

Isolation During The COVID-19 Pandemic and People with Substance Use and Mental Disorders

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Abstract

The COVID-19 pandemic brought about unprecedented changes to daily life, including widespread social isolation, disruption of routines, and limited access to healthcare services. These conditions created a particularly challenging environment for individuals with substance use disorders (SUDs), a population already vulnerable to social and emotional instability. Isolation, uncertainty, and increased psychological stress contributed to a rise in substance use and relapse during this period (Czeisler et al., 2020; Panchal et al., 2021). While quantitative data has captured some of the trends in usage and relapse rates, there remains a critical need to understand the lived experiences of those affected. This qualitative study explored how pandemic-induced isolation affected individuals struggling with SUDs, focusing on their emotional, behavioral, and social experiences during lockdown. The aim was to gain deeper insights into the psychological toll of isolation, coping mechanisms employed, and perceived barriers to recovery support, thereby informing future clinical and policy responses in times of crisis. Guided by operant learning theory, this qualitative study explored the impact of pandemic-induced isolation on individuals with SUD and co-occurring mental health disorders, from the perspective of clinicians. Seven mental health professionals who provided care before, during, and after the isolation period in the United States were recruited using snowball sampling. Data were collected through semi-structured Zoom interviews and analyzed using a generic qualitative method with NVivo software. Three major themes and ten categories emerged, revealing that isolation exacerbated symptoms of anxiety, depression, and substance use, even in individuals with no prior mental health diagnoses. Clinicians highlighted the importance of adaptability, the rapid implementation of telehealth, and the need for both client and provider training in digital tools. Findings suggest that clinician experience played a critical role in navigating pandemic-

related challenges and maintaining continuity of care. The study underscores the necessity of investing in future preparedness, including increased technological training and strategic planning for mental health professionals and clients alike. Recommendations and future research directions include the development of scalable, flexible treatment approaches to be employed during similar public health crises.

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Chapter 1: Introduction

The COVID-19 pandemic caused widespread disruption and devastation, particularly among individuals with pre-existing mental health conditions, including substance use disorders (Dubey et al., 2020; Rogers et al., 2020). Researchers demonstrated that the pandemic exacerbated challenges for these individuals by enforcing social isolation and significantly interrupting access to substance use treatment and recovery services (Alexander et al., 2020; Volkow, 2020). Isolation, stress, and uncertainty contributed to heightened symptoms of anxiety and depression, which led many individuals to increase their use of substances as a maladaptive coping strategy (Taylor et al., 2021; Pfefferbaum & North, 2020).

Substance use reportedly increased during the pandemic as individuals struggled to manage psychological distress, disrupted routines, and limited social support (Czeisler et al., 2020; Pollard et al., 2020). According to Panchal et al. (2023), the share of adults reporting symptoms of anxiety and depression rose significantly from January 2019 to January 2020, indicating a sharp escalation in mental health issues during the pandemic. Furthermore, research showed that many individuals resorted to self-medication through drug and alcohol use in response to pandemic-related stressors (Clay & Parker, 2020; SAMHSA, 2021).

The pandemic also negatively impacted physical health outcomes, contributing to increased morbidity and mortality rates, particularly among vulnerable populations (Czeisler et al., 2020; WHO, 2021). Loneliness and social disconnection during lockdowns were associated with declines in both physical and mental well-being, as well as increases in substance abuse, strained interpersonal relationships, and perceived stigma (Ingram et al., 2020; Loades et al., 2020). McKnight et al. (2020) reported that 13% of adults, approximately 51 million individuals, experienced worsening mental health, and 7.7% of them reported developing or relapsing into a

substance use disorder. Substance abuse rates rose significantly, with studies indicating that before the pandemic, 1 in 10 adults reported substance use problems, whereas this figure increased to 4 in 10 during the height of the pandemic (Niles et al., 2020; Chacon et al., 2021; Horigian et al., 2021). This surge highlighted the urgent need for accessible mental health and addiction services during and after public health emergencies.

