infections, endocarditis, and intoxication-related injury and trauma (Gryczynski et al., 2016). As noted in the section on personal problems related to SUD, excessive and chronic substance use damages all the major organs of the body. This damage results in increased healthcare costs that are borne by many businesses. The use of certain substances can also result in infectious and contagious diseases such as HIV and hepatitis C. Treatment of these diseases can be extremely costly. Finally, the treatment of SUD can be expensive. Treatment for the disorder includes detoxification, inpatient residential care, counseling, and on-going therapy.

Damaged Relationships

Individuals with SUD often have relationship problems (Campbell-Sills et al., 2018). In addition to strained relationships with family and friends, individuals with SUD often have strained relationships with their supervisors and colleagues. Repeated absences from work leave supervisors and co-workers with extra work. Supervisors may have to scramble to try and fill the void with replacements. Co-workers work requirements may increase due to absences. When individuals do manage to attend work, they perform poorly. Supervisors and co-workers may notice the lack of productivity. When working with an individual with SUD, the illness may impact overall team performance, slowing the progress of the team which can result in

frustration and anger. Relationships with customers and clients may also be strained due to production of substandard products and services from people who suffer with SUD.

Loss of Business

Individuals with SUD are unproductive, make mistakes, cause accidents, and breed contempt from co-workers, supervisors, and customers. People with SUD often fail to meet their work obligations, show up late to work, and produce poorly when on duty. In some instances, they may show up to work intoxicated or have acute withdrawal symptoms on the job. The above facts may result in customers and clients severing relationships with the companies that employ these individuals.

Insubordination

Workplace consequences of SUD include insubordination (Spicer & Miller, 2016). SUD has been associated with rule-breaking behavior. Individuals with SUD often fail to follow the instructions of their supervisor and do not follow company policies and procedures. This lack of obedience creates problems in the workplace and increases the costs of doing business.

Dishonest Acts

SUD carries a significant stigma for those with the disorder (Barry et al., 2016). Because of the attached stigma, individuals with SUD lie to prevent others from finding out that they have substance use problems. For instance, when missing work due to substance use or withdrawal symptoms, individuals with the condition often lie about the reason they failed to attend work. In other instances, affected employees may call into work because they would prefer to stay home and use substances.

People with SUD are often under significant financial pressure. Obtaining the abused substance becomes a priority in their life. If they are unable to obtain the substance, they may

become severely ill due to withdrawal symptoms. Most substances are extremely expensive when consumed in excessive amounts. Because of the significant financial pressure created to maintain substance use, employees may engage in dishonest acts which can result in damage to affected businesses. These dishonest acts may include employee theft and fraud.

Addressing Substance Abuse in Business

SUD presents numerous problems for businesses that employ individuals who suffer with the condition. Substance use and abuse is a major concern of most companies in today's business environment. Based on a review of the literature on the topic, businesses address substance abuse in two ways. Some businesses employ a zero-tolerance policy for substance use. These policies are referred to as drug-free workplace policies. In some cases, companies seek to assist employees in their recovery by employing EAPs. Both programs will be discussed. In many cases, substance users cannot be helped and must be terminated. This section provides a few brief notes on terminations related to SUD.

Drug Free Workplace Policies

Drug use in the workplace results in higher rates of workplace injuries and impaired performance, among other things. Many employers have instituted drug testing policies and procedures to combat the negative effects of substance use in the workplace. In 1988, the Drug-Free Workplace Act was passed which requires recipients of federal grants to maintain a drug-free workplace. The act required that companies who receive federal funds certify that the business is drug-free. To comply with the act, businesses began drug testing employees when they were initially hired. Companies also instituted policies and procedures to drug test employees on a periodic basis. These policies and procedures included the use of random drug

testing. In addition to randomized drug testing, companies also tested employees based on reasonable suspicion (Waehrer et al., 2016).

In addition to companies required to maintain a drug-free workplace by the Drug-Free Workplace Act, many companies have instituted drug-free workplace policies that require employees to submit to drug tests as a condition of employment. Many companies also have zero tolerance policies in place. These zero tolerance policies strictly forbid the use of substances in the workplace. Under these policies, if an employee fails a drug-screen, they are terminated immediately. Zero tolerance policies are often found in work environments where safety is a significant risk factor. This includes the transportation industry and industries where employees are required to operate machinery and equipment.

Employee Assistance Programs

To combat the negative impacts of substance abuse in the workplace, many companies have instituted EAPs. EAPs were originally formed as occupational alcohol programs in highly industrial industries. EAPs focus on employee alcohol and substance use problems. These programs provide a linkage between in-house and outside resources for employee assistance with these problems. The programs also provide training for supervisors related to substance abuse issues. EAPs usually provide screening and assessments to employees. They also provide counseling services, referrals to service providers, and case management services. EAPs have also expanded their services to include other mental health related services. Studies have shown that the use of EAPs reduce absenteeism, improve workplace performance, and decrease lost-workday injuries (Waehrer et al., 2016).

Terminations

A consensus exists in the medical community that substance abuse is a mental illness that requires medical treatment. To some extent, individuals with SUD are protected by federal law; however, companies do not have to accommodate employees who are actively using substances or intoxicated on the job. In most cases, employees who use on the job are terminated. Also, the personal and workplace consequences of substance use can lead to termination. For instance, insubordination can result from SUD. Employees with SUD can be terminated for failing to follow the instructions of supervisors without regard to their SUD status. Little dispute exists that SUD is an illness that affects many aspects of an individual's life but the illness can cause unacceptable and illegal behavior which can result in immediate termination. Most employers can find non-medical grounds for discharging employees with SUD without accommodating the illness through EAPs or other means of assistance.

SUD Recovery Process

SUD can be treated. Recovery from SUD starts with a period of detoxification. After detoxification, the recovery process involves mental and behavioral treatment often provided in the form of inpatient residential care. Once mental and behavioral treatment has taken place, the recovery process involves on-going therapy to prevent the return to substance use (Swensen, 2015).

Detoxification

The long-term usage of substances causes the body and mind to develop tolerance for substances. After a period of long-term use, the body becomes accustomed to the presence of the chemical. Sudden cessation of substance use can cause withdrawal symptoms. These withdrawal symptoms can be severe and, in some cases, life-threatening. The process of detoxification

involves allowing the body to remove harmful chemicals. Medical detoxification is a method utilized to assist in the body's process and ensure safety. Detoxification is the first step in the recovery process (American Addiction Centers, 2020).

Mental and Behavioral Treatment

Medical detoxification is only the first stage of SUD treatment. Detoxification alone does little to change long-term abuse patterns (Gruber & Urbanowicz, 2016). To be effective, detoxification must be followed by mental and behavioral treatment. In most cases, inpatient residential care is recommended. The length of inpatient care varies based on length of substance use, amounts used, and frequency. Most residential treatment programs last a period of 30 to 90 days. During this process, recovering individuals receive counseling, medical care, and physical rehabilitation. These residential facilities provide a safe environment where individuals can live in a substance-free environment while receiving medical care and therapeutic services. Many inpatient residential rehabilitation facilities also help individuals with resolving family, legal, and related mental health issues (American Addiction Centers, 2020).

Post-Treatment

After completing the detoxification process and initial mental and behavioral treatment, individuals with SUD must engage in a life-long recovery process (Gruber & Urbanowicz, 2016). This process involves an on-going effort to prevent relapse. SUD is a chronic illness with no cure (Gruber & Urbanowicz, 2016). There are several post-treatment options available to individuals with SUD. These post-treatment options will be discussed below.

Post-Treatment Options

There are several post-treatment options available to individuals recovering from SUD. Effective recovery may include a combination of multiple treatment options. Many recovering

individuals continue to receive individualized psychological addiction counseling after completing mental and behavioral treatment. In some cases, individuals may use pharmaceuticals to maintain abstinence from substances. A physical exercise regimen has also proven to be effective in the recovery process. Recovering individuals also may find engaging in hedonic activities effective at replacing unhealthy pleasure-seeking behaviors, like substance use (Volkow, 2020).

Individuals recovering from substance use may attend post-treatment recovery groups and enroll as members of organizations which focus on assisting members with maintaining their sobriety. A large majority of these recovery groups are based on the principles of the 12-steps which were first formulated in the seminal text, *Alcoholics Anonymous*. The book was written with the intent of helping alcoholics recover and abstain from alcohol. Many other groups have adopted 12-step principles to address substance abuse and other compulsive behaviors. These groups include organizations such as Narcotics Anonymous, Gamblers Anonymous, and Celebrate Recovery.

Emphasis of God in Recovery

Many treatment centers, recovery groups, and religious organizations base their recovery programs on the 12-steps of recovery as outlined by Wilson (1976). The 12-steps emphasize the importance of an individual developing a personal relationship with God to overcome their addiction. The 12-steps as outlined by Wilson (1976) are as follows:

1. We admitted we were powerless over alcohol—that our lives had become unmanageable.
2. Came to believe that a Power greater than ourselves could restore us to sanity.

3. Made a decision to turn our will and our lives over to the care of God as we understood Him.
4. Made a searching and fearless moral inventory of ourselves.
5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. Were entirely ready to have God remove all these defects of character.
7. Humbly asked Him to remove our shortcomings.
8. Made a list of all persons we had harmed and became willing to make amends to them all.
9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take personal inventory and when we were wrong promptly admitted it.
11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs. (Wilson, p. 59-60)

Wilson (1976) contended that alcoholics are doomed and are beyond human aid. They must admit complete powerlessness and come to believe in a Higher Power that can help them to recover. Being doomed, individuals with alcoholism must turn their life over to God and be willing to do His will in their daily life. After deciding to turn their life over to God, they must

“clean house” by admitting their wrongs to God and another human being. During this process, they ask God to remove defects of character so that they may be more useful to Him.

After preparing and presenting a moral inventory, Wilson (1976) suggested that those in recovery approach people they have harmed and make amends for the wrongs they have done to others. Once this process is complete, recovering alcoholics continue to monitor their daily activities and make amends promptly when they are wrong. They seek daily to expand their relationship with God through prayer and meditation. Finally, after they have completed the 12-step process they attempt to help other alcoholics to recover from alcoholism and live by the principles outlined in the steps.

In addition to Alcoholics Anonymous, many other organizations have sprung up and use the tenants outlined in the 12-steps to help members recover from addictions and compulsive behaviors. The 12-steps dominate the recovery landscape. A consensus exists among many recovered individuals that a person must have a religious experience to recover from their addiction. There must be a profound change in the way that they conduct themselves and view the world. This psychic change occurs once a person completes the intense work proposed by the 12-steps.

Emphasis on Helping Others

Wilson (1976) outlined a practical program of action by which those who suffer with addiction can recover and maintain abstinence from substances. The book outlines a program that has three parts. The first being unity, found in fellowship meetings that are attended regularly by members. The second being recovery, found through completing the work outlined in the 12-steps. The third being service, found through carrying the message of the program and helping other alcoholics to recover from their condition. Once an individual has completed the

12-steps and has had a vital religious experience, they go forth to assist others to find a solution to their problem. Wilson (1976) emphasizes that altruism is required to maintain sobriety.

Members of 12-step based organizations seek to help others find a relationship with God which will solve their addiction problem.

Barriers to Sustained Recovery

The SUD recovery process is characterized by repeated attempts and failures to remain substance free. Many individuals attempt to recover but cannot. There are several barriers that individuals face in their quest to achieve continuous abstinence from their substance of choice. Many individuals with SUD suffer with a form of denial. Also, SUD has a significant stigma which acts as a barrier in the recovery process. Finally, many individuals who attempt to recover cannot avoid repeated relapse. Each of these barriers to recovery are briefly discussed.

Denial

Acknowledging a problem is the first step in the recovery process. A major barrier to addressing SUD can be denial (Gastala, 2017). Denial refers to the selective ignoring of information (Heshmat, 2018). A person with denial refuses to acknowledge his own reality (Heshmat, 2018). Denial explains why an individual continues to use despite the presence of consequences (Pickard, 2016). These individuals fail to realize the damage substance abuse causes in their life or do not correlate the damage to substance abuse issues. Until a person can fully acknowledge the extent of their problem recovery will escape them.

Stigma

SUD carries a stigma for both individuals with the disorder and their family members (Shay-Wallace, 2020). This stigma creates a sense of shame in individuals with SUD and those around them. Stigma can be a significant barrier to recovery from SUD because many people are

ashamed of discussing the problem openly with others. While the medical society agrees that SUD is a disorder, many people continue to moralize substance abuse. Some believe that substance abuse results from poor choices that are made by individuals and that those who suffer with substance abuse are bad people. In addition to many viewing substance abuse as a moral failing, the personal problems created by SUD cause individuals with the disorder to have a significant amount of guilt and shame. In many cases, people with substance abuse lie, commit illegal acts, and otherwise behave poorly in the face of the disorder. Guilt and shame result from reliving past misdeeds. These feelings of guilt and shame often lead individuals to use more to blot out these feelings and avoid facing the issues presented by SUD.

Relapse

SUD is characterized by chronic relapse (Gruber & Urbanowicz, 2016). Relapse refers to the return to use after a period of abstinence. During use, the brain changes. Individuals with SUD gain a tolerance for their substance of choice. When attempting to discontinue use of substances people with SUD experience withdrawal symptoms. In many cases, these changes of the brain outlast the detoxification process and result in drug cravings and lapses in recovery (Shay-Wallace, 2020). These lapses in recovery create a great sense of guilt, shame, and remorse which invariably leads to still more substance use to quiet these feelings.

Potential Themes and Perceptions

A literature was conducted on SUD and the disorder's impact on business. During the review of literature, several potential themes and perspectives were identified. These themes and perspectives are discussed below.

SUD Begins in Pleasure, Ends in Misery

People use substances because they like the effect substances produce. All commonly abused substances result in pleasurable feelings. During substance use, the brain is flooded with neurochemicals that bind to receptors. These neurochemicals create a great sense of euphoria. When individuals use, they feel ease and comfort when intoxicated. People with SUD use frequently to recreate good feelings and soothe aches, pains, and symptoms of mental illness.

As individuals use, they begin to develop a tolerance for their substance of choice. More and more of the substance must be used to experience the same amount of pleasure from prior use. Frequent and excessive use damages the brain and creates a situation where those with SUD use simply to feel normal. When they are not using, they begin to withdraw from their substance, which causes violent physical and mental reactions in the body and mind. As using gets worse, frequent, and excessive use leads only to misery.

Use at Any Cost

Those with SUD form an unbreakable habit wherein they cannot stop using in the face of severe negative consequences. These individuals use at any cost. SUD impairs functioning and damages the body and mind. The disorder affects personal and professional relationships. The illness leads to financial problems. Often, the disorder results in legal consequences. Even in the face of all these problems, individuals with SUD continue to pick up their substances. They cannot weigh the pros and cons of use. The users have become dependent on substances and cannot break the habit.

The brain of those with SUD can become damaged. The reactions of substances occur in the lower brain, where base survival reactions occur. This action circumvents the brain's logic function which occurs in the frontal lobes. Those with SUD brains have been rewired by

substance use wherein they cannot call into consciousness the negative consequences of substance use. The brain prioritizes the use of substances over all else because the reaction to substances create the guise that the use of substances provides for a person's very survival needs. The use of substances becomes more important than eating, sleeping, sex, and other base survival instincts because the significant reward the brain receives during substance use causes the notion that substance use supersedes all other activity.

SUD is All-Consuming

SUD consumes the life of those who suffer with the disorder. Most of their waking hours are spent acquiring, using, and recovering from use. As matters grow worse, these individuals begin to neglect everything in their life including their spouses, children, friends, and work relationships. People with SUD also sacrifice their values. They may commit illegal acts such as burglary, theft, and fraud to support their habit. They frequently lie to avoid detection or cover up use. Many people with SUD lose everything worthwhile in life before they are willing to get help for their problem.

There is Hope in God

A treatment exists for SUD. Recovery begins with the removal of the substance from the body during a period of detoxification. Detoxification is followed by inpatient treatment for 30 to 90 days. Once a person has been stabilized, they must continue an on-going effort to prevent relapse. Most recovered individuals agree that a relationship with God was required to affect their recovery. They found recovery through the principles of the 12-steps. The main purpose of the 12-steps is to enable people to find a relationship with God that will help solve their problem. The 12-steps are based on biblical principles. The answer to all life's problems can be found in the Holy Bible such as:

Come to me, all you who are weary and burdened, and I will give you rest. Take my yoke upon you and learn from me, for I am gentle and humble in heart, and you will find rest for your souls. For my yoke is easy and my burden is light. (New International Version [NIV], 1973, Matthew 11:28–30)

Discovered Themes

A literature review was conducted to investigate SUD and the disorder's impact on business. During the review of the literature, the researcher identified several potential themes and perspectives. These potential themes and perspectives were discussed in the previous section of this document.