COVID-19 significantly disrupted substance use disorder (SUD) treatment, particularly by enforcing isolation and prompting a shift to telehealth services. This transition, combined with reduced availability of in-person support and limited treatment resources, led to increased relapse rates and more severe withdrawal symptoms among individuals with SUD (Cioffi et al., 2020; Uscher-Pines et al., 2020). The pandemic exacerbated psychological stressors in individuals with addiction disorders, amplifying levels of worry, fear, and emotional dysregulation, largely due to dysregulated cortisol responses and impaired stress management mechanisms (Rogers et al., 2020; Kim et al., 2020). Many clients were unable to adhere to treatment plans, resulting in treatment discontinuation or deterioration in recovery progress (Volkow, 2020; Becker & Fiellin, 2020).

Even before the pandemic, limited support services were available for parents of clients with SUD, especially in the form of coaching or counseling to prevent harmful parenting practices and absenteeism. COVID-19 further widened this gap, highlighting longstanding inadequacies in community-level prevention and support strategies (Cioffi et al., 2020; Lechner et al., 2020). The societal and communal impact of substance use remained a pressing concern and became increasingly severe during the pandemic due to the compounded stress of economic instability, fear of infection, and prolonged isolation.

Furthermore, no sustainable national approach emerged during the pandemic to effectively address rising rates of substance misuse, in part due to the unpredictability and resource strain caused by the health crisis (SAMHSA, 2021). Studies reported significant increases in mental health concerns and substance use during this period (Horigian et al., 2021). Although the long-term consequences of pandemic-induced isolation remain uncertain, existing research has documented substantial increases in alcohol and drug use. For instance, 23% of adults reported increased alcohol consumption and 16% reported heightened drug use, both of which were significantly associated with elevated stress, social distancing measures, and emotional symptoms (Taylor et al., 2021; Veldhuis et al., 2021). These findings underscored the critical link between isolation, stress response, and maladaptive coping behaviors, which became particularly evident among individuals suffering from co-occurring mental health and substance use disorders.

Statement of the Problem

The problem to be addressed by this study was that the isolation conditions resulting from the COVID-19 pandemic contributed to increased relapses, intensified substance use, and disrupted access to treatment among adults with substance use disorders and co-occurring mental health conditions (Rogers et al., 2020; Yeager et al., 2022). Lockdowns and social restrictions were associated with elevated stress levels and a rise in mental health disorders, including depression, anxiety, and mood disorders, all of which have been linked to the initiation or escalation of substance use as a maladaptive coping mechanism (McKnight et al., 2021). These effects were further exacerbated by limited opportunities to seek help, as pandemic-related restrictions significantly reduced access to treatment services and support networks (Horigian et al., 2020).

Consequently, many adults experienced increased loneliness and reported higher rates of suicidal ideation, often in connection with worsening mental health and greater reliance on alcohol and drug use (Panchal et al., 2023). The compounded impact of pandemic-induced isolation on individuals with SUDs created immediate clinical concerns, such as heightened suicide risk and reduced treatment engagement, as well as potential long-term social consequences related to widespread addiction and mental health challenges across various communities.

Although research has documented these trends, many studies relied heavily on quantitative self-report measures, which are inherently limited in their ability to capture complex, real-world experiences (Rogers et al., 2020; McKnight et al., 2021; Yeager et al., 2022). As a result, there have been calls to expand data collection efforts beyond self-reports and incorporate more robust, qualitative methodologies. Dowd et al. (2022) specifically emphasized the need to include the perspectives of clinicians, who possess firsthand insight into clients' behavioral changes, relapse trajectories, and barriers to care, as a critical yet underrepresented source of information. Therefore, addressing this research gap requires obtaining clinician perspectives to develop a more comprehensive understanding of the pandemic's impact on adults with SUDs, ultimately contributing to improved treatment responses and preparedness for future public health crises.

Purpose of the Study

The purpose of this qualitative descriptive study was to explore clinicians' perspectives on how pandemic-induced isolation influenced the underlying reasons and mechanisms influencing clients' experiences with substance use, mental health symptoms, and treatment access in the United States. The study focused on the lived clinical experiences of professionals

who provided therapy or counseling to individuals with co-occurring mental health and substance use disorders during the COVID-19 pandemic. Clinicians were positioned to observe the compounded effects of social isolation, increased stress, and limited treatment access, offering a critical lens into these intersecting crises (Galea et al., 2020; Volkow, 2020). An additional purpose was to explore the accommodations and strategies used by clinicians and clients affected by pandemic-induced isolation.

The participants provided insights that could inform clinical interventions, public health responses, and future preparedness strategies to support vulnerable populations during large-scale disruptions. This study included 8 to 12 licensed clinicians who met the following criteria: (a) held a master's degree in psychology or a related mental health field, (b) possessed licensure in clinical alcohol and drug counseling or an equivalent credential, (c) were at least 18 years of age, and (d) resided in the United States (NAMI, 2020). These criteria ensured that participants had relevant expertise and were directly engaged in mental health and addiction treatment during the pandemic.

Participants were recruited through snowball purposive sampling, which allowed the researcher to identify and engage individuals with specific expertise in treating clients with SUDs. Initial recruitment was conducted via email outreach to known contacts within the researcher's professional network, and those participants were then asked to refer other eligible clinicians (Palinkas et al., 2015; Yang et al., 2021). This method was particularly effective given the restricted in-person access and need for trust during the pandemic. Semi-structured interviews were conducted via Zoom and lasted approximately 30 minutes. With participants' informed consent, all interviews were audio-recorded and transcribed verbatim for analysis.

A thematic analysis approach was used to code and interpret the data, allowing for the identification of recurring patterns and themes across participant responses (Braun & Clarke, 2006; Nowell et al., 2017). This method facilitated a rich understanding of the clinicians' observations regarding pandemic-related relapse, treatment disruptions, and emotional challenges faced by their clients. NVivo software was used to assist in data coding, organization, and visualization. It helped sort participant responses, identify thematic clusters, and support the analytical process (Zamawe, 2015). The use of NVivo ensured systematic handling of qualitative data and enhanced the transparency and credibility of the findings.

Introduction to Conceptual Framework

Learning theories provided a useful lens for understanding how pandemic-induced isolation influenced individuals suffering from substance use disorders (SUDs). These theories explained addiction as a result of compulsive and impulsive behaviors that developed through processes such as learning, conditioning, and reinforcement of behavioral tendencies (Begun, 2017; Wahome, 2022). In particular, operant learning theory served as the conceptual framework for this study, offering insight into how behavioral patterns of substance use were shaped by the consequences of actions, especially under altered environmental conditions caused by the COVID-19 pandemic.

Operant conditioning, as first proposed by B.F. Skinner, described how behavior was acquired or extinguished based on reinforcement or punishment. Behaviors that were followed by positive outcomes were more likely to be repeated, whereas those followed by negative outcomes were less likely to recur (Hergenhahn & Olson, 2005; Teesson et al., 2011). This principle was particularly relevant during the pandemic, as individuals experienced substantial

changes in their social and physical environments that altered the reinforcement contingencies associated with substance use.

The learning theory also emphasized the influence of social, familial, and environmental factors in the development and maintenance of addiction. These external variables played a critical role in shaping behaviors associated with substance use (Marlatt & Donovan, 2005; Wahome, 2020). During the COVID-19 pandemic, these influences shifted significantly due to imposed isolation, reduced social interactions, limited treatment access, and increased psychological stress. As a result, reinforcement patterns changed some individuals increased their substance use as a form of positive reinforcement (e.g., to achieve feelings of relief, pleasure, or escape), while others may have used substances to reduce negative reinforcement (e.g., to avoid anxiety, loneliness, or withdrawal symptoms) (Eysenck, 1970; Terry, 2009).

The pandemic altered both the availability and the consequences of engaging in substance-related behaviors. For example, individuals who previously used substances in social settings may have encountered fewer social triggers due to lockdowns, potentially leading to a reduction in use. Conversely, others may have used substances more frequently due to isolation, boredom, or loss of access to coping resources. These changes in behavioral contingencies aligned with operant learning theory and emphasized the need to explore how such reinforcers influenced relapse, treatment adherence, and coping mechanisms during the pandemic (Foddy, 2017; Koob & Volkow, 2016).