During the case study procedures, the researcher discovered common themes derived from the interviews of the study participants that related to common themes found in the literature. Please see the discovered themes that were common to both the literature review and the case study in Table 1

Table 1.

Discovered Themes

Impaired Functioning – people with SUD cannot function well due to their substance use.
Accidents – people with SUD often cause accidents in the workplace.
Financial Consequences – people with SUD suffer financially.
Marital Problems – people with SUD often have marital problems.
Damaged Relationships – people with SUD have a difficult time maintaining healthy relationships.
Lost Productivity – people with SUD are not productive at work and make errors.
Absenteeism – people with SUD miss work.
Loss of Business – SUD cause businesses to lose customers and clients.
Dishonest Acts – people with SUD are dishonest and have the potential to steal or commit fraud.
Denial – people with SUD suffer from denial. They often fail to realize they have a problem.
Stigma – SUD carries a significant stigma which often acts as a barrier to recovery.

These discovered themes and their relationship to the case study findings are discussed in more detail in Section 3 of this paper.

Literature Review Conclusion

A literature review was conducted on substance abuse and the disorder's impact on business. During this literature review, information on substance abuse was obtained to better understand the problem. This information was summarized in this document. First, the criteria for substance abuse was included. A classification of substance types was included. Some substances are legal, while others are forbidden by law. Commonly abused substances were explained in detail. SUD commonly co-occurs with mental illnesses as well. These co-occurring mental illnesses include anxiety, depression, bi-polar disorder, schizophrenia, and PTSD. Each of these illnesses and their relationship with SUD was explained herein. The problems SUD presents to individuals who suffer with the disorder were examined. Other substance related issues were also discussed.

In addition, to explaining the problem in general, SUD and the disorder's impact on business was discussed. SUD is prevalent in most businesses. The personal problems the disorder presents spill over into the workplace. Many people who have SUD are less productive at work. They fail to attend on a regular basis. They cause accidents and injuries. To deal with these issues, workplaces have implemented drug-free workplace policies and EAPs.

After discussing SUD's impact on business, the recovery process was summarized. SUD is a consuming problem that affects many people. Those with SUD find quitting substances practically impossible. Hope does exist. Many recovery programs emphasize development of a relationship with God as a means of achieving recovery. These recovery programs also emphasize helping others to a path of recovery as a means of maintaining abstinence from

substances. Biblical principles are utilized in the recovery process as a means of producing hope. True hope can be found through repentance and development of a personal relationship with the Lord Jesus Christ.

Section 1: Transition and Summary

Section 1 of this paper provided the foundation for the study. The foundation of the study included a description of the problem. Many businesses face challenges with SUD. The specific problem to be addressed is SUD and its impact on public accounting practice in the state of Louisiana. Several research questions were formulated to address the specific problem. A case study will be conducted to address the problem identified and the research questions presented herein.

Substance abuse disorder has severe consequences and results in significant costs to businesses. This study is significant because it can add to the existing body of knowledge on the subject and help businesses better address the problem when it arises. This study will seek to identify best practices and innovative solutions for dealing with the problem. The researcher will immerse himself in public practice and interview key members of practices to better understand the problem and identify solutions.

A comprehensive literature review was conducted and was presented in the first section of this document. Literature on SUD was presented to explain the problem. A summary of literature was also presented which explained SUD and its presence in business. Finally, the literature related to the recovery process for SUD was presented. The foundation of the study was provided to form a basis for further investigation into this matter.

In Section 2, the researcher summarizes the project. The next section of this paper explains the project conducted to address the problem statement and the research questions

which were prepared in Section 1. In Section 2, the role of the researcher is explained. The research method and design are identified. The research population is discussed, as well as the process of gathering data during the project. The instrument which will be used as a means of gathering data is presented and discussed in the next section. Data organization techniques are explained. Variables are defined. Finally, a discussion of data analysis is presented.

Section 2: The Project

The researcher conducted a case study to investigate SUD and the disorder's impact on public accounting practice in the state of Louisiana. Below, there is a discussion of the researcher's role and the appropriateness research design and method selected. There is also a discussion of the study's intended participants, population, and sampling method. Finally, this section concludes with a discussion of data collection and analysis procedures that will be utilized during the study.

Purpose Statement

The purpose of this qualitative case study is to expand the body of knowledge of SUD and the disorder's impact on public accounting practice in the state of Louisiana. The management of people is a primary concern of public accounting firms. Like most businesses, accounting firms deal with various labor issues that affect productivity and the ability to optimally serve their clients. SUD is one issue that public firms face in the management of operations. SUD's impact is present within any industry. This study aims to explore the common problem that businesses face and identify unique experiences of public accounting professionals in the state of Louisiana. The intent of the study is to inform the business community about best practices for dealing with the problem.

Role of the Researcher

The researcher planned the study to ensure that the project yielded meaningful findings. The first step in this planning process was to determine the perspective participants that were interviewed during the proposed project. As noted in Section 1 of this document in the delimitations section, the researcher interviewed members of public accounting in the state of Louisiana. These participants included public accounting partners, public accounting staff

members, and other relevant parties who are CPAs. People who are familiar with the problem and how the disorder's impact on the public accounting industry in which they work.

During the planning process, the researcher developed six interview questions. These questions were developed with the intent of fully addressing the specific problem statement and reaching the project's goals of developing an artifact outlining best practices for addressing the stated problem. The questions were developed taking into consideration the current literature on the topic and any areas where current knowledge on the subject was lacking. The researcher used his knowledge and experience with the subject matter to develop questions and guide his approach.

After determining the pool of participants and interview questions, specific participants were identified and selected. During this process, the researcher obtained the participants' informed consent to participate in the research project. A document will be provided summarizing the project, discussing the potential risks to the research subjects, and explaining that participation will be voluntary and that the participant can withdraw at any time. The document noted that the participant's identity and responses were to be kept confidential, and participants would remain anonymous. After obtaining consent from participants, the timing of the interviews was determined and scheduled.

After meetings were scheduled with participants, the researcher travelled to the site of the interview or conducted the interview using video conferencing applications. Each interview lasted approximately a half hour. All interview questions were addressed with subjects and the interviews were recorded when allowed by the participant. The researcher probed subjects to clarify points and obtain a more in-depth understanding of participants' responses.

After the data gathering process, the researcher performed an analysis of the data. He transcribed all interviews. Common themes that emerged during the process were identified during the transcription and analysis of the data. Findings were developed during this process. A comparison of research data and the literature was made to better understand the data and how the information could be used to expand the knowledge that already exists on the topic. The researcher sought to triangulate the findings by conducting quantitative procedures. The findings that were derived from the analysis process and triangulation process are formally summarized in writing by the researcher in Section 3 of this document. The findings focused on the development of best practices and noted any measures that should be specifically avoided when addressing the SUD in business. The researcher also proposed areas of additional research on this subject.

Bracketing to Avoid Personal Bias

Bracketing involves the process of identifying interests, personal experiences, cultural factors, assumptions, and hunches that can influence the researcher's view of the research data. To avoid personal bias, the researcher used bracketing during the study. This process involved placing the data in brackets or shelves for the time being to gain a fresh perspective of new data reviewed. During the data analysis process, the researcher used bracketing to hold their findings in suspension as they ask how each new insight changed their comprehension of the data and the study's findings (Fisher, 2009).

Summary of Role of Researcher

The researcher began the study by comprehensively planning the study to ensure that the research project adequately addressed the specific problem statement. The goal of the project was to produce an artifact that identifies best practices that can be used to address substance

abuse within the business environment. After the planning process, participants were selected. Each participant was provided with information and asked to provide informed consent. After the subject provided consent, the researcher scheduled and conducted interviews using interview questions that were formulated during the planning process. After the completion of the interview process, interviews were transcribed, and common themes were identified. Findings were developed from the data collected during the interviews. These findings are summarized in Section 3 of this document. Throughout the process of the study, the researcher used bracketing to avoid personal bias. The researcher sought to compartmentalize previous findings and see how each new segment of data influences the findings of the study.

Research Methodology

This study was conducted with a flexible design using qualitative methods; specifically, a case study design was used. In this section of the document, the appropriateness of a flexible design is discussed. The appropriateness of the qualitative method is also explained. Finally, the chosen method for triangulation is discussed.

Appropriateness of Flexible Design

Flexible design is iterative and emergent (Ohman, 2005). Flexible design granted the researcher the ability to change and adapt the research process in accordance with the results (Ohman, 2005). Flexible design allowed for greater spontaneity and adaptation of interaction between the researcher and the participant (Family Health International, 2021). For instance, in studies with qualitative flexible design, participants are asked “open-ended” questions they are free to respond in their own words rather than simply “yes or “no” answers (Family Health International, 2021).

In flexible qualitative research, the relationship between subjects and the researcher are less formal than quantitative methods. Participants are given the opportunity to respond more elaborately and in greater detail when qualitative research designs are used. Additionally, researchers can adjust and respond immediately to participant responses and ask subsequent questions that are tailored based on those responses (Family Health International, 2021).

Flexible design was appropriate because the method allowed the researcher to adjust his approach based on the responses of the participants. The researcher sought to understand the participants experience with SUD. To do this, he asked open ended questions which allowed the participants to elaborate on their experience. The researcher probed the research participants to clarify points and gain a deeper understanding of SUD in business and how the disorder is addressed. The researcher also sought to understand the costs borne from the disorder and measures that should be avoided when addressing the problem in a business environment. Fixed quantitative research would not allow open-ended questions or the ability to probe participants after an adjustment was made based on previous responses.

Appropriateness of Method

This study was conducted using a qualitative method, specifically the case study method was used. As noted previously in this paper, qualitative researchers collect evidence by immersing themselves in real-life environments and natural settings (Cypress, 2019). Case study research is conducted in real-life environments (Yin, 2018). The researcher desired to conduct interviews and collect evidence in the field from research participants. Qualitative research allowed the researcher to ask open-ended questions and follow-up questions to clarify points and gain a deeper understanding of a subject's experience by probing. While a case study was limited in terms of the number of participants, the responses from participants provided a richer

understanding of the problem and helped the researcher develop more meaningful findings. The researcher's goal was to develop a document that provides practitioners with best practices used for dealing with substance abuse when the problem occurs.

Appropriateness of Triangulation Method

Triangulation was used to increase the credibility and validity of research findings. Credibility refers to trustworthiness of data. Validity refers to the accuracy of the findings with respect to the concept being investigated. Triangulation was used to avoid the bias that arises from using a single research method. Triangulation can be performed in both qualitative and quantitative studies. The procedure's purpose is validating the data and findings from the primary research method. When the results from triangulation are consistent and support the study's finding, the process adds confidence to the study's results (Noble & Heale, 2019).

The researcher used methodological triangulation. Using methodological triangulation involves using another research method to triangulate the research findings. The researcher used the quantitative method to triangulate the findings in this study. He produced a survey instrument and solicited responses from CPAs in the United States. Quantitative analysis procedures were performed on the data collected. The findings were analyzed and compared to the results of the qualitative procedures performed during the study. Using two methods helped the researcher add confidence to the conclusions made in the research (Turner & Turner, 2021). Qualitative findings often add depth to quantitative findings (Turner & Turner, 2021). Quantitative data helped the researcher to eliminate competing explanations (Turner & Turner, 2021).

Summary of Research Methodology

The study was conducted using a flexible qualitative design, specifically the case study method was used to investigate the specific problem. A flexible design allowed the researcher to

adapt based on participant responses. The case study method enabled the researcher to immerse himself in a real-world environment to better understand the problem and possible solutions. The data and findings were triangulated by the researcher through the performance of quantitative procedures.

Research Participants

The participants in this case study were CPAs licensed in the state of Louisiana. These participants were interviewed to gain an understanding of their unique experience with SUD. There were different types of participants that could potentially participate in the study. Each of these potential participants are discussed. These participants were previously identified in Section 1 in the delimitations section. Further description of these participants is included herein.

Public Accounting Firm Partners

Firm partners are the owners of the firms. Firm partners practice accounting and manage the day-to-day operations of public accounting firms. Firm partners supervise firm employees. During the supervision process these partners may have been in contact with firm employees or members who have substance abuse issues. Firm partners offered information from their experiences in dealing with SUD and how the disorder impacts public practice in the state.

Public Accounting Firm Staff

Staff members of public accounting firms are employees of the firms who practice accounting. These staff members may have worked with other employees on teams or interact with other staff members during their day-to-day duties or have had the disorder themselves. These staff members had experience to share regarding interacting and working with others who had substance abuse issues or provided information about their individual struggles. Their feedback was valuable to the study.

Population

To investigate SUD and the disorder's impact on public accounting firms in the state of Louisiana, the researcher selected CPAs from firms of varying sizes that operate within the state of Louisiana. These firms included large multi-national firms, medium-sized regional firms, and small firms. The unit of analysis was the CPAs themselves. The population of the study is discussed in this section of the document. There is also a discussion of the study's sampling process.

Population

There are over 600,000 licensed CPAs in the United States (NASBA, 2021). Not all CPAs work in public practice. Many CPAs work for private companies, non-profit organizations, and government agencies. This study's population will be derived from CPAs who have experience in public accounting firms. The population included CPAs who have worked or works for public accounting firms within the state of Louisiana and who have direct knowledge and experience with SUD and how the illness affects the public practice of accounting.

Public accounting is a broad field. On one end of the spectrum, some CPAs are sole practitioners and may not have any employees. On the other end of the spectrum, some firms are multinational firms that have over 100,000 employees who provide a broad range of services. This study sought to achieve saturation by drawing from a population that include members from small accounting practices, regional firms, and multinational firms who have operations and do business in the state of Louisiana.

Multi-National Firms. There are four major multi-national accounting firms that operate world-wide. These firms are often referred to as the "Big 4" accounting firms. These firms include Ernst & Young, Deloitte, KPMG, and PriceWaterhouse. All these four major multi-

national accounting firms have offices in Louisiana in the New Orleans metropolitan area and have clients who do business throughout the state. Members from these firms were interviewed to understand the impact SUD has on public practice in the state of Louisiana.

Regional Firms. Regional accounting firms operate in certain sections in the United States. These firms may be larger and operate in a multi-state area or may be smaller firms and operate within one or two close major metropolitan areas. For the purposes of this study, several participants were selected from the various metropolitan areas within the state of Louisiana.

Louisiana has seven primary metropolitan areas. These metro areas include New Orleans, Shreveport, Baton Rouge, Lafayette, Lake Charles, and Monroe. Accountants from regional firms were selected from each of the major metro areas, except Monroe, and members of these firms were interviewed to understand SUD's impact on public accounting practice in the state of Louisiana.

Small Firms. Many accounting firms consist of only one or a few CPAs. These small firms operate throughout the cities and small towns throughout the state of Louisiana. For the purposes of this study, firms that range in sizes from one to five CPAs were selected from within the state of Louisiana. The members of these firms were interviewed to understand the impact SUD has on public accounting practice in Louisiana.

Sampling

When conducting research, in most cases, obtaining data from the entire population is impractical. Obtaining data from a sample of the study's population can lead to meaningful findings. A sample of data is taken from the population based on the characteristics of a population and objectives of a study (Family Health International, 2021). Qualitative and quantitative sampling methods differ because of the nature of the two methods. This study used a

flexible qualitative design as the primary method and used the quantitative method for triangulation; therefore, distinguishing between the goals and methods of qualitative and quantitative sampling is important and is discussed here.

Quantitative Sampling

Quantitative researchers seek to obtain a large amount of information by using random methods. The larger the sample size, the more likely that the results can be generalized to the entire population. In quantitative sampling, numerical data is used to describe the sample, examine relationships, and determine relationships between variables. Quantitative research has been criticized as being reductionist and removed from natural human experience (Byrne, 2001).

Qualitative Sampling

Qualitative researchers seek to provide a deep and contextual understanding of a phenomenon derived from human experience. Qualitative research sampling methods seek to explain a phenomenon rather than generalize findings to the population at large. Qualitative researchers' goal is to provide enough description about the context of a sample so that other people can judge for themselves whether the findings apply to their own situations (Byrne, 2001). Qualitative research methods include several common sampling methods. The four most common qualitative sampling methods are discussed briefly herein.

Purposeful Sampling. The first commonly used sampling method is purposeful sampling. When using this method, groups of participants are selected based on preset criteria or characteristics. Sampling sizes depend on the resources and time available to conduct the study. The sample size also depends upon the goals and objectives of the study. The size is often determined upon theoretical saturation. Saturation is the point at which the collection of new data

does not bring additional meaningful insights. Purposeful sampling is most successful when data analysis is performed in conjunction with data analysis (Family Health International, 2021).