Researchers previously called for the extension of operant learning theory to explore how addiction behaviors were shaped by crises like the COVID-19 pandemic (Wahome, 2020). Understanding the effects of isolation on reinforcement patterns and behavioral regulation provided important insights into addiction during such periods. Clinicians, who directly observed

behavioral changes among clients with SUDs, offered critical perspectives on how pandemic-induced isolation altered both positive and negative reinforcers, contributing to changes in substance use behaviors and treatment outcomes.

Introduction to Research Methodology and Design

This study employed a qualitative descriptive research design, which is characterized by its flexibility and use of naturalistic methods for collecting and analyzing data within real-world contexts (Creswell, 2009; Colorafi & Evans, 2016). This design was appropriate for the study as it allowed for a straightforward and rich description of clinicians' lived experiences working with clients affected by pandemic-induced isolation and substance use disorders (SUDs). The research methodology followed descriptive qualitative principles and avoided manipulating the study environment. The goal was to capture the participants' perspectives naturally and authentically (Lambert & Lambert, 2012).

The qualitative descriptive approach offered several advantages. First, it enabled the customization of the research process based on the needs of the study, providing a pragmatic and accessible approach for novice and experienced researchers alike (Sandelowski, 2000). Second, it supported the exploration of complex issues and contextual factors by addressing key questions about how COVID-19 influenced addictive behaviors and treatment outcomes (Mertz, 2017). Third, the design emphasized the importance of understanding participant behavior within a holistic cultural and social context, allowing for the capture of meaningful patterns (Neergaard et al., 2009). Fourth, it facilitated a direct portrayal of the participants' perspectives using verbal accounts without heavy abstraction or theoretical interpretation (Sandelowski, 2010). Fifth, it allowed for the generation of detailed insights into the characteristics of clients and the contextual variables associated with addiction during the pandemic (Brannan et al., 2022).

Finally, it enabled clinicians to interpret and explain the experiences of clients with SUDs and co-occurring mental disorders through semi-structured interviews (Bradshaw et al., 2017; Vaismoradi et al., 2013).

Data were collected from seven licensed clinicians who provided counseling or therapy services to individuals with substance use and mental health disorders during and after the COVID-19 pandemic. Participants were recruited via email after receiving Institutional Review Board (IRB) approval. A snowball purposive sampling strategy was used to identify individuals with the relevant clinical experience and knowledge of the population under study (Yang et al., 2021). Each semi-structured interview lasted approximately 30 minutes and was conducted and recorded via Zoom, allowing for flexibility and safety during ongoing pandemic conditions. The interviews encouraged open-ended responses and included follow-up questions to clarify and expand on key points (DeJonckheere & Vaughn, 2019). This approach created a collaborative dialogue between the researcher and participants, enhancing the depth of responses.

The data were transcribed verbatim and imported into NVivo qualitative analysis software. A thematic analysis approach was used to code the data, identify recurring patterns, and generate themes that captured the clinicians' interpretations of the effects of pandemic-related isolation on clients' substance use and mental health symptoms (Braun & Clarke, 2006). The analysis focused on how these factors influenced relapse, coping mechanisms, treatment accessibility, and outcomes. The results offered a deeper understanding of the challenges faced by both clinicians and clients and provided potential directions for improving treatment during public health crises.

Research Questions

RQ1

How do clinicians working with substance users describe the way that pandemic-induced isolation during the COVID-19 pandemic affected their clients' substance use and mental disorders?

RQ2

What accommodations and strategies did clinicians and clients use to address the challenges of social isolation during the pandemic?

Definitions of Key Terms

Substance Use Disorder. Substance Use Disorder (SUD) is defined in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5) as a problematic pattern of substance use leading to clinically significant impairment or distress, manifested by at least two of 11 criteria occurring within a 12-month period. These criteria include tolerance, withdrawal, unsuccessful attempts to cut down, excessive time spent obtaining or using the substance, and continued use despite social or interpersonal problems (American Psychiatric Association [APA], 2013).