Quota Sampling. Quota sampling is another commonly used qualitative sampling method. Quota sampling is a form of purposeful sampling where the sample size is determined during the design of a study. Participants are selected based on their characteristics, which might include age, gender, class, etc. The sampling method allows the researcher to focus on people who are likely to have experience or knowledgeable insights into the research topic. Once the criteria are set, the researcher uses recruitment methods to obtain the preset quota designed in the study (Family Health International, 2021).

Snowball Sampling. Another type of sampling method is snowballing. When using this method researcher seek to find participants from other people by using contacts from platforms like social media. Contacts made during the study may lead to the identification of other contacts who can participant and contribute to the study. This method is often used to discover hidden populations that are not easily accessible to researchers through other available sampling methods (Family Health International, 2021).

Convenience Sampling. The final commonly used qualitative sampling method that will be discussed is convenience sampling. This method is used by researchers to recruit participants who are easily accessible and convenient to the researcher. This method often includes selecting a specific geographic location that is convenient to the researcher (Statistics Solutions, 2021).

Study's Sampling Method and Strategy

This study used elements of all the above referenced qualitative sampling methods; however, convenience sampling methods was primarily be utilized. Participants were derived from the state of Louisiana. The researcher intended to conduct approximately 20 to 30

interviews to research saturation as designed in the study. He completed 23 interviews. The participants that was included in the study were selected by contacting CPAs who are easily accessible and willing to participate. The process was voluntary and judgmental, based on the willingness of participants. The researcher intended on being purposeful in contacting members of public accounting practices who were knowledgeable of the topic and had experience with the topic of the study. Contact with perspective participants led to other contacts with subjects who were able to contribute to the project.

Sample Frame. The sample frame included members of the entire population of the study. There has already been much discussion about the sample frame in the delimitations and population section of this document. For the purposes of the qualitative research of this study, the sample frame included all members of public accounting practices in the state of Louisiana. For the purposes of triangulation, the researcher sought to survey CPAs who are licensed to practice in Louisiana.

Sample Size. The researcher sought to select a sample size of 20 to 30 participants that would achieve data saturation (Creswell & Poth, 2018). Saturation is the point in which additional data collection does not gain additional meaningful insights into the studied phenomenon (Creswell & Poth, 2018). There is no one-size-fits-all sample size to reach saturation (Fuschm & Ness, 2015). Each study is different. During this study, the researcher selected participants from firms of various sizes and locations to conduct interviews and research. Decision-makers at public accounting firms were asked to participate. Selection occurred based on convenience and the willingness of the perspective participants. Weight was also given to those who have direct knowledge of SUD and the disorder's impact on public accounting practice.

During the data collection, some analysis was conducted concurrently. The researcher continually assessed the saturation point and sought to reach the point of saturation through additional sampling where necessary. The researcher conducted 23 interviews of various members of firms to reach the saturation point.

Notes on Triangulation Sampling Strategy

The researcher sought to validate and triangulate the findings of his qualitative work by performing quantitative procedures. A survey instrument was developed and administered to CPAs who practice in the state of Louisiana. The researcher sought voluntary participation of CPAs. The researcher achieved saturation and triangulated the findings of the qualitative work by surveying 105 CPAs.

Population and Sampling Summary

The population of the proposed study was derived from members of public accounting practices in the state of Louisiana. These employees of firms included firm partners, staff accountants, and other relevant parties who have knowledge of SUD and illness' impact on public practice within the state. Firms of varying sizes were selected to achieve diversity and increase data saturation. The sampling strategy used was derived from numerous sampling methods; however, the study primarily used convenience sampling. Participants were selected by location, willingness to volunteer, and ability to contribute to the study in a meaningful way. Quantitative procedures were conducted to triangulate the data and assist in data saturation.

Data Collection & Organization

The data was collected in several ways. Qualitative procedures were primarily used to develop findings. The researcher conducted a case study to investigate the stated problem. Case studies seek to gain an in-depth understanding of a phenomenon by collecting data from multiple

sources (Creswell & Poth, 2018). There are six primary types of data collected during case studies: documents, archival records, direct observations, participant observations, interviews, and artifacts (Yin, 2018). During this case study, interviews of participants were conducted to collect information related to the specific problem and to address the study's research questions. Participant interviews were the primary means of data collection. According to Stake (1995), there are three main purposes for using interviews: (a) To receive a unique perspective and interpretation held by the subject interviewed, (b) Obtaining a numerical aggregation of data from many individuals, and (c) finding out something that a researcher is unable to observe themselves.

Quantitative procedures were used to triangulate the findings derived from qualitative procedures. Triangulation was performed to gain more confidence in the results of the study (Stake, 1995). A survey instrument was used to collect data and establish the validity of the qualitative findings. An advantage of using a survey is the ability to collect data from many participants (Stake, 1995). The data collection process and procedures are discussed below. A copy of the interview questions and survey instrument can be found in the appendix of this document. In addition to including the interview questions and a survey instrument, there is a discussion of how these questions and the instrument addressed the stated problem and research questions.

Data Collection Plan

The researcher collected and analyzed data to develop a detailed description of the case. This collection process was conducted with the intent of identifying themes and patterns in the data (Creswell & Poth, 2018; Yin, 2018). Interviews were conducted during the study. These interviews were recorded and transcribed. The transcriptions were reviewed with the intent of

finding common themes. These themes were used to develop findings explaining the problem and the disorder's impact on public accounting practice in the state of Louisiana. The findings were used to determine best practices for addressing the problem when the illness occurs in practice.

While interviewing, the interviewer can ask probing questions to better understand the information and interpret responses (Stake, 1995). During the case, the researcher probed participants to gain a better understanding of their responses and to clarify points. In addition to asking follow-up questions based on participant responses, the researcher requested any relevant documentation that supports participant responses. Documentation represents data to which the subject has given attention and can be collected in a non-obstructive manner at a time that is convenient to all parties (Creswell & Poth, 2018). The interview responses were kept in digital format on the researcher's password protected computer and backed up on Microsoft OneDrive.

Quantitative procedures were conducted to triangulate and validate the qualitative findings. Triangulation involves collection of data from different sources and examining evidence from those sources to build coherent justification for the themes developed during the study (Creswell & Poth, 2018). A survey instrument was used during this process. The instrument was created on Survey Monkey and placed on Prolific for distribution to qualified participants. The survey link was distributed to CPAs who were willing to participate in the study. The participants visited the link and provided anonymous and confidential responses. All the data was collected on the password-protected online site. When the survey period expired, the data was downloaded on the researcher's computer. At that time, the researcher conducted quantitative procedures to determine the prevalence of substance abuse among public accounting practitioners in the state of Louisiana. The instrument also included two open-response questions

which were optional. Responses to the open-response question were collected in the same manner and analyzed to yield findings that substantiated the qualitative research findings.

Case studies involve the study of a case in a real-world setting or context (Yin, 2018). The case study approach was an appropriate method because case studies allow the researcher to immerse himself in a real-world setting and receive information from practitioners in the field who have experience with the problem. This collection method was appropriate because interview responses helped the researcher understand how the disorder was addressed directly from CPAs who practice in the state of Louisiana. Recording and transcribing the data helped the researcher to develop in-depth findings and common themes which aided in the development of best practices. Some firms had formal policies and procedures that assisted the researcher in his effort to determine appropriate measures and substantiated the themes developed during the interview process. Finally, the quantitative data collection validated the qualitative findings. All data was secured, and responses to all interviews and surveys remained anonymous and confidential.

Instruments

A case study was conducted to investigate SUD and the disorder's impact on public accounting firms in the state of Louisiana. Data was collected primarily by interviewing research participants. An interview guide was developed which included six interview questions. This interview guide and the guide's appropriateness is discussed below. Findings were developed based on interview responses. These findings were triangulated and validated by performing quantitative procedures. A proven survey instrument was used during this process. This survey instrument is included in the appendix of this document. The instrument's appropriateness, reliability, and validity are also discussed in this section of the document.

Interview guide

An interview guide was developed and can be found in the appendix of this document. This interview guide included six interview questions that were posed to research participants during interviews that were conducted as part of the project's process. Each of these questions are discussed here regarding their coverage and relevance to the study's purpose and research questions.

The first interview question stated, "Explain your experience with substance abuse in the workplace?" This broad open-ended question enabled the participant to provide their experience with the disorder. The question primarily addressed the study's purpose which is to determine the impact SUD has on public accounting firms in the state of Louisiana. The question also addressed the study's first research question directly, which states "What are the common experiences of public accounting firms in Louisiana regarding SUD?" The question indirectly addressed all the study's other research questions. The coverage of each research question depended upon the depth of the response by any given participant. This broad open-ended question started the discussion and allowed the researcher to ask clarifying questions that narrowed the focus and addressed each specific research question.

The second interview question stated "Explain the impact substance abuse has had on your workplace in terms of financial burden?" This interview question addressed the study's second research question and one sub-question. The second research question states "How does SUD affect public accounting firms?" The related sub-question states "What are the financial costs borne from SUD?" The second interview question also addressed the study's purpose in that the question helped to explain SUD and the disorder's impact on public accounting firms in the state of Louisiana.

The third interview question stated “What are some of the non-financial implications attributed to substance abuse in the workplace?” The question primarily addressed the study’s second research question and the second sub-question. The second research question states, “How does SUD affect public accounting firms?” The related sub-question states “What are the non-financial implications of SUD?” This interview question also directly addressed the study’s purpose which was to understand the impact substance abuse has on public accounting firms in the state of Louisiana.

The fourth interview question stated “What procedures have you found work best for addressing substance abuse when the problem occurs?” This interview question addressed the third research question and first related sub-question. The third research question states “How do firms currently address instances of substance abuse within their ranks?” The first sub-question states “What are the best practices firms have developed to mitigate damages caused by SUD?” This interview question addressed the goal of the study which was to develop an artifact that businesses can use as a means of best practices identified during the project. The question allowed professionals in the field that have dealt with substance abuse to provide examples of measures that have proven success addressing the problem when disorder occurs.

The fifth interview question stated “What measures should be avoided when dealing with substance abuse in the workplace?” The interview question also addressed the third research question and second related sub-question. The second sub-question related to the third research question states “What measures have proven to fail in the face of SUD?” This interview question also aided in the development of best practices for addressing the problem. The responses can inform the business community on measures that do not work and should be avoided. Identifying

measures to avoid can help businesses to avoid costs and minimize the impact substance abuse has on firms.

Survey Instrument. The survey instrument used will be the CAGE-AID assessment. This proven and frequently used assessment tool is public domain and does not require permissions for academic use. This short survey is a four-question tool used to gauge whether an individual exhibits symptoms of substance abuse. If an individual affirmatively answers two, out of the four questions, the response is deemed to be clinically significant. This tool was used to determine the prevalence of self-reported substance abuse among public accountants in the state of Louisiana. All responses were anonymous and confidential. A copy of the survey instrument is included in the appendix of the document.

Two open response questions were used and are included on the survey instrument. These questions stated “How has your substance use, or someone else’s substance use impacted your practice (firm)?” and “What measures should be taken to address substance abuse when the problem occurs in the workplace?” The short open-response questions assisted the researcher in understanding the impact on public accounting practice and possible means for adequately addressing the problem when the illness presents.

When paired with the CAGE-AID assessment, these responses to the open-ended questions were reviewed with respect to self-identified substance abusers and non-substance abusers to further understand the problem and possible solutions from both classes. The findings from this survey instrument were used to triangulate and validate the findings from qualitative procedures. The survey reached a larger audience and enabled to researcher to understand the problem and possible best practices derived from a large population of practitioners in the state of Louisiana. CAGE has demonstrated a high level of test-retest reliability and can be correlated

to other proven screening methods (Basu et al., 2016). The CAGE-AID is a valid tool for alcohol and substance dependence (Basu et al., 2016).

Data Organization Plan

During this case study, most data was collected through the interview of research participants and survey of many subjects who practice in the field. The interview responses were recorded and stored by date and participant. The interviews were transcribed in Microsoft Word. The researcher used coding to identify themes. This process will be discussed later the section on data analysis. All interview recordings and transcriptions were stored on the researcher's password protected and be backed up on a password protected Microsoft OneDrive account with two-factor authentication.

As noted, quantitative procedures were performed during this project to triangulate and validate the findings derived from qualitative procedures. Surveys were administered by providing a link via email. The was data collected and housed in a secure Prolific account. When the period for responses expired, data was downloaded from Prolific onto the researcher's password protected computer. This data was placed in Microsoft Excel where the information was analyzed. Self-identified substance abusers and non-substance abusers were separated to assist in understanding each classes perspective on SUD's impact and possible solutions to the problem. The data analysis process is explained later in this document.

Summary of Data Collection and Organization

A case study was performed to address the research problem and questions identified in this study. The primary data collected was from participant interviews. These interviews were recorded and transcribed. They were stored based on date and participant. Quantitative procedures were performed to triangulate and validate qualitative findings. This data was

collected on Survey Monkey, then downloaded to a computer for analysis. All research data was secured on a password protected computer and backed up on a two-factor protected Microsoft OneDrive account.

Data Analysis

In qualitative research, data analysis involves making sense of the texts and other data collected during the project. Qualitative analysis involves segmenting and taking apart the information collected and putting the information back together. Once the data collection and organization process was completed, the data was analyzed. The first step in the analysis process involved organizing and preparing the data for analysis. Next, all the data was read and looked over to gain a broad overview. Last, the researcher began coding (Creswell & Poth, 2018).

The researcher sought to yield findings by analyzing the data through a searching for emerging ideas and common themes during the coding process. The researcher interpreted the data to draw conclusions and derive important findings. Finally, the quantitative data was analyzed and compared to the results of the qualitative procedures to triangulate the findings and add to the validity of the project results. A discussion of the analysis and the processes' components is discussed below.

Emergent Ideas

The qualitative researcher is required to meticulously pay attention to language and deeply reflect upon emergent themes and the meanings of people's experience (Saldana, 2016). He must be vigilant of emergent ideas and the possibility of making new insights about the data collected (Saldana, 2016). There is a substantial amount of academic literature on the topic of SUD and the disorder's impact on business. During the study, the researcher sought to find best

practices for addressing the problem when the disorder is present in a business setting which required the identification of emergent ideas during the data analysis process.

During the work, new ideas emerged that the researcher was unaware of, based on the review of academic literature and on-going work on the project. The researcher kept a record of emergent ideas and codes in a file (Saldana, 2016). These emergent ideas were identified by memorandum and investigated further both in terms of additional review of academic literature and investigation during the research project. These emergent ideas were tested through additional procedures, including additional interviews, until thematic saturation was met.

Coding Themes

Thematic coding was performed during the qualitative research project to record or identify text that are linked by a common theme or idea (Gibbs, 2007). The codes were indexed into categories to establish a framework of ideas (Gibbs, 2007). During the data analysis process, the researcher used coding to identify common themes and emergent ideas. Coding is an analytical process that involves intense reading and data analysis. Important and emerging themes were highlighted, and descriptive codes were developed. During the analysis, many codes were identified that can be used to interpret the data and to draw conclusions.

Interpretations

To strengthen the trustworthiness of qualitative analysis, the researcher used interpretation during the analytic process. Interpretation is a process that involves explaining, reframing, making sense of, and showing an understanding of a participant's lived experience with a problem. Interpretation is a process where the researcher strives to make the subject's voice heard. Interpretation is a component of establishing context, transitioning from descriptions of content to interpretations of latent content and the formulation of sub-themes and

themes. Interpretation procedures were performed to ensure a comprehensive analysis and search for the underlying meaning of the research material. Qualitative content analysis' aim is to decipher and make sense of the words used and the people that said them (Lindgren et al., 2020).

Analysis of Triangulation

Triangulation was used to validate the findings of qualitative research (Creswell & Poth, 2018; Stake 1995). The researcher performed quantitative procedures to triangulate and validate the qualitative findings. Analysis of the quantitative procedures and data began with understanding the self-reported prevalence of the disorder among CPAs who practice in the state of Louisiana.

The quantitative procedures asked subjects to respond to two short optional open-response questions. Information collected from these questions was coded and interpreted to identify common themes in the data. These themes were compared to the themes developed during the qualitative procedures.

Understanding the open responses regarding the experience of self-reported substance abusers and non-substance abusers was important. Those who have experience with the problem may view impact and corrective measures differently than non-substance abusers. During the qualitative procedures and quantitative procedures, the researcher gained an in-depth view of the problem from various perspectives. These multiple perspectives, with consideration and comparison to existing academic literature on the topic, contributed to the overall validity of the findings and research work. The researcher drew on all the data collected during the interview, along with his in-depth understanding of the problem, to understand how the quantitative procedures add validity to the research findings and communicate his findings in the final section of this paper.

Summary of Data Analysis

Data analysis procedures were performed after the data was collected and organized. The researcher coded the data to understand common themes present. Emergent ideas were investigated through additional review of academic literature and research procedures. Quantitative procedures were performed, and collected data was analyzed to triangulate the findings and add to the validity of the project results. The aim of the data analysis process was for the researcher to yield meaningful and useful findings that will contribute to the body of knowledge on the topic and aid business practitioners in conducting business.

Reliability and Validity

During data collection, organization, and analysis the researcher worked to ensure the reliability and validity of the research findings. Ensuring reliability included performing the study to address credibility, transferability, dependability, and confirmability. Ensuring the validity of the study included procedures such as bracketing and triangulation.

Reliability

The reliability of research refers to the ability to reproduce the findings (Anderson, 2010). Elements of reliability include credibility, transferability, dependability, and confirmability. Each of these elements are discussed herein.

Credibility. Credibility involves establishing that the findings of the research are believable from the perspective of the research subject. Since the findings are developed from the eye of the participant, they are the only ones who can judge the legitimacy of the results (Trochim, 2020). The researcher screened participants who were CPAs and familiar with SUD in the workplace.

Transferability. Transferability is the degree to which the findings of the research can be generalized. Transferability is primarily the responsibility of the person attempting to generalize the results. The researcher increased transferability by describing the research context and assumptions used in the study. This process can assist those attempting to generalize the results make sensible judgements (Trochim, 2020).

Dependability. The traditional view of reliability is that of replicability and repeatability. Dependability is concerned with the ability to get the same results if the same procedure were performed twice. Dependability emphasizes the need to account for constantly changing context in the research. The researcher described these changes and how they affected the findings to ensure dependability of the findings (Trochim, 2020).

Confirmability. Confirmability refers to the ability to confirm the results of the study. There are several methods for enhancing confirmability. The researcher documented the procedures for checking and rechecking the data throughout the project. The researcher also looked for conflicting data that contradicts research observations and findings and investigated those deviations. Finally, data auditing and bracketing were used which will enhance confirmability (Trochim, 2020).

Validity

The validity of a study's findings refers to the extent that the findings are accurately represent the phenomena for which they are intended to represent (Anderson, 2010). To ensure the study's validity, the researcher performed triangulation procedures. A discussion of triangulation procedures is included below.

Triangulation. As discussed earlier in this section of the document, triangulation was used to contribute to the validity of research findings. Validity is accuracy of the findings with

respect to the topic being researched. Triangulation was used to eliminate the bias that can arise from using a single research method. The purpose of triangulation was to validate the data and findings from the primary research method. Results from triangulation were compared to the findings of the qualitative procedures. When they are consistent and support the study's finding, the process adds confidence to the study's results (Noble & Heale, 2019).

The researcher used methodological triangulation. Methodological triangulation involves the use of another research method. The researcher used the quantitative method to validate the study's findings. A survey instrument was produced, and the researcher solicited responses from members of public accounting practices in the state of Louisiana. Analysis was performed on the data collected during the survey process. The findings were analyzed and compared to the results of the qualitative procedures. Triangulation helped the researcher add confidence to the conclusions made during the data analysis process (Turner & Turner, 2021). Quantitative data helped the researcher to reconcile conflicting explanations (Turner & Turner, 2021).

Summary of Reliability and Validity

The researcher planned and performed the research project to ensure that the results were reliable and valid. Reliability refers to the ability to replicate the research findings. Elements of reliability include credibility, transferability, dependability, and confirmability. Each of these elements were addressed in the planning and performance of the study. Validity refers to the accurate representation of the findings of the stated topic. The researcher performed triangulation procedures to ensure the validity of the study's results.

Section 2: Transition and Summary

The purpose of this study was to understand the impact SUD has on public accounting practice and to develop a document which includes best practices for addressing the problem

when it occurs. To investigate this problem and address each of the study's research question, the researcher used a flexible research design. Specifically, a case study was conducted to fulfill the purpose of the study and develop meaningful findings that contribute to business practice. A case study was appropriate because the method enabled the researcher to immerse himself in public accounting practices to investigate the problem and understand viable solutions.

Members of public accounting practices were interviewed during the process. These members included firm partners, staff members, office managers, human resource personnel, and other relevant employees of these practices. The population included all public practices in the state. These practices included national firms, regional firms, and small practices. The sampling method included a combination of qualitative sampling methods, but primarily, convenience sampling was used to select the study's subjects.

Data was collected primarily by interviews. The interviews were recorded and transcribed. Once transcription was complete, coding was performed to identify common themes and emergent ideas. The data was interpreted by the researcher.

The researcher strived to conduct a study that yielded reliable and valid findings. Several procedures were used to contribute to the reliability and validity of the research findings. These procedures included bracketing and triangulation. Quantitative procedures were performed to triangulate the findings. Responses to a proven survey were solicited from CPAs who practice in the state of Louisiana. The survey included two short open-response questions. Data from these procedures was analyzed and compared to the findings from the qualitative research procedures.

In the next section of this document, there will be an overview of the project. The findings will be discussed. There findings will include themes that emerged during the work. The findings will also include a narrative of how the study's findings can be applied in practice to

benefit the business community. Finally, there will be a discussion of further research that can be conducted on this topic and reflections from the researcher.

Section 3: Application to Professional Practice

In this section, the researcher will present an overview of the study conducted. This overview will be followed by a presentation of the findings of the study. This section will conclude with recommendations for applying these findings in practice, recommendations for further research, and reflections from the researcher.

Overview of the Study

This section will provide a comprehensive overview of how the study was conducted. The section will begin with a discussion of how the participants were selected and recruited for participation in the study. Next, there will be a discussion of the data collection and organization. Afterward, data analysis procedures will be explained.

Selection of the Participants

The researcher conducted a Google search of all major metropolitan areas within the state of Louisiana to select CPAs who practice within the state of Louisiana for participation in the study. CPAs from Shreveport, Monroe, Alexandria, Lake Charles, Lafayette, Baton Rouge, and New Orleans were selected and contacted to request that CPAs participate in the study. Participants from all the major metropolitan cities, except Monroe, agreed to participate and took part in the study. Additionally, several small-town CPAs within the Acadiana region of Louisiana were contacted and agreed to participate in the study. In total 23 participants were involved in the study. The researcher selected sole practitioners, members of small firms within one major metropolitan area, members of large regional firms, and members of large multi-national firms operating in the state of Louisiana. Firm staff members, seniors, managers, partners, and directors were all represented as participants in the study.

Sampling

The researcher primarily used convenience sampling. This method was used by the researcher to recruit participants who were easily accessible and convenient to the researcher. As noted, the researcher used a Google search to locate potential participants from major metropolitan areas and small towns across the state of Louisiana. He made calls to these offices and spoke directly to the CPAs, requesting their participation in the study. When a CPA agreed to participate in the study, a time and date was selected that was convenient to both parties. Once the participant agreed to participate in the study, an informed consent form was sent to the participant along with a link or conference number and confirmation of the date and time of the interview.

Notes on Triangulation Sampling

The researcher validated and triangulated the findings of his qualitative work by performing quantitative procedures. A survey instrument was developed and administered to CPAs who practice in the state of Louisiana. The researcher developed a survey on Survey Monkey that contained an electronic version of the survey instrument included in the appendix of this document. Prolific was used to recruit CPAs who practice in the state of Louisiana. The survey link to the Survey Monkey survey was placed on Prolific. Those individuals who agreed to participate in the survey were instructed to visit the link and complete the survey. Prior to participating in the survey, participants were provided with a consent form that is included in the appendix of this document.

Data Collection

Once a participant agreed to participate, they were asked to complete an informed consent form and return the form prior to the date of the interview. A day and time were

scheduled with each participant once they agreed to take part in the study. A day prior to the interview, the researcher sent a reminder email with a link or phone number to the participant.

The researcher collected the data in several different ways. The researcher used Zoom to interview and collect data from two of the participants. The conference was recorded and later transcribed. The researcher also visited two of the participants in-person in their firm offices. The interviews were recorded on the researcher's phone and later transcribed. Most of the interviews took place on a recorded conference call line that the researcher obtained from freeconferencecall.com. In total, 19 of the interviews took place on a recorded conference phone number. These recorded sessions were later transcribed.

Interview Guide

An interview guide was developed and can be found in the appendix of this document. The researcher used this interview guide during the data collection process. This interview guide included six interview questions that were posed to research participants during the interviews. In addition to the research questions, the researcher asked probing questions to gain additional insights and clarification of key points made by each participant.

Notes on Triangulation Data Collection

As noted, the survey instrument prepared for the purposes of triangulating the case study findings was used to create a survey on Survey Monkey. The survey link was provided to qualifying members of Prolific. These Prolific members visited the link provided and completed the survey on the Survey Monkey web site. Data was collected on the survey monkey web site. At the end of the quantitative procedures, the researcher downloaded the data collected and saved the information in Microsoft Excel.

Data Organization

During the case study, data was collected by several means. Two interviews were conducted using Zoom. The interviews conducted on Zoom were recorded on the platform, downloaded to the researcher's computer, and backed up on Microsoft OneDrive. The interviews that were conducted in-person were recorded on the researcher's phone. These files were emailed to the researcher's computer and downloaded onto the computer. The files were also backed up on Microsoft OneDrive. The conference line interviews were recorded on the medium. The files were downloaded to the researcher's computer and backed-up on Microsoft OneDrive.

Each participant was assigned a code. For instance, the first participant was assigned 001 and each of the following participants were assigned a sequential numeric code. The researcher saved each file using the numeric code rather than the participant's actual name. A code control list was maintained by the researcher which included the participant's name and date and time of each interview along with contain information of the participant. Audio recording were transcribed in Microsoft Word. These files were saved based on the numeric code assigned to each participant.

Data Analysis

Once the transcription process was completed, all transcribed files were reviewed and read in detail by the researcher. During this process of reading through the files, the researcher began to develop the themes and emergent ideas of the case study. He made a list of these themes in a separate Microsoft Word document. He then placed detailed quotations from the interviews under each theme which they related to. He then re-read each theme and related quotation and synthesized the data into the findings of the study.

Triangulation Data Analysis

Survey data was collected on the Survey Monkey web site. Once the collection of survey data was complete, the researcher downloaded the data into Microsoft Excel. The demographic data was analyzed in Microsoft Excel. A new spreadsheet was created that was used to summarize the demographic data into tables for the findings section of this report.

Open-response question data was first read, in detail, by the researcher. Themes were coded and included in a separate Microsoft Word document. The Microsoft Word document was used to draft the quantitative findings, once all the themes were coded and open-response data was read by the researcher. The researcher was able to draw additional conclusions by comparing the CAGE-AID assessment responses to the open-response question responses.

Presentation of the Findings

A case study was performed to investigate substance abuse's impact on public accounting practice in the state of Louisiana. 23 CPAs who practice in Louisiana were interviewed as part of the case study. In this section of the paper, there will be a discussion of the themes that emerged during the research project. Quantitative procedures were also performed to triangulate the findings from the case study procedures. This section will also include a discussion on the themes that emerged from the quantitative procedures and their relationship to the themes that were found during the case study. The themes that emerged will be interpreted by the researcher. There will be a discussion of the relationship these themes had to research questions, conceptual framework, anticipated themes, literature, and the problem being studied.

Qualitative Themes

Interviews were conducted as part of the case study to investigate substance abuse and the problem's impact on public accounting practice in the state of Louisiana. Six interview

questions were posed to the participants. Common themes emerging during the process of these interviews. Each of these common themes were coded with respect to each of the first five interview questions. The last interview question asked participants to share anything else that they thought would be helpful to the study. Themes from this question are included with themes from the first five questions, as they fit within the common themes identified within those questions and often expanded on items from the previous discussion on the first five interview questions. Below, there will be a discussion of each interview question and common themes that emerged from these questions.

Explain your experience with substance abuse in the workplace? For the most part, everyone interviewed had knowledge of substance abuse in the workplace and was able to share a considerable amount of information. Seven participants explained that they had no direct knowledge of substance abuse within their workplace but were able to share regarding prospective problems and corrective measures regarding substance abuse (P003, P006, P007, P009, P010, P012, P015). 16 participants had some direct knowledge and experience with the problem (P001, P002, P004, P005, P008, P011, P013, P014, P016, P017, P018, P019, P020, P021, P022, P023). Many of the common themes that emerged came from participants who were able to provide detailed accounts of their experience with SUD. Also, two of the participants admitted they had had substance abuse problems in the past (P013, P014). In this section, there will be a narrative of nine detailed accounts provided by participants along with a narrative of the two self-assessed substance abusers.

Personal account one. P05 explained that one of his partners was asked to leave the firm because of his substance abuse problems. The partner became a liability to the firm because of his substance abuse. Mainly, this was because of what could have happened in public with the

partner and the potential for the loss of clients. The partner in this case was using in front of staff. He drank excessively, and in some cases, got drunk with subordinates. He even got an employee of the firm to purchase heroin for him and bring the drug back to the office where he used the substance. According to P05, the situation was messy, and action had to be taken in terms of asking the partner to leave. The partner was given a couple of chances to get better but did not, and termination was the only option.

Personal account two. In another situation, P05 had to ask one of his partners to leave their firm. The partner went through serious personal issues, including a divorce and loss of custody of her children. Substance abuse was suspected. These personal issues affected the person mentally and placed a lot of stress upon her. The situation began to impair her performance and interfere with the firm operations. She had an affair on her husband, and the husband found out. She cheated on her husband with somebody that was involved in their lives. The affair was a very public ordeal which placed the firm at risk. According to P05, situations like this involve a lot of drama that most firms want to avoid; drama that a firm does not want around their business. Prior to these personal issues, the CPA was a very accomplished professional who was a tremendous asset to the firm. At the end, she was discharged for a decline in her work performance.

Personal account three. P016 explained that she had an employee that had an issue with prescription pain medication. The employee was absent from her desk for an extended period during the workday. This was when the problem became known. When she was absent from her desk for these periods of time, she was going to the restroom and falling asleep in the restroom. P016 said that in hindsight she wished she could have recognized earlier some of the symptoms of substance abuse so she could have helped the person more. She worried that this person could

have fallen and hurt herself when she dozed off in the restroom. She also felt that being supportive was appropriate.

Personal account four. P20 explained that there was a situation in her workplace that has been going on for about five years. The situation involved substance abuse and was swept under the rug. P020, who is pregnant, was at work, and a colleague started smoking marijuana in the office next to hers. The marijuana fumes filled up the entire side of the building. The participant told her superiors about what happened, and there were no repercussions for the employee who smoked the marijuana in the building. The only consequence was that he was asked to work from home going forward. In P020 opinion, the worst thing you can do about substance abuse is ignore the problem and allow the behavior to continue without consequence.

Personal account five. P10 explained that there was a group of co-workers who were at a client's office, and one of the staff members had a hangover from the night before. That staff member drank some beer to try to overcome the hangover and showed up to the client's office drunk. The staff member was sent home. Human resources and the firm's directors got involved in the situation. Gossip and rumors quickly spread throughout the office. According to P010, binge drinking was common around deadlines, and this was an example of binge drinking that he became aware of during his work at the firm.

Personal account six. This P018 shared a story that soured him on substance abuse. His wife had a friend who was a heavy drug user. She got arrested for possession of methamphetamine. He and his wife did their best to try to help her. They allowed her to stay at their house for a period of 30 days. They thought this would help her get clean and sober for 30 days and give her a better chance of long-term success. They also helped her to arrange an

agreement with the District Attorney and Sheriff's office that would allow her to attend rehabilitation and avoid prosecution.

Unfortunately, the plan of helping the woman backfired. According to P018, the 30 days she stayed in the house felt like six months. They brought her to a facility that was federally funded. The facility had a vaccine mandate. This person they were trying to help did not want to take the vaccine, so she declined the treatment. This baffled P018 because the person was willing to take methamphetamine but did not want to put a vaccine in her body.

Based on his experience in his personal life, he became less tolerant of substance abuse in the workplace. In the workplace, he said that he had terminated due to substance abuse in the past, but now given his experience with the friend who needed help, he would terminate quicker. He said there was no place for substance abuse in the workplace. There are plenty of candidates without the problem.

He was saddened by the incident with the friend who could have avoided jail in exchange for admittance into a rehabilitation facility. The incident shocked him that she did not take advantage of the deal that provided her a safe place to overcome her addiction. The researcher noted that P018 was disturbed by the incident, and the ordeal had a great effect on him emotionally.