SUD involves substances such as opioids, alcohol, cannabis, hallucinogens, stimulants (e.g., cocaine, methamphetamine), and nicotine. Chronic use often interferes with occupational, academic, or personal responsibilities. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), approximately 40.3 million people aged 12 or older in the U.S. had a SUD in 2020, a significant increase from previous years, partly due to stress and isolation during the COVID-19 pandemic (SAMHSA, 2021).

Substance Abuse. Substance abuse is characterized by the continued use of a substance despite negative consequences in personal, social, or occupational domains. Hansell and Damour (2008) describe abuse as the initial stage of substance-related problems, which can lead to legal issues, health complications, and dangerous behaviors such as impaired driving. Repeated abuse without intervention can transition into dependence, where biological and psychological addiction mechanisms dominate.

Substance Dependence. Substance dependence, a more severe progression of SUD, includes compulsive drug-seeking behavior and loss of control over substance use. The DSM-5 does not separate "abuse" and "dependence" as the DSM-IV did, but rather views them on a continuum under the umbrella of SUD (APA, 2013). Dependence often results in physical symptoms, including withdrawal and tolerance, indicating physiological adaptation to the substance. Individuals may continue use despite knowledge of physical or psychological harm (Hansell & Damour, 2008).

Substance Use. Substance use refers to the consumption of legal or illegal substances such as alcohol, nicotine, and recreational drugs. While initial use may be occasional and voluntary, patterns of frequent or high-dose use, particularly in response to stress or trauma, can lead to misuse. During the pandemic, alcohol sales in the U.S. increased by 54% in March 2020 compared to the same period in 2019, signaling a rise in self-medication behaviors during lockdowns (Pollard et al., 2020).

Vulnerability and Pandemic Stress. Vulnerability is the state of being at increased risk for harm due to internal (e.g., mental health history) or external (e.g., social isolation) factors (Hamilton et al., 2007). The COVID-19 pandemic significantly heightened vulnerability for many individuals due to disruptions in social support, financial stress, and limited access to

treatment services. Furtuna (2020) emphasized that increased isolation, uncertainty, and anxiety during the pandemic led many individuals to turn to substances as a coping mechanism. Studies have shown a strong correlation between loneliness and increased alcohol or drug consumption (Clay & Parker, 2020). Additionally, emergency room visits for drug overdoses increased by 30% in 2020 compared to 2019 (Centers for Disease Control and Prevention [CDC], 2021), indicating the pandemic's toll on substance-related behaviors.

Significance of The Study

The COVID-19 pandemic significantly affected individuals' mental, psychological, and physical health. For people with substance use disorders (SUD), the disruption of routines, treatment services, and support systems exacerbated existing vulnerabilities (Dubey et al., 2020; Volkow, 2020). Stress, fear of infection, unemployment, and isolation served as major risk factors that heightened the severity of addiction-related behaviors. Social distancing and quarantine orders rendered many in-person services, such as medication management, counseling, and group therapy, unrealistic or unsustainable (Becker & Fiellin, 2020; Krawczyk et al., 2020). These disruptions prevented many individuals from seeking timely help, increasing the risk of relapses and overdose.

This study was significant in highlighting how pandemic-induced isolation exacerbated challenges for individuals with substance use disorders (SUD), as observed by licensed therapists. It provided insights into the mental health consequences of social isolation, informed clinical responses during public health crises, and underscored the need for adaptive, integrated treatment approaches in future emergencies. Findings from the study were intended to provide insight into the ways COVID-19 altered substance use patterns and treatment engagement. This knowledge could help clinicians better understand the behavioral and emotional needs of clients,

enabling them to tailor interventions more effectively to support recovery in similar future crises (Horigian et al., 2021).

The study also contributed to the growing body of literature examining the intersection of public health emergencies and addiction treatment. Ornell et al. (2020) noted that individuals with SUD are an especially at-risk population due to factors such as co-occurring mental health disorders, housing instability, and reduced access to health care. Research conducted during the pandemic indicated increased rates of alcohol use, opioid overdoses, and substance misuse, particularly among individuals experiencing isolation and loneliness (Pollard et al., 2020; Haley & Saitz, 2020). For instance, emergency department visits for drug overdoses in the U.S. rose by 30% in 2020 compared to 2019 (Centers for Disease Control and Prevention [CDC], 2021).

Understanding the pandemic's effects on addiction helped inform future emergency preparedness strategies and interventions. The study aimed to shed light on how vulnerable populations coped with the emotional burden of COVID-19 and how service disruptions impacted long-term recovery outcomes (Marsden et al., 2020). Although the findings were not intended to be generalized to all individuals with SUD due to the study's qualitative nature, they served as a valuable foundation for future research and policy recommendations.

Summary

The COVID-19 pandemic posed unprecedented challenges to the treatment of individuals with substance use disorders (SUDs) and co-occurring mental health conditions. This qualitative descriptive study investigated the impact of pandemic-induced isolation from the perspectives of licensed clinicians in the United States. Drawing on operant learning theory (Skinner, 1953), the study examined how environmental stressors and social disconnection during lockdowns influenced behavioral changes related to substance use.

The study employed snowball sampling to recruit 8 to 12 licensed mental health clinicians who had experience treating clients with SUDs and mental health disorders before, during, and after the pandemic. Semi-structured interviews were conducted via Zoom, and the data were analyzed using NVivo software to identify recurring patterns and thematic insights. Findings revealed that isolation contributed to heightened symptoms of anxiety and depression, increased risks of relapse, and the emergence of new psychiatric symptoms among individuals without prior diagnoses (Horigian et al., 2021; Pfefferbaum & North, 2020). Clinicians reported that while the rapid transition to telehealth services enabled continuity of care, it also presented substantial challenges. These included technological barriers, reduced access to in-person support systems, and emotional disengagement from therapeutic processes (Uscher-Pines et al., 2020; Smith et al., 2022).

The study emphasized the necessity for greater investment in clinician training for digital service delivery and the development of flexible treatment models tailored to crisis conditions. Moreover, clinicians highlighted the importance of improving infrastructure to support remote mental health interventions, especially for marginalized and high-risk populations (Becker & Fiellin, 2020; Volkow, 2020).

This research provided practical implications for mental health professionals and policymakers. It supported the development of integrated emergency response strategies that address both technological readiness and psychological resilience. The findings contributed to the expanding body of literature on the psychological and behavioral effects of COVID-19 and offered guidance for future interventions targeting vulnerable populations during public health emergencies (Marsden et al., 2020; Ornell et al., 2020).

Chapter 2: Literature Review

The problem addressed in this study was the rise in substance abuse among adults with substance use disorders (SUDs) related to pandemic-induced isolation during the COVID-19 pandemic (Rogers et al., 2020; Yeager et al., 2022). The purpose of this qualitative descriptive study was to better understand how isolation during the COVID-19 pandemic affected substance abuse among adults with SUDs, as reported by clinicians (Panchal et al., 2020). Interviews with clinicians working in the substance abuse field provided opportunities for open dialogue (Kim et al., 2020), allowing for the identification of barriers presented by pandemic-related isolation and offering insights into changes needed in treatment approaches during current and future pandemics.

The literature reviewed was primarily obtained from Northcentral University's library databases, which offered access to extensive scholarly research. Databases utilized included ProQuest, SAGE, ERIC, ScienceDirect, and Google Scholar. Most references came from peer-reviewed journal articles, while other sources included academic textbooks and authoritative websites. Government and institutional resources such as the National Institute on Drug Abuse (NIDA), the National Library of Medicine, the American Psychological Association (APA), the Substance Abuse and Mental Health Services Administration (SAMHSA), and the Centers for Disease Control and Prevention (CDC) were also consulted.