Personal account seven. P013 was involved with two different partnerships. One of his partners he was with years ago used to drink excessively. He eventually left the field of accounting and became a financial advisor. But he continued to drink heavily.

Another person he knew would hold themselves together throughout the week, but on weekends would drink excessively. They went on fishing trips on Friday through Sunday and the person would sometimes consume an entire case of beer in the first day on the trip. And then he

would stay drunk the entire weekend. P013 said he brought a 12-pack for the entire trip and his friend would end up drinking all his beer too.

Personal account eight. P001 had an experience with substance abuse five or six years prior to the interview. He was in a supervisory role and one of his subordinates got into a bad accident. After the accident she started to abuse prescription pain medication. This had a negative impact on her performance and work life. Everything from her mood, work output, and attitude was affected. After several attempts to help her overcome her problem, the firm had to let her go. At the end of the day, they believed that both parties to part ways.

Personal account nine. P019 had an employee who was an alcoholic. The firm knew that the employee was an alcoholic when they hired him. He had been gainfully employed with no relapse for over a year prior to being hired. The managing partner of the firm knew him personally and extended an offer to him to work for the firm. He was a good employee who did good work and was knowledgeable in the field.

The person had been to a rehabilitation facility several times in the past. Within six to eight months of starting with the firm, he relapsed. The relapse occurred in November or December. This relapse did not affect the firm because the relapse occurred during a slow period of time. But the employee relapsed again in March, during the busy season. At that point, he had to be let go because he stopped attending work. The relapse during the busy season was chaotic to the small firm. Other employees had to pick up the slack and be paid overtime.

Self-assessed. Two of the participants interviewed admitted to having substance abuse issues themselves (P013, P014). P014 said that he was an alcoholic. He did not drink anymore; however, in the past, he had had issues with drinking. He had not had a drink since 1995. He saw that he was headed in a bad direction and stopped before matters got out of hand. He did not go

to a rehabilitation center; he quit on his own. Coffee and sugar helped him control his desire for alcohol.

P013 noted that in the profession, alcohol was more of a problem than any other substance. For a period, he drank too much because of the stress he faced in the profession. This stress came from either having too much work, not enough work, or from worrying about getting paid for his work. The participant said that he was able to stop drinking on his own before matters got too bad.

Explain the impact substance abuse has had on your workplace in terms of financial burden? The second question posed to the study's participants deals with the financial costs that arise from substance abuse in the workplace. During the interview process, the researcher noted five common themes that emerged, related to the financial costs that are incurred because of substance abuse. The first and primary cost that arises from substance abuse in the workplace is impaired performance and lack of productivity. The next financial cost identified by the study's participants is the liability that substance abuse can create in public accounting practice. The third financial cost associated with substance abuse and public accounting is the loss of clients. Finally, accidents and theft were also noted as a possible financial cost during the interviews. Each of these costs and the participant responses will be discussed in this section of the document.

Productivity. The main finding that arose from the interview of participants is that substance abuse causes productivity issues. P008 noted that costs are incurred due to efficiency and performance issues. Employees who are impaired due to substance abuse make mistakes. These mistakes result in rework. More time must be dedicated to going behind someone and checking their work. People who are affected by substance abuse cannot focus, and productivity

decreases drastically. Work does not get done and the firm cannot bill for work that was unproductive.

P023 noted that the primary cost of substance abuse was efficiency. Substance abusers are not efficient. Usually, substance abuse results in performance issues and unusual behavior in the workplace. These performance issues can have a negative impact on other team members and people working with the substance abuser. Other's productivity can suffer due to the decreased productivity of the affected person.

P020 noted that the biggest financial cost was a decrease in productivity. All work performed is billed to the client. All time must be kept. Many people who suffer with SUD bill clients for unproductive work. From an administrative perspective, the bills must be discounted whenever someone has wasted time and overcharged a client for unproductive work. People who abuse substances bills must be discounted heavily according to the participant.

P017 explained that people on substances do not feel well. They cannot think straight. They are in the building sitting at their desk but not being productive. Time is lost by employees who suffer with SUD. People who abuse substances work inefficiently and make mistakes. The lack of the ability to bill the client puts pressure on everyone else in the firm to get the work done to fulfill the needs of the client.

P005 noted that substance abuse also causes employees to arrive late or miss work. Tardiness and absenteeism result in productivity issues for firms. If an employee fails to work everyone else in the firm must do extra work to meet client deadlines. Productivity suffers. Then when substance abusers do come to work, they have performance issues. They make errors in the work output.

P012 noted that he noticed missed time or people underperforming because of a hangover or when they were using substances. He estimated that people are 20 to 30% less productive when they were on some kind of substance. This lack of productivity caused the firm to lose money and fail to meet client obligations.

Lack of productivity and impaired performance issues were also found in the review of academic literature. The literature noted that productivity issues were caused by SUD. People with SUD arrive for work late or do not show up. If they do, they cannot perform well. Later in this section of the document, there will be a section that covers the relationship of the findings to the academic literature on the subject.

Liability. Another major finding noted throughout the course of the case study interviews is that a major financial cost that arose from substance abuse in the workplace is the liability the problem creates for firms. P019 noted that some of the financial cost related to substance abuse were from damages or injury claims. These costs can be quite significant according to the participant. People who are under the influence of substances can damage a firm's reputation and be a liability to a firm which can have a detrimental financial impact. If someone performs poorly on an engagement, such as an audit or review, then this poor performance can cause a potential lawsuit for the firm in the future.

P016 noted that potential lawsuits that arise from errors in the work done for clients can result in financial costs to the firm. Examples include important items not brought to the attention of the client. Also, important details may be missed on an assignment such as a tax return or audit report that would have been otherwise disclosed and corrected by a person in their right state of mind.

P011 explained that when referring to professional practice, such as a CPA firm, there is a potential for malpractice. This malpractice can result in lawsuits. For smaller practices the problem could result in a loss of the entire firm. The cost that arises depends on the relative level of the CPA who causes the damage. Someone abusing substances may perform substandard work and miss important items in their work. At some later point, mistakes and omissions may result in damage, such as the questioning of the integrity of an audit.

Loss of Client. The next major finding from the case study interviews is that a cost of substance abuse is the potential for lost clients. As noted in the previous section, people who are recovering from substance use or actively using substances are unproductive and make mistakes. Even if a client does not take legal action because of a mistake, they may fire the firm over a mistake. Additionally, clients may leave the firm because they are being billed for unproductive work. Finally, clients may be lost because of relationship problems caused by people who abuse substances. P020 noted that a client was lost because someone, who was actively using substances, yelled, and cursed at them.

Accidents. Based on the interviews performed during the case study, another financial cost that can arise from substance abuse in the workplace is accidents. P022 noted that automobile accidents can be costly. This arises when a person on substances drives to and from a client location to do field work whether in their personal vehicle or a company owned vehicle. The firm is liable for employees who drive on the job. People who use substances can be impaired when driving and cause accidents. P016 noted that there is a lot of room for injuries when people are under the influence of substances.

Theft. A common theme that emerged during the case study is that a financial cost resulting from substance abuse in the workplace is theft. P020 said that someone who worked for

her firm stole from a client after they were given sensitive data. This data included banking account information and credit card information. They referred to the fraud triangle.

Opportunity, pressure, and rationalization are the three sides of the fraud triangle. The CPA had the opportunity to steal because they were given access to account numbers and credit card numbers. Substance abuse created pressure for the person, and they rationalized and stole from the client.

What are some of the non-financial implications attributed to substance abuse in the workplace? The third interview question posed during the case study related to the non-financial implications that substance abuse in the workplace causes. Five common themes related to non-financial implications emerged during the case study. The first theme that emerged is that substance abuse causes a loss of a person. People who use substances become someone different from their true self. The next theme that emerged was that a non-financial cost that arises from substance abuse in the workplace is a loss of trust. People who use substances are often dishonest and fail to meet their obligations. The third theme that emerged is that substance abuse damages relationships in the workplace. Fourth, substance abuse creates morale issues within firms. Finally, people who use and abuse substances damage their firms' reputations.

Loss of Human Being. One of the key findings and themes that arose during the research project was that people who abuse substances lose themselves in the process. They become someone completely different. As P014 noted they lose their identity and become something else. They are like "zombies." As P018 stated, they are at work, but they really aren't there. Essentially, firms are paying people who are not mentally there or working.

Often people who abuse substance must be terminated because they cannot recover even after attempts by firms to try to assist them in the recovery process. P002 noted that this has

significant implications. The employee may have been with a firm for years. They received a significant amount of training, and the firm invested a substantial amount of time and financial resources into the person. There is a tremendous cost because of the amount of time and money spent on the person with no residual benefit to a firm.

Trust. Another common theme that emerged during the interviews is that a major implication of substance abuse in public accounting is a loss of trust. P005 said trust is the backbone of the profession. Any personal or professional relationship must have trust. Once that trust has been violated, the relationship falters. People who abuse substances cannot uphold their expectations, whether it be showing up on time for work, showing up for work, or delivering a project by the deadline. Those are factors that affect trust. And once trust deteriorates, whether the case be between an employer and employee, or supervisor and staff member, the relationship will deteriorate as well.

P001 noted that a lot of clients trusted their CPA more than they trusted their spouses. This is because CPAs handle a client's financial matters – their money and financial wellbeing. Trust is everything in a relationship between a CPA and their client. People who use substances often cannot meet their obligations. Trust can be impaired, and the betrayal damages the relationship between a CPA firm and their clients.

Damaged Relationships. Another common theme related to the non-financial implications of substance abuse is damaged relationships. In the previous theme, there was a discussion of impairment of trust caused by those who abuse substances. Trust is an essential element in any relationship; thus, once trust is impaired the relationship is damaged. Whether a relationship between a client and a CPA, or between CPAs within a firm, the relationship can become damaged due to the fallout from substance abuse.

P002 noted that a major implication of substance abuse is the affect the problem has on a person's demeanor. People who abuse substances often come to work in a poor condition. These people can have a bad attitude and be irritable when working with others and dealing with the client. This can damage the relationships within the firm both internally and externally.

Substance abuse can cause health issues, mental instability, bad work environment, lack of respect, and failure to perform job duties. All these have a negative impact on relationships. Another noted that substance abuse affects relationships within a family, professionally, and with friends. Relationships are extremely important in the field both between clients and other professionals in the office.

P005 said the inability to meet deadlines causes trust to deteriorate between coworkers. When substance abuse is involved, coworkers must cover for the substance abuser. While many people who work in firms become friends during their tenure, substance abuse can damage these friendships and make relationships become antagonistic.

Morale. The most common non-financial factor and theme that emerged from the third interview question was that substance abuse in the workplace damages morale. P009 noted that morale issues can arise from how a firm handles substance abuse when SUD occurs in the workplace. If employees are aware of someone who is using substances in the workplace, and nothing is done about these issues, people can become frustrated, and the problem can impair their attitude and productivity. Lack of productivity can also creation friction between employees.

P021 from a large firm said that non-financial implications primarily relate to morale of the team that the substance abuser is working with. Poor performance and morale issues can impact a team, service line, or entire office. SUD can have an impact on how people view the

workplace. People may begin to have poor morale and a negative view of the workplace damaging the work environment. The problem can disrupt team chemistry, and the problem can be a distraction because of the concern for the impacted person's wellbeing.

P004 noted that substance abuse lowers morale among other employees. People get frustrated because they must cover for the substance abuser whenever they cannot perform their work efficiently and when deadlines cannot be met. One CPA explained, morale is really impaired when abusers are family members of the owners, and nepotism can play a part in the situation. Substance abuse and nepotism can damage the culture in the workplace. Substance abuse can make other employees unhappy when they know the abuse is going on, yet nothing is being done about the situation. The problem can have a huge impact on turnover rates. The productivity of the other employees can suffer when the abuser is seen as loafing around. People don't want to work when they see this happening.

A substance abuser can cause stress for other employees because the abuser is not pulling their weight. The problem can be stressful on a supervisor or team member when an employee is not working at full capacity. If a high-level employee is abusing substances and being given a pass, other employee's morale can be affected. Morale can suffer when an employee is not disciplined for their poor work performance. People will view the firm as unfair and unequitable based on how punishment and accountability is handled within the organization. The atmosphere within the company will suffer. This can create morale issues throughout an entire office. Other employees may leave the firm because they are not comfortable working with a person who has substance abuse issues.

Damaged Reputation. The last common theme that emerged from the third interview question was substance abuse damages the reputation of firms. As noted, those who abuse

substances are unproductive and make errors. Substance abusers can't meet deadlines and their relationships with others become damaged. People do not trust people who misuse and abuse substances. The reputation of a firm who employs substance abusers can become damaged. Reputational cost was a major non-financial implication of substance abuse in the workplace.

What procedures have you found work best for addressing substance abuse when the problem occurs? The fourth interview question posed to research participants attempts to find best practices for dealing with substance abuse when SUD occurs in the workplace. Six common themes emerged during the case study. The first theme that emerged among some of the participants is that substance abusers should be given little patience (P003, P005, P008, P018). They should be given very few chances to change. They need to either stop doing what they are doing or be terminated. Still others in the case study said that being supportive was best and to give substance abusers a chance to recover. Another common theme found during the interviews was that instances of SUD should be addressed directly and immediately. Those interviewed stressed the importance of avoiding hiding from the fact that there is a problem going on. Those from larger firms all stated that they would hand the matter over to the internal human resources department to handle (P010, P016, P021, P023). Having someone who was trained on dealing with substance abuse issues when they arose is important. Some of the participants thought that drug testing would be an appropriate measure to help firms mitigate the damage from substance abuse (P016, P018). Finally, referral to counseling or some form of rehabilitation was suggested as a possible measure firms should take when SUD occurs.

Short String

A few of the participants said that they would have little patience with those who abused substances (P003, P005, P008, P018). P005 explained that if the person failed to perform their

professional work responsibilities and betrayed their trust would be out after two chances. He explained that after three strikes, they would be out. The person involved with substance abuse would be asked to leave.

P018 reflected that in the past they dealt with substance abuse by terminating affected employees. After having personal experience with substance abuse in his personal life, he would terminate quicker. He stated that substance abuse had no place in the workplace. He never had a candidate so good that the problem was worth putting up with. The odds of success are low, and offering help is not worth the time. There are many other qualified candidates that do not have substance abuse issues.

P003 said that he would pull the person affected into his office. He would explain that the behavior needed to stop, and something needed to be done. He would explain to the person that the substance abuse issues are ruining the practice, and they must stop or be terminated.

Finally, P008 said that he would give a substance abuser a chance but would have a short string. He felt as though most substance abusers did not want to get better. He had a client who owned outpatient psychiatric centers. People went out of these centers like they had revolving doors. He felt that until a substance abuser was ready in their own mind, there was very little hope of recovery.

Give Chance. While a few of the CPAs interviewed said they would have little patience with substance abusers, most of the participants said that those affected should be supported and given a chance to recover. P017 said every employee must be treated individually to see what is going on. Hollering and screaming will not work. Telling the employee to quit will not work. And telling the employee you are going to fire them if they do not quit won't work either. The

firm must do their best to help the individual. Termination may be the answer, but you must help them first.

P001 said the firm's policy was to give the employee a chance to correct their issues. If they need to check into a facility, the firm will give them time off. After they come back from time off, the firm will ensure that they are not overloaded. Accounting work can be extremely stressful, especially during the busy season. The firm makes sure that the affected individual is not given too much work which could lead to relapse.

P011 explained that helping was a best practice from a community standpoint to extend some level of compassion in terms of helping the person address their substance abuse problem. The firm should help them address the problem and meet substance abuse head-on. The firm should help people with SUD to correct the situation and get to a better place.

Direct and Immediate. Another common theme that arose from the fourth interview question was to address the problem directly and immediately. P014 said do not hide the problem. Hiding the problem only makes the problem worse. Bring the individual in and talk to them. Try and get them the help that they need to address the problem. Another noted that there should be a one-on-one discussion with an offer to assist the person in getting treatment for their condition.

P017 said the problem should be handled directly. While a person's privacy and personal life should be respected, if the problem is affecting the person's productivity, availability, and the team, the problem should be addressed directly by the employer. There should be an effort to understand what the issue is. There needs to be a fact-finding mission. There needs to be compassion for the employee, but the business must also protect themselves so that the employee does not harm the business.

The longer the problem goes without being addressed the worse the problem could get. The firm should not ignore the issue. The issue needs to be faced head-on. Facing the problem needs to be handled sooner than later. The business should avoid letting the situation linger and letting the problem affect others within the organization. The business should attempt to help the affected individual especially if the employee is an otherwise good employee and asset to the firm.

Human Resources. Some of the participants interviewed explained that they would refer substance abuse problems to their internal human resource departments (P010, P016, P021, P023). Many of the participants of the study worked for small firms that had no human resource departments. The participants from large regional and national firms noted that human resource personnel were trained to handle this matter.

P016 noted that the firm they worked for paid for an employee assistance program. Employees who were affected by substance abuse would be encouraged to seek out that path. The program provides confidential counseling. There is a system within the organization that provides resources such as referrals to rehabilitation centers. The company also had a clinic that provided medical services to employees and other resources when dealing with their substance abuse problems.

P023 said that the firm had several resources, such as outside professionals, to help their client servicing personnel deal with problems such as substance abuse. If the situation occurs in the practice, professional resources within the firm are accessed. These professionals have regular experience with matters such as substance abuse. These services can better manage and provide the right assistance whether medical professionals, counseling professionals, or other relevant services

Drug Testing. A common theme that emerged about how to best handle substance abuse when the disorder occurred in the workplace is drug testing. This is particularly true when an accident is involved. P016 noted that people involved in a workplace accident should be drug tested. If they test positive, they are encouraged to seek professional or medical help for their problem.

P004 noted that many companies have drug testing policies. Within these companies, if a person tests positive for drugs and alcohol they are offered a choice of joining a program to get help. If they join the program, they do not lose their jobs. This plan provides encouragement to employees who otherwise might not have sought help for their problem. Drug testing can also be used as prevention. Some employers perform pre-screening, random testing, and testing for cause. These tests may deter employees from using substances.

Rehabilitation. One of the most common themes found in the interviews as a solution to substance abuse in the workplace is to offer employees affected some form of rehabilitation. P001 noted that some form of counseling would be appropriate. Someone to mentor the person and guide them. P013 said to get the affected person into a rehab program. Understand what the underlying issues are so that the person can be placed in the appropriate rehabilitation situation.

What measures should be avoided when dealing with substance abuse in the workplace? The fifth interview question asks the participant to identify processing and procedures that should be avoided when handling substance abuse in the workplace. Six common themes emerged during the interviews. The first theme is that firms should avoid giving employees ultimatums. Next, employers should avoid the stigma issue. Employees should not be made to feel shame or guilt over their substance abuse issue. The third theme is to avoid using the wrong people to handle the situation when the problem arises. The right people who are

properly trained and have experience with the problem should be used to handle the problem when SUD occurs. Another theme that emerged is that firms should avoid denying the problem exists. Privacy and confidentiality is also very important when handling the situation. Firms should avoid violating privacy and confidentiality rights of affected employees. Finally, firms should avoid enabling employees.

Ultimatums. When asked measures that should be avoided when dealing with substance abuse in the workplace, participants noted that employers should avoid ultimatums. P001 said that employers should absolutely avoid any kind of ultimatum. If someone is backed into a corner that is battling an issue like substance abuse, the ultimatum can do more harm than good. Instead, the firm should let the person know that they are there to help the employee get better. Sometimes, terminations are the right step, but initially, firms should try to help rather than threatening to fire an affected employee.

Stigma. Substance abuse carries a stigma or mark of disgrace. P020 said that firms should avoid adding to stereotypes or making the person feel like something is wrong with them. Some employees may find seeking help difficult to reach out for help because they may fear what people will think about them. Many people who have substance abuse try and hide the issue because of the attached stigma.

P004 noted that you should avoid making people feel bad about themselves by being negative. Avoid telling substance abusers that they are a disappointment. This would make the person feel worse about themselves and make the situation worse. The stigma would hurt their chances of recovering from the condition. Staying positive and expressing a desire to be helpful are better alternatives than making a person feel ashamed or guilty for their problem.

Use the Right People. Substance abuse is a sensitive topic. Many who suffer with the disorder cope with the problem through denial. A common theme that arose during the case study is that the right people should be assigned to handle the problem when substance abuse arises. People that have been trained and have experience with dealing with the problem. This may not be practical in smaller firms that do not have a dedicated human resource department. Some of the skills may be able to be acquired by firm partners that will enable them to properly handle the problem when the illness arises.

Avoid Denial. People with substance abuse issues often live in a state of denial. Likewise, firms that employ substance abusers may use denial when the problem arises. During the case study a common theme was that firms should avoid using denial and face the problem directly and immediately to minimize the damage caused by the problem and to get the abusers the help they need in a timely manner.

P002 noted that firms should avoid hiding the issue and burying their heads in the sand, pretending that the problem does not exist. Doing nothing would do more harm than good. The longer the problem goes unaddressed, the worse the problem gets. Firms should avoid ignoring the problem.

Privacy and Confidentiality. Another common theme found during the case study from the fifth question is that violations of confidentiality and privacy should be avoided. Human resource professionals are well trained on dealing with privacy and confidentiality issues. The human resource department should be used when available. In smaller firms, partners should ensure that substance abuser's privacy is not violated, and information is kept confidential. P023 noted that privacy and confidentiality was always important. Firms should avoid making a scene in front of other employees, and everything should be done in private.

Enabling. The last common theme that emerged during the case study interviews was that enabling should be avoided. P020 noted that allowing employees to continue to work when impairment is obvious. In some cases, the company she worked for made excuses for the person with substance abuse issues. According to P011 enabling happens when you cushion or stop a person from suffering the consequences of their abuse. Enabling a person can be a detriment to their recovery.

Quantitative Themes

Quantitative procedures were performed to triangulate the qualitative findings produced from the interviews performed during the case study. A survey instrument was used to obtain responses from CPAs who practice in Louisiana. Prolific was used to recruit participants. A survey was created in Survey Monkey and distributed on the Prolific web site. This survey included the CAGE-AID assessment previously described in this document, along with two open-ended, open-response questions. The results of this survey distribution will be discussed below. The demographic information collected will first be discussed. Next, the CAGE-AID results will be discussed. Finally, the analysis of the open-response questions will be included in this section of the document.

Demographic Information

There were 105 CPAs practicing in the state of Louisiana who responded to the online survey via Prolific. The respondents provided demographic information when they completed the survey. The demographic information for this survey is summarized in Table 2.

Table 2.*Demographic Breakdown*

Category	Classification	N	%
Gender	Female	68	65%
	Male	35	33%
	Prefer not to say	2	2%
Income	0 -25000	1	1%
	25,001 – 50,000	23	22%
	50,001 – 75,000	37	35%
	75,001 – 100,000	29	28%
	100,000 – 150,000	11	10%
	150,001 – 200,000	1	1%
	200,000+	3	3%
Marital Status	Single	78	74%
	Married	27	26%
Education	Bachelor’s Degrees	60	57%
	Master’s Degrees	38	36%
	PhD or higher	5	5%
	Prefer Not to say	2	2%
Race	African American	15	14%
	Asian	13	12%
	Caucasian	64	61%
	Latino or Hispanic	9	9%
	Native American	2	2%
	Other	2	2%
Age	18-25	48	46%
	26-35	41	39%
	36-45	15	14%
	Prefer not to say	1	1%

CAGE-AID Assessment. The survey instrument used was the CAGE-AID assessment.

This short survey is a four-question tool used to determine whether an individual displays symptoms of substance abuse. If an individual affirmatively answers two or more questions, the response is deemed significant. Tables 3 & 4 displays the results of the CAGE-AID assessment.

Table 3.*CAGE-AID Responses*

CAGE-AID	N	%	N	%
	No		Yes	
Q1 - Have you ever felt you ought to cut down on your drinking or drug use?	53	50%	52	50%
Q2 - Have people annoyed you by criticizing your drinking or drug use?	69	66%	36	34%
Q3 - Have you felt bad or guilty about your drinking or drug use?	49	47%	56	53%
Q4 - Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)?	62	59%	43	41%

Table 4.*CAGE-AID Score*

CAGE-AID Scores		
N	%	Result
34	32%	0
14	13%	1
18	17%	2
20	19%	3
19	18%	4

Approximately 55% of the CPAs surveyed scored two or more on the CAGE-AID assessment, which suggest that they display symptoms of substance abuse.

Open Response Questions

Two open response questions were used to investigate the research questions. These questions state “How has your substance use, or someone else’s substance use impacted your practice (firm)?” and “What measures should be taken to address substance abuse when the problem occurs in the workplace?” The short open-response questions help the researcher understand the impact on public accounting practice and possible means for adequately addressing the problem when the illness occurs.

Numerous responses were received for both survey questions. The responses for these survey questions were coded for common themes. The results of this coding process are discussed in the section below.

How has your substance use, or someone else's substance use impacted your practice (firm)? This first survey question received numerous responses. However, surprisingly 44 out of 105 felt as though substance abuse had no impact on their practice. Another eight participants did not respond to the question. Fifty-three participants responded to the question, with responses coded for common themes and summarized.

Productivity. By far the most prevalent response to the above referenced question was substance abuse caused productivity and performance problems. A practitioner's performance is impaired using substances. This is true when a person is actively using substances on the job. The point is also true when a person is recovering from previous substance use. They cannot perform their work effectively and efficiently. They struggle to work and work slowly. They are prone to making mistakes and errors. Their work must be redone which slows others down. Their substance abuse not only affects their productivity, but the productivity of the entire team.

The findings of the quantitative survey results are consistent with the findings of the case study interviews. The most common impact on firms given by those interviews was that substance use and abuse resulted in productivity problems. Substance abusers produce poor results when using and recovering from substances.

Concentration. Many survey respondents noted that substance abusers have poor concentration. Substance abusers have a difficult time focusing on their work. They are often tired when they are at work. They work in a sluggish manner. Those who abuse substances are easily distracted from their work. This theme is consistent with the qualitative responses during

the case study interviews. One participant during the case study noted that substance abusers were like “zombies.” They were there in person, but they couldn’t contribute. Another participant in the case study noted that a person who used substances fell asleep on the job. Clearly, those who use substances are impaired and cannot fully dedicate themselves to their work. This lack of concentration ultimately leads to the productivity problems noted in the previous coded theme.

Quality of Work. In addition to productivity problems and lack of ability to focus on work, substance abuse in the workplace leads to poor quality of work. Substance abusers have sloppy work, and this sloppy work can lead to lower client satisfaction. People who use substances also often make errors. These errors can be costly in terms of rework. Errors can lead to a loss of a client. Finally, errors can be a liability to a firm. One participant noted that the firm could face legal action due to a lawsuit from a significant error.

This theme matches many elements of common themes noted during the case study interview. Many of the case study participants noted that a significant cost of substance abuse in the workplace was the liability the problem created because of errors created by substance users. Qualitative participants also noted that a significant cost borne from substance abuse was the loss of clients because of errors made by those who abuse substances.

Unreliable. The online survey responses identified that people who abuse substances affect the workplace because they are unreliable. They often come to work late or do not bother to show up at all. They cannot meet important deadlines. They show up to work unprepared to meet their work obligations. They are often tired and sluggish when performing their work. They show a general lack of commitment to their firms and work product. They do not deliver on their promises.

This theme is consistent with the responses received during the qualitative case study interviews. The research work noted that substance users came to work late. Those who were problem users had to be asked to leave firms because they did not perform, used on the job, and engaged in other behavior that caused damage to the firm. They could not meet their obligations to the firm and performed poorly. Even when offered help, substance abusers could not quit and eventually had to be terminated.

Denial. As noted in the literature review, acknowledging a problem is the first step in the recovery process. Denial is a major barrier to addressing substance abuse. People with denial fail to realize the damage their substance abuse issues cause. Denial is a key feature of substance abuse. Based on the results of the CAGE-AID assessment, over 55% of those surveyed displayed signs of substance abuse. Strangely, almost 50% of those surveyed said that substance abuse did not have any impact on their firm. Many of the same people who were scored as substance abusers on the CAGE-AID assessment could not see any damage of substance abuse on their firm or damage to their own performance.

During the qualitative case study work, some of those surveyed had no direct experience with substance abuse in the workplace. Some noted that people who have substance abuse need to have a desire to have help to get the help they need. The survey results clearly show many people who have substance abuse issues deny the damage their substance abuse has on firms. Certainly, this denial keeps people from getting help because they do not see where there is any need for help.

Relationships. Many of those surveyed noted that substance abuse caused problems with relationships on numerous fronts. One survey participant noted that substance abuse caused co-workers to have to cover for the substance abuser. Another participant noted that substance

abusers caused damage to the relationship with the client. Finally, another survey respondent noted that a consequence of substance abuse was termination and divorce.

Problematic relationships were a key finding of the case study interviews. Many of the interview participants noted that substance abuse damaged relationships whether problem be personal, client, or co-worker relationships. Substance abusers cause damage to morale in the workplace. Their co-workers must cover for them and perform extra work because the problems they create. Supervisors must address substance abuse, and this damages the relationship between themselves and subordinates when the substance abuser fails to meet their end of the bargain.

Terminations. The last common theme found in the responses to the online surveys was that substance abuse in the workplace impacted firms in terms of terminations. One survey response noted that an employee had to be escorted off the property because they were found to be actively using on the job. Others noted that substance abuse resulted in terminations.

This is consistent with the qualitative work performed during the case study. In many instances, people with substance abuse were asked to leave firms. After measures were taken to assist those affected, the eventual outcome was termination when the person receiving the help failed to quit using substances. Also, others had a stern sentiment toward those who actively abused substances. They said they would have little patience with substance abusers and that these people should be terminated quickly if they abuse substances.

What measures should be taken to address substance abuse when the problem occurs in the workplace? This second survey question received numerous responses. Another nine participants did not response to the question. The responses were coded for common themes and summarized.

Therapy. Most respondents said that those affected with substance abuse should receive some form of therapy when the problem occurs in the workplace. Some respondents noted that substance abusers should be provided with therapeutic solutions such as group therapy, counseling, or rehabilitation. Some mentioned that affected employees should be granted time off to take care of their problem in an appropriate therapeutic manner.

This is consistent with the interview responses from case study performed during the qualitative procedures. Many of the respondents pointed toward counseling as a possible means of recovery and a method of addressing substance abuse when the disorder occurred in the workplace. The problem should be assessed, and a therapeutic alternative offered whether the solution be counseling or rehabilitation services.

Human Resources. Many of the participants in the online survey pointed to human resource intervention as a solution to substance abuse when the illness occurs in the workplace. Specifically, some participants noted that there should be a reporting mechanism for substance abuse when SUD occurs. One noted that there should be an anonymous tip line that employees can call to report substance abuse in the workplace. Drug testing was also suggested as a possible means for discovering and addressing substance abuse in the workplace.

In addition to reporting, many respondents said that there should be education about substance abuse in the workplace. This education could be in the form of training such as workshops. Two participants mentioned that there was a need for enlightenment on the subject within the workplace. Some of the case study participants also mentioned human resources particularly those participants from large firms. However, most interviews were derived from sole practitioners and small firms who did not have human resource departments.

Direct Approach. Survey participants noted that substance abuse should be brought to superiors. Supervisors should take a direct approach when handling substance abuse. Call the person into the office and have a conversation. Also mentioned was that the situation should be addressed immediately. Reporting tools as previously mentioned in the previous theme could also assist supervisors in addressing the problem when SUD occurs because they can become aware of the problem in a timelier manner.

Disciplinary Action. Many of the survey participants mentioned traditional disciplinary methods for addressing substance abuse when the problem occurs. First, employers may issue warnings. Next, they may suspend employees. Finally, if warnings and suspensions are ineffective, the employee is terminated for cause.

As mentioned in a previous point in this discussion, some CPAs during the case study interviews took a hard line toward substance users. They said that they may give substance abusers a couple of chances but would ultimately have a short rope. Also, those who had direct experience with substance abuse mentioned that the employees they were familiar with were eventually terminated, because they failed to adequately address their problems.

Interpretation of Themes

Common themes emerged as part of the case study. Many of these common themes were confirmed in the quantitative procedures performed to triangulate the qualitative findings. In this section of the document, the researcher will provide an interpretation of the unique themes found within the study. This interpretation will provide additional meaning found from the themes that emerged during the research work.

Personal Accounts. Many of the participants had firsthand knowledge of substance abuse in the workplace and were able to provide a detailed account of their experience. These

personal accounts provided the researcher with an understanding of how substance abuse impacted public accounting practices and accounting professionals in the field. During the research, many of the participants seemed disgusted by their encounters with substance abuse, when illness occurred in their respective practices. Their disdain was evident in the way they presented their personal stories to the researcher. Based on the interviews, substance abusers are frustrating to deal with in the workplace and present many problems that businesses would otherwise like to do without.

A couple of the participants explained that they once had experienced substance abuse themselves. They explained that they were able to overcome problems by themselves without any outside assistance. Even though they had once experienced substance abuse themselves, they told stories of other people they had encountered that also abused substances. In both cases, the accounts were judgmental of those who have substance abuse problems. People who have substance abuse issues exhibit appalling and socially unacceptable behavior that leads others to judge them harshly and creates a severe stigma that is difficult to overcome.

Productivity. The most noted implication of substance abuse's impact on public accounting was lost productivity. People that use substances have a hard time focusing on their work. In many cases, these individuals are late or do not show up for work. When they do come to work, they cannot perform their duties efficiently. Firms earn money by billing clients and cannot bill the client for this unproductive work. Other members of the firms must fill in for substance abusers to meet deadlines and client obligations. The whole team suffers because of substance abuse in the workplace.

Liability. Employees who abuse substances are a liability to their firms. This liability is created when a substance abuser performs substandard work. Errors and omissions in accounting

work can cause financial loss in terms of malpractice lawsuits in the future. Also, people who use substances cause accidents and injuries which can increase insurance premiums and lead to lawsuits.

Loss of Clients. Another negative financial implication of substance abuse in the workplace is lost clients. As noted, substance abusers are unproductive and exhibit unusual behavior. Substance abusers also make mistakes and bill for unproductive work. Clients expect professionalism, accuracy, and exceptional performance from their CPA. Clients will leave firms that exhibit anything less than these qualities.

Accidents. The use of substances affects clarity of thought and motor skills. People who abuse substances can cause accidents. These accidents can cost firms a significant amount of money in terms of insurance premiums and liability lawsuits.

Theft. Clients trust CPAs with sensitive data. People who abuse substances may have pressure to use more substances than they can afford. Substances can become expensive to acquire. This pressure to acquire more and more of a substance can lead a CPA taking advantage of a client. Sensitive client information can be used to steal money from client accounts so that substance abusers can acquire more of a substance they desire.

Loss of Person. People who use substances lose themselves in the process. They become different people. Firms invest significant resources into their people in terms of compensation and training. In many instances, people who abuse substances are terminated and the resources invested in them are lost.

Loss of Trust. Upholding trust is essential for CPAs. CPAs are given a significant amount of trust by their clients. Within firms, employees are trusted to meet obligations and deadlines. Substance abusers are often dishonest and cannot meet their obligations. Those who

abuse substances can cause their firms to lose client trust. Also, firms can lose trust in substance abusers themselves.

Damaged Relationships. Relationships are extremely important in the accounting field. Externally, CPAs must maintain a relationship with their clients. Internally, CPAs must effectively work together and have healthy relationships within the firm. Substance abusers tend to betray trust which damages relationships. They have a hard time being productive and meeting deadlines. This can damage relationships with colleagues who have to fill in for them.

Loss of Morale. Substance abuse in the workplace can cause morale to suffer. As noted in previous points, other employees must fill in for substance abusers when they have difficulty performing and meeting important deadlines. This can be frustrating for these employees and cause morale to suffer. This is particularly true when a person with substance abuse issues is not being held accountable and given a pass by superiors.

Loss of Reputation. With all the factors already discussed considered, a firm's reputation can suffer due to substance abuse in the workplace. Substance abusers are unproductive and make mistakes. They cannot be trusted to meet deadlines. They have a hard time maintaining professional relationships. All these factors, and others, can damage the relationship of the firm and abuser.

Short String. Some of the CPAs interviewed said they would have very little patience with those who abuse substances. These CPAs were soured by past experiences with substance abusers and had little faith in the ability of substance abusers to recover. They felt that there was no place in public accounting for people who abuse substances.

Give Chance. Most participants in the study have a policy of helping the affected person. Helping them to obtain some form of counseling or rehabilitation. Providing time off so that the

person and get the help that they need. In some cases, firms were willing to pay for counseling, especially if the employee was a good employee and otherwise an asset to the firm.

Direct and Immediate. Most of the participants agreed that when substance abuse occurs in the workplace there should be no delay in handling the matter. The longer the problem goes on, the worse the problem becomes. Participants said that they would handle the matter immediately and directly. In most cases, the substance abuser would be brought into a supervisor's office and some form of remediation would be offered to help the person recover from their condition.

Human Resources. Many of the participants interviewed were from small firms that do not have a dedicated human resource department. Some of the participants interviewed were from large regional and national accounting firms. All of the participants from larger firms stated that they would refer the matter to human resources. Human resource departments are trained to handle these situations and have the resources to help substance abusers recover. Many of the larger firms also had access to external resources that could be accessed through the human resource function.

Drug Testing. According to some of the participants, drug testing can help firms reduce the incidence of workplace substance abuse. This is particularly true when accidents happen. Participants stated there should be a policy to drug test employees who are involved in accidents. Also, a policy of drug testing new hires and conducting random drug screens can deter employees from abusing substances. Some suggested that if an employee failed a drug test, they should be given the opportunity to seek help instead of being terminated.

Rehabilitation. When substance abuse occurs in the workplace, most participants agreed that help should be offered to those who suffer with the problem. This help should involve some

form of counseling and rehabilitation. Rehabilitation centers specialize in assisting people with substance abuse problems overcome their illness and return to the work force. In some instances, participants said that firms should be willing to pay for some form of rehabilitation and counseling services.

Ultimatums. A few of the participants said that they would bring an affected employee into the office and tell them to shape up or risk losing their jobs. There was another school of thought among some of the other participants. They said that ultimatums should be avoided. Instead, a person should be helped, and compassion should be extended. In the end, termination may result from substance abuse but when initially approaching the problem help should be offered.

Stigma. As noted throughout the paper, substance abuse carries a significant stigma or a mark of disgrace. Participants felt that when handling the problem one should avoid adding to the stigma. Making a person feel guilty or ashamed of themselves can only do harm to the individual. Firms and personnel should avoid passing judgement on those who suffer with substance abuse.

Use the Right People. When possible, firms should use people who are trained and knowledgeable about the subject. In larger firms, human resources are accessed to handle the problem when SUD presents. Smaller firms should train and educate partners or access external resources to better handle the problem when the illness is present.

Denial. Substance abuse is characterized by denial. Individuals with substance abuse often deny they have a problem. Firms, too, can use denial when handling substance abuse in the workplace. Some of the participants said that firms should avoid hiding the problem or “putting

their head in the sand.” As noted, the problem should be handled in a direct and immediate manner.

Privacy and confidentiality. Substance abuse is a sensitive issue that should be handled in a private and confidential manner. People with SUD should be confronted in a private manner. Confidentiality should be ensured.

Enabling. Enabling involves softening the consequences for someone with substance abuse disorder. While most of the participants agreed that people with SUD should be given a chance to recover, they agreed there should be a limitation on how long someone is given a pass. Sometimes in handling the situation, it is best to terminate someone with SUD, so that they can experience a consequence that will wake them up and result in them seeking help for their problem. In some cases, people with SUD live in a state of denial and do not want help for their problem. In these cases, they should be discharged.

Relationship of the Findings

The approved research proposal included several key areas. First, there was a presentation of the research questions and sub-questions. A conceptual framework was presented in the proposal which visually informed the reader about the study, the study’s key elements, and the intended discovery of relevant findings. The relationship of the findings to the research questions and the conceptual framework will be presented herein. Also, during the preparation of the review of the literature and the research proposal, the researcher developed an idea about several anticipated themes. The researcher will discuss the relationship of the findings to the anticipated themes and literature in this section as well. Finally, the relationship of the findings relative to the problem being studied will be discussed and conclude this section of the paper.

Relationship to the Research Questions

This study has three primary research questions and two of those research questions have two sub-questions. They will be restated below. The relationship of the findings of the case study will be discussed for each of the research questions and sub-questions.

Research Question One. The first research question states, what are the common experiences of public accounting firms in Louisiana regarding SUD? The findings of the study relate to this research question in several ways. This finding's relationship to the first research question was explained best by the personal accounts of CPAs interviewed during the case study. SUD presents numerous problems for firms, and people who deal with substance abusers are often baffled and frustrated by the behavior of those who abuse substances. In most cases, people with SUD are offered help to no avail. They eventually must be terminated due to their performance and inability to overcome their illness.

Research Question Two. The second research question states, how does the SUD affect public accounting firms? The first sub-question that supports the second research question is what are the financial costs borne from SUD? The findings relate to this sub-question in several ways. The most common problem presented by SUD in the workplace is productivity issues. People who abuse substances cannot perform good work and often make errors. They lack efficiency. They bill clients for unproductive work, and their bills must be discounted. They create a liability for their firms, both in terms of malpractice suits and risks of accidents. In some cases, substance abusers steal from firms or the client.

The second research question states, what are the non-financial implications of SUD? There are several relationships of the findings to this sub-question. The first and most compelling finding is that there is a loss of the person who suffers with substance abuse. People who abuse

substances become different people. In most cases, people with SUD must be terminated after repeated efforts to attempt to overcome the disorder. When these people are terminated from firms, the investment made by the firms are lost. Loss of trust is another important finding that relates to this sub-question. People who abuse substances cannot be trusted to meet obligations or deadlines. They are often dishonest with others and fail to live up to their promises. Another key non-financial implication is that firms who employ people with SUD can suffer a loss of reputation for obvious reasons already mentioned. When a firm employs someone with substance abuse issues the entire firm can suffer. There is a loss of morale due to the problem because other employees constantly must cover for the affected person. This is particularly true when people with substance abuse issues are not held accountable for their substandard work.

Research Question Three. The third research question states, how do firms currently address instances of substance abuse within their ranks? The question is supported by two sub-questions. The relationship of the findings to each sub-question will be discussed here.

The first sub-question states, what are the best practices firms have developed to mitigate damages caused by SUD? The findings of this question varied by firm size. Large regional and national firms have sophisticated human resource functions that have been developed to address this problem when SUD occurs. In these large firms, people with SUD are referred to internal or external resources that are trained and experienced in dealing with the problem. In smaller firms, there is an informal approach. This approach is immediate and direct. One group of participants stated that bringing the affected person in and tell them to stop or be terminated was best. They believed there should be little threshold for substance abuse in the workplace. Most other participants said that people with SUD should be brought in and given a chance to recover through some form of counseling or rehabilitation.

The second sub-question of the third research question states, what measures have proven to fail in the face of the SUD? These are measures that should be avoided in the face of the problem. Several participants agreed that giving a person an ultimatum was a measure that should be avoided. Also, another important finding that relates to this sub-question is that denial should be avoided at all costs. The problem must be addressed as soon as possible because the problem can get worse the more time goes by. Finally, another item that should be avoided is adding to the existing stigma. Firms should avoid judgment and making the affected person feel guilty and ashamed of their problem.

Relationship to Conceptual Framework

The conceptual framework is contained in Figure 1 of this document. The framework is largely a visual representation of the research questions presented in the previous section of the document. To explain the relationship of the conceptual framework to the findings of the case study the researcher will first summarize the framework.

SUD is present in most businesses and public accounting firms are no different. Firm managers must navigate the issue because the problem can have a negative impact on the firm and the firm's people in numerous ways which have already been discussed in this section of the document. The research conceptual framework seeks to understand the common problems that firms face when SUD presents. Firms face both financial and non-financial implications which were previously discussed in the relationship of the findings to the research questions. The framework also seeks to find common solutions; what measures work, and which ones should be avoided. These measures were also covered in the relationship of the research questions to the findings in the section on research question three.

To avoid repetition, suffice to say that that substance abuse is prevalent in public accounting in the state of Louisiana. People that are touched by the disorder suffer tremendously and are often unable to recover and avoid termination. Most firms take the position of helping affected parties, but in most cases, these corrective measures fail. Most CPAs who have dealt with the disorder are left disgusted. Some of those are left jaded with a desire to avoid the problem entirely and terminate swiftly. Large firms are perhaps better equipped to handle the problem because of their dedicated human resource function that enable them to provide people with SUD developed resources to address their problem. Later in this paper, there will be a section on application of the findings of the study to business practice. In this section, recommendations on handling the problem will be made which will enable firms to better mitigate the damage the disorder presents firms when the problem occurs in practice.

Anticipated Themes

Throughout the course of the research project, particularly during the review of the academic literature on the subject, the researcher began to anticipate themes that he would discover during the case study. The relationship of the findings to the literature will be discussed in the next section of this document. In this section, anticipated themes will be discussed. Particularly, differences from anticipated themes, unanticipated themes, and missing themes will be discussed in this section.

Differences, unanticipated themes, and missing themes. There were several differences between anticipated themes and those themes found during the research study. The first and most notable of this difference was the prevalence of substance abuse and the participants knowledge and experience with SUD in the workplace. While most of the participants had some direct experience with substance abuse in the workplace, some had none.

Seven of the participants reported having no direct experience. This was surprising to the researcher. The expectation is that all participants would have had some type of experience with dealing with substance abuse in some form. Also, surprising to the researcher were that those who had direct experience did not have more than one or two experiences in long standing careers. Based on the findings, problem is not as prevalent as the researcher first thought or participants only reported severe and memorable cases.

While during the case study the researcher was surprised that the problem was not more prevalent, the researcher was equally surprised by the findings from the quantitative survey results. Over half of those people surveyed during the quantitative process scored as having abused substances according to the CAGE-AID assessment parameters. Still, many of those surveyed who scored as potential substance abusers believed that substance abuse did not have any impact on their respective firms. Perhaps those surveyed and interviewed felt as though the reportable problem was a matter of severity of misuse. Case study participants tended to only report severe instances of substance abuse which had profound impacts on their firms. The CAGE-AID assessment may have pointed to one-time or mild substance abuse that did not impact firms and occurred during non-business days and hours.

Another unanticipated finding was present when the researcher interviewed people that were completely disgusted with substance abusers. While most people felt giving people a chance was appropriate, but a group of participants wanted no part in helping people with substance abuse issues. Their experience in the past may have jaded them and made them completely intolerant of those who use and abuse substances.

Finally, a key missing finding is the lack of recovery on the part of those who abused substances as explained by the research participants. The researcher expected at least a few

success stories but there were not many successes. In most cases, people with substance abuse issues were given chances but, in the end, they still had to be terminated because they could not overcome their problems. This was true, except for the two self-reported substance abusers who quit on their own without any assistance. They both saw that their drinking was a problem that were able to quit without experiencing too many consequences.

Relationship to the Literature

An exhaustive literature review was performed during the preparation of the research proposal. Within the literature review, SUD was explained and identified. Commonly abused substances and their effect were discussed. The negative impact SUD has upon individuals who suffer with the condition were explained. There was a section on SUD and business. Within that section, SUD's impact on business was discussed. Finally, the SUD recovery process was explained. Some common barriers were identified. For the purposes of discussing the findings relationship to the literature review, the section on damage SUD causes to individuals and reported impact on business will be discussed here. This is where the findings related to the literature on the topic. Also, the section on barriers to recovery and their relationship to the findings will also be discussed, particularly denial and stigma.

Impaired Functioning. The literature identified impaired functioning as a negative implication of SUD (Han et al., 2016). This relates directly to the themes found during the case study. People with SUD have an inability to function well in live. They cannot think straight and make bad decisions. They have impaired motor skills. This information found in the literature relates to the findings from the case study. Many of the personal accounts from the participants explained that those with substance abuse issues were unable to adequately care for themselves

or perform their work duties. They made errors, caused accidents, and were liabilities to their respective firms.

Accidents. The literature identified that people with SUD are accident-prone (Campbell-Sills et al., 2018). This relates directly to a theme found during the case study. They are more likely to be involved in accidents than their sober counterparts. The findings of the case study identified people with substance abuse issues as liabilities to their firms. They were dangers to themselves and others when operating motor vehicles while driving for business purposes.

Financial Consequences. The literature on the topic identified financial consequences as a significant impact to individuals who suffer with SUD. Substances can be expensive to acquire. The findings and literature suggest that people who abuse substances have a difficult time maintaining employment (Han et al., 2016). In many cases they must be terminated because they are unable to overcome their illness. Because of terminations, they lose financial status and cannot meet their financial obligations as they become due.

Marital Problems. The literature on the topic suggested that people who suffer with SUD have marital problems (Zargar et al., 2019). During the case study, one of the personal accounts directly correlated to this topic of the literature review. One participant's partner had an extra-marital affair that was a public matter and damaged the partner's and firm's reputation. The marriage in question ended in a nasty divorce, and the substance abuser lost custody of her children.

Damaged Relationships. The literature explained that people with SUD have damaged relationships (Campbell-Sills et al., 2018). The findings relate to this topic found in the literature. The findings suggest that trust is an essential quality of the profession. People who abuse

substances often betray trust. They cannot fulfill their obligations or meet deadlines. In many instances, co-workers must fill in for substance abusers which breeds contempt.

Lost Productivity. During the review of literature, lost productivity was identified as a negative impact on business (Sarkar & Ghosh, 2019). Much has already been said about impaired performance and substance abuse. Public accounting is a labor driven field that requires specialized skills and training. According to most of the participant's lost productivity is the primary negative financial implication of SUD in the workplace.

Absenteeism. The literature suggested that people who suffer with SUD are frequently late, and miss work often (Patil et al., 2017). The findings of the case study confirm that people who abuse substances in the public accounting field do not show up for work on time and miss work often. This was noted as a major impact on firm productivity.

Loss of Business. The literature on the topic noted that businesses lost customers because of SUD in the workplace. The findings of the study identified loss of clients as a major financial implication of substance abuse in public accounting. People with SUD are unproductive, make errors, betray trust, and cause accidents. Clients of CPA firms demand professionalism from their accountants because the significant trust they bestow upon firms. Firms that fail to meet this level of professionalism lose business.

Dishonest Acts. The literature identified dishonest acts by employees as a negative impact to businesses who employ individuals with SUD (Barry et al., 2016). The findings of the case study found that some CPAs stole money, time, and resources from clients and the firms that employed them. CPAs are granted significant trust and access to sensitive data. People with substance abuse issues may abuse this trust for personal gain to support their expensive habit.

Denial. The literature identified denial as a major barrier to the recovery process (Gastala, 2017). To fix a problem, one must acknowledge that there is a problem. Many of the research participants noted that a key to solving the problem was immediately acknowledging that there was a problem and addressing the problem directly.

Stigma. As previously noted, a stigma is a mark of disgrace. The literature explains that SUD carries a significant stigma (Shay-Wallace, 2020). This was apparent in the research findings. Some of the participants judged people with substance abuse harshly and wanted no part in assisting them with their problem. They did not want the problem in their firm and wanted to avoid the issue. Still others thought best to avoid adding to the perceived stigma of substance abuse and assisting the affected parties with their problem; however, privacy and confidentiality was emphasized due to the sensitive nature of the topic.

Relationship to the Problem and Summary

The general problem addressed during this case study was SUD's impact on business which results in high costs to firms. The purpose of the study was to formulate best practices for the problem when SUD occurs, which would mitigate the cost to firms and assist the substance abuser in their recovery. The findings found numerous financial and non-financial implications which are borne out of SUD when the problem occurs in the workplace. There has already been much discussion of the implications in the findings section of this document. The findings relate directly to the problem.

There is hope. In the next section the researcher will present a practical guide for addressing the problem when the disorder occurs in business. Many small and medium size firms do not have formal policies and procedures for addressing the problem when SUD occurs. Each case is handled individually. Hopefully, this practical guide will inform firms and better equip

them to handle the problem when the illness presents in their businesses. Also, of great hope, the best practices guide will help people with SUD receive the help they need to recover from this progressive and often fatal illness.

Application to Professional Practice

This study yielded meaningful findings that can benefit the professional practice of business. In this section of the supporting material section, there will be a discussion of how the findings of this study can improve the general practice of business. There will also be a section that provides a practical guide that businesses can use when addressing SUD.

Improving General Business Practice

The findings of this study can be used to improve general business practice. The main area for general business practice improvement is for small businesses who do not have dedicated human resource functions or access to significant external resources for addressing SUD. The findings of the study suggested that small businesses lack policies and procedures related to SUD. Perhaps, the findings of this study can assist small businesses in developing meaningful policies and procedures to address the problem when SUD occurs. In the next section of this document there will be a list of possible application strategies.

Before these application strategies are discussed, there will be a discussion of suggested improvement that were identified during the study. These areas of improvement can best be identified by the problems that were identified during the interviews of participants. The first area of improvement is the suggestion that businesses should not ignore SUD. They should not deny the problem and avoid the issue. It should be faced head-on and immediately, because SUD is progressive. The problem only intensifies as time passes.

The next area of improvement is to avoid enabling people with SUD. The study's findings suggest that most people want to help people who suffer with substance abuse. The study also suggested that some people are enabled, or their consequences are softened. If someone is unwilling to admit they have a problem or unwilling to get help, they should be terminated immediately. Also, if a person repeatedly fails to recover and their performance continues to be substandard, they should be terminated. By terminating these people, it may provide them with the wake-up call they need to really seek help for their problem.

As previously noted, small businesses lack the internal and external resources to address SUD in an informed manner. Small businesses should provide education and training to managers related to SUD. This education and training should include general information about the disorder, as well as suggested policies and procedures for addressing the problem when the illness occurs. Also, companies may want to engage external resources that specialize in handling human resource matters such as SUD. The findings suggest that the right people should be used when the problem occurs.

Frequent and periodic performance reviews can also be used as a tool for quickly identifying problems such as SUD when they occur. These performance reviews can be performed by supervisors who are knowledgeable about the performance of their subordinates. Significant decline may suggest SUD. A conversation can occur with the employ to determine possible reasons for the decline in performance. Performance reviews can also be used as a basis for termination when an employee is unable to meet their important employment obligations and customer expectations for any reason, including SUD.

The last area of improvement is the implementation of drug testing. Most small businesses do not use drug testing. This is because drug testing is expensive and another area of

business that must be managed during the day. The study suggested that drug testing can be used to discover SUD when the problem may otherwise go undetected. Also, drug testing may act as a deterrent to employees using and abusing substances. The drug testing results can be used in a discretionary manner. Employees who test positive for substances can be terminated immediately or offered some form of remediation if the circumstances warrant that.

Potential Application Strategies

The findings from the case study and the quantitative procedures can be used in business to address SUD when the problem occurs. The findings from the study have been used to prepare a practical application guide. This practical guide will be outlined in this section of the paper.

Education and Training. Based on the results of the study, many businesses do not have formal policies and procedures related to substance abuse in the workplace. Many small businesses lack a dedicated human resource function. The handling of SUD by proper parties within an organization is extremely important. If the organization lacks the knowledge and resources for handling this human resource matter, they should seek to obtain the knowledge needed through education and training.

Direct and Immediate. Substance abuse is often hidden by those who suffer with the illness. In some instances, companies that discover substance abuse also hide the problem and pretend the problem does not exist. Based on the findings of the study, SUD should be handled directly and immediately. If the problem is suspected, someone with training and experience for handling human resource matters should confront the individual and offer assistance.

Give a Chance. SUD is treatable. Once SUD is determined to be the problem, companies should aid the employee. This assistance may include some type of rehabilitation or counseling.

The company may want to pay for such treatment. Offering time off to the employee to handle the problem through rehabilitation and counseling may also be appropriate.

Termination. While the findings suggest that employees with SUD should be given a chance to recover, enabling should be avoided. The company's interest must be protected. If an employee does not want assistance or does not take the assistance seriously, termination may be appropriate. By terminating the employee, it may send a wake-up message to encourage them to seek help because of the consequences they suffer because of the termination.

Performance Appraisals. As noted on the previous section on improvements to the practice of general business, periodic performance appraisals should be used to detect performance problems that may arise because of substance abuse. These performance appraisals can also be used as the basis for termination, if appropriate. The central finding of the study is that SUD significantly impairs performance.

Drug Testing. Also noted above, drug testing policies may be a key in early detection of substance abuse in the workplace. The drug testing policies and procedures can also be used to deter employees from using substances in the first place. Finally, positive drug tests can be used as a basis for termination.

Summary of Application to Professional Practice

SUD is problematic, and the disorder presents numerous problems for businesses. The findings of this study can be used to improve business practice. Businesses should handle the problem in a direct manner and waste no time addressing the problem. The findings suggest that the problem intensifies as time passes. Employees with SUD should be given a chance to recover, but chances should be limited to avoid enabling the employee and to protect the interests of the organization. The employee should be terminated if they do not wish to address their

problem, or remediation efforts fail. Performance appraisals and drug testing can detect SUD, deter substance abuse, and be used as the basis for termination, when appropriate.

Recommendations for Further Study

This study focused on interviewing accounting professionals about their experience with SUD in the workplace. The study sought to better understand the problem and formulate a list of best practices for handling the situation when the problem occurs. Based on the results of the study, many people who suffer with SUD fail to recover and must be terminated by the companies that employ them. Perhaps further study on this matter should focus on people with SUD. Interviews can be conducted on those people who have the disorder.

Interviewing people with SUD can better assist the business committee and affected employs by identifying possible means of recovery from SUD. During further study on the matter, people who have recovered from the disorder could share their experience in overcoming the disorder. Also, those who have yet to recover can help the research community better understand the barriers of recovery and the reason for failed attempts.

Research on substance abusers who are employed may also provide valuable insight. The findings of such a study may help to identify measures that have worked in assisting substance abusers in their recovery. Those who have been terminated may also be able to provide insights into how they viewed their company and their part in the employment process.

Reflections

This section will contain reflections from the researcher. The researcher will discuss how he has grown personally and professionally because of the study. The researcher will also discuss the Christian worldview of the study and its elements.

Personal and Professional Growth

During the planning stage of the study, the researcher learned a tremendous amount about SUD. Specifically, during the review of literature the researcher learned how SUD affects individuals and the business community at large. This will help the researcher both personally and professionally.

During the case study, the researcher grew in confidence by approaching CPAs and soliciting participation in the study. At times, soliciting participants proved to be difficult. In some instances, CPAs politely declined to participant. These rejections were difficult for the researcher. The researcher still persevered through the process and was able to gain saturation of the research findings through obtaining consent by a substantial amount of research participants.

The researcher grew professionally in learning how to best handle human resource matters such as SUD when they occur in practice. It is important to engage experts who are properly trained in human resource matters. Compassion should be extended to a point; however, ultimately the best interests of the business must be protected.

The researcher grew personally and professionally by completing this project from start to finish. The project started almost two years ago, and the researcher saw the project through. He did all this, despite personal illness and hardship. The completion of this project is one of the most memorable and outstanding accomplishment of the researcher's life. It is something that he can be proud of. The project is also something that he used to contribute to the business community and God's world.

Biblical Perspective

God's purpose for business on earth is to enable man to thrive and prosper through the production of goods and services. Man stands in for God on earth (Keller & Alsdorf, 2012). Man

must navigate through the hardships in business to successfully serve God and their fellows. Sin produces hardships for humans and business alike. Substance abuse is an example of a sin that man faces and presents a real problem for businesses in today's world. In the past, most companies have shown zero tolerance for substance abuse in their businesses. Today many people view substance abuse as a disease and extend some level of compassion to individuals who suffer with the condition. Extending compassion is the Christian thing to do. The Bible tells man to be compassionate and humble (NIV, 1973, 1 Peter 3:8). Christ gave us the greatest commandment:

Love the Lord your God with all your heart and with all your soul and with all your mind and with all your strength. The second is this: 'Love your neighbor as yourself.' There is no commandment greater than these. (NIV, 1973, Mark 12:31)

Loving one's neighbor as oneself involves placing oneself in another's position and extending one's neighbor some form of compassion.

Glorify God

All work should be performed with the intent of glorifying God. The Bible says to do all things to glory of God (NIV, 1973, 1 Corinthians 10:31). When man works, his work matters to God, and man should seek to perform work in a competent manner. Competent work is a good measure of one's service level to God (Keller & Alsdorf, 2012). In seeking to improve and achieve a high level of performance through mitigation of damage from SUD, man can honor God. God's purpose for business can be furthered through the management of this condition.

Service

The practice of business can be form of service to others. Business helps people to meet their needs. This study can help people to learn and grow. They can become more effective in

their occupations. Businesses can better manage SUD when it occurs and suffers can get the help they need to recover.

Christ is the Answer

Most recovered substance abusers stress the fact that without a relationship with Christ, recovery from SUD would be impossible. Wilson (1976) stated that alcoholics were beyond human aid and needed to have a relationship with God to recover from their condition. Jesus Christ is the big picture (Keller & Alsdorf, 2012). Whoever believes in Christ is saved (NIV, 1973, John 3:16). All things are possible through Christ (NIV, 1973, Philippians 4:13). The main purpose of this study is to glorify the Lord and to help his children form a relationship with Him through his Son. Through a relationship with Him, no problem is too big to overcome.

Summary of Reflections

During the student, the researcher grew personally and professionally. He successfully completed the project which is a major achievement. The project also helped him grow in his faith. He has produced a product that can assist businesses and that helps to achieve God's purpose for business on earth.

Section 3 Summary

The researcher provided an overview of the study. The study was planned and performed to obtain an understanding of the best practices for addressing SUD when the problem occurs in a business practice. The findings were presented herein and provided a basis for the recommendations for applying the results to business practice. Improvements to general business practices were included in this section. Application strategies for these improvements were outlined. Finally, the section concluded with reflections from the researcher. Completion of this project helped the researcher to grow both personally and professionally. The study was

conducted to glorify God and encourage others to find a solution through a relationship with Christ.

Summary and Study Conclusions

A case study was performed to understand SUD and the disorder's impact on public accounting practice in the state of Louisiana. The case study involved interviewing CPAs who practice in the state of Louisiana. 23 CPAs were interviewed during the research project. To triangulate and validate the findings of the qualitative work, quantitative research procedures were performed. 105 CPAs who practice in the state of Louisiana were surveyed. Themes identified during the quantitative work matched common themes derived from the case study.

The study was planned and performed to obtain an understanding of the best practices for addressing SUD when the problem occurs in a business practice. The findings were presented in the last section of this document and provided a basis for the recommendations for applying the results to professional practice.

SUD is a severe disorder that can negatively affect the workplace. The intent of this study was to help businesses to mitigate the damage the disorder causes to professional practice. The study yielded meaningful findings and can assist businesses in navigating this pressing issue. To summarize these important findings and recommendations once more, businesses should face up to substance abuse immediately as the problem gets worse if the disorder persists. Businesses should initially show compassion and give substance abusers a chance to recover. These chances should be limited, as to avoid enabling. Termination may well be the answer to protecting the company and assisting substance abusers with addressing their problem. Performance appraisals and drug testing can be used as a basis for termination.

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Appendix A: Interview Guide

1. Explain your experience with substance abuse in the workplace?
2. Explain the impact substance abuse has had on your workplace in terms of financial burden?
3. What are some of the non-financial implications attributed to substance abuse in the workplace?
4. What procedures have you found work best for addressing substance abuse when the problem occurs?
5. What measures should be avoided when dealing with substance abuse in the workplace?
6. Is there anything else that would be helpful for me to know that we have not already discussed?

Appendix B: Survey Instrument

The following assessment is anonymous and confidential. No identifying information will be collected. There will be a short section that request participant demographic information followed by an assessment to understand the prevalence of substance abuse among public accountants in the state of Louisiana as part of a doctoral research project on the matter. This assessment will be followed by two optional open-response questions. These open-response questions are meant to understand the impact substance use has on public accounting firms in the state of Louisiana and proven means for addressing the problem when the illness occurs.

Demographic Questions

1. What is your gender?
 - a. Male
 - b. Female
 - c. Prefer not to answer.

2. What is your age?
 - a. 18 – 25
 - b. 26 – 35
 - c. 36 – 45
 - d. 46 – 55
 - e. 56 – 65
 - f. 66+
 - g. Prefer not to answer.

3. What is your ethnicity?
 - a. Caucasian

- b. African American
 - c. Latino or Hispanic
 - d. Asian
 - e. Native American
 - f. Native Hawaiian or Pacific Islander
 - g. Other
 - h. Prefer not to answer.
4. What is your highest level of education?
- a. Some High School
 - b. High School
 - c. Bachelor's Degree
 - d. Master's Degree
 - e. Ph.D. or higher
 - f. Trade School
 - g. Prefer not to answer.
5. What is your marital status?
- a. Single
 - b. Married
 - c. Divorced
 - d. Prefer not to answer.
6. What is your annual income?
- a. 0 – 25,000
 - b. 25,001 – 50,000

- c. 50,001 – 75,000
- d. 75,001 – 100,000
- e. 100,001 – 150,000
- f. 150,000 – 200,000
- g. 200,000+
- h. Prefer not to answer.

CAGE-AID

1. Have you ever felt you ought to cut down on your drinking or drug use? (Y/N)
2. Have people annoyed you by criticizing your drinking or drug use? (Y/N)
3. Have you felt bad or guilty about your drinking or drug use? (Y/N)
4. Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)? (Y/N)

Optional Open-Response Questions:

1. Has substance abuse impacted your practice (firm), if so, how? (0 - 500 words)
2. What measures should be taken to address substance abuse when the problem occurs in the workplace? (0 - 500 words)