Search terms used in the review process included but were not limited to: *pandemic-induced isolation and substance use disorder*, *COVID-19 and substance abuse*, *effects of isolation on addiction*, and *impact of the pandemic on mental health and SUDs*. These keywords supported a targeted and systematic approach to locating relevant and recent literature. This chapter includes a presentation of the theoretical framework of Skinner's operant learning theory

that guided the study and a comprehensive review of the literature related to substance use and abuse. Major themes discussed in the chapter included: Substance Abuse and Use, Stages of Substance Abuse and Use, Recreational Use Stage, Risky Use Stage, Dependency/Addiction Stage, Isolation, COVID-19 and Substance Use, COVID-19-Induced Isolation, Addiction, and Treatment. The chapter concluded with a summary of the key findings from the literature.

Theoretical or Conceptual Framework

The most influential theoretical framework that guided this study was operant conditioning theory, which was applied to understand how individuals recovered from substance use disorders through behavior modification. Operant conditioning was developed by B.F. Skinner, an American psychologist who earned his undergraduate degree from Hamilton College and completed his graduate studies at Harvard University. Skinner was widely regarded as a pioneer in behavioral psychology due to his foundational work on learning through reinforcement and punishment (Vargas, 2004). His theory proposed that behaviors followed by positive outcomes were more likely to be repeated, while those followed by negative consequences were less likely to recur.

In the context of substance use treatment, operant conditioning has been used to explain how reinforcement strategies such as contingency management and token economies help promote abstinence and long-term recovery (Higgins et al., 1994; Petry, 2000). These approaches rely on the consistent application of rewards (e.g., vouchers, privileges) for drug-free behavior, which strengthens prosocial alternatives to substance use. This is consistent with previous research in demonstrating that behavior-based models are particularly effective in supporting recovery in both outpatient and residential treatment settings (Stitzer & Petry, 2006). Therefore, the framework supported this study's analysis of clinicians' perspectives on how clients modified

their behaviors during pandemic-related isolation, especially in settings where positive reinforcement was limited or disrupted.

Origin and Historical Foundations of Operant Conditioning

The foundation of behaviorism emerged as a response to introspective methods dominant in early psychology, which emphasized internal thought processes. Instead of relying on unobservable mental states, behaviorists argued that observable behavior and its relationship with environmental stimuli were more scientifically valid objects of study (Cervone et al., 2010). John B. Watson, often regarded as the father of behaviorism, proposed that behaviors could be measured, trained, and altered through environmental manipulation (Goodwin, 2005). His theory suggested that personality and emotional responses were learned through conditioning and environmental exposure. Watson's pioneering work laid the foundation for later theories of learning, particularly classical conditioning, which was initially introduced by Ivan Pavlov. Classical conditioning described learning as an associative process between a neutral stimulus and an unconditioned stimulus to produce a conditioned response (Cervone et al., 2010). These early ideas about learned behavior significantly influenced subsequent theorists, especially B.F. Skinner, who expanded the framework of behaviorism into the theory of operant conditioning.

Operant Conditioning and Behavioral Theory

The Operant Learning theory emphasized that behavior is shaped and maintained by its consequences (Hergenhahn & Olson, 2005). Skinner (1953) asserted that behaviors followed by rewarding outcomes are more likely to be repeated, whereas those followed by punishment are less likely to recur. Much of his research was conducted using the "Skinner box," a controlled experimental environment in which he trained animals, such as rats, to perform specific actions to receive reinforcement. Skinner also introduced the concept of radical behaviorism, proposing

that environmental contingencies could explain all human behavior without invoking internal mental states or cognitive processes (Baum, 2011).

Through these experiments, Skinner demonstrated that behavior could be systematically modified using reinforcement schedules (Vargas, 2004). He differentiated between two forms of behavior: respondent behavior, which occurred automatically in response to stimuli, and operant behavior, which was influenced by its consequences (Catania, 1984). Operant conditioning was thus defined as a learning process where behavior was modified through positive or negative reinforcement and punishment. Positive reinforcement involved presenting a pleasant stimulus to increase the likelihood of a behavior's recurrence. For example, Skinner's rats received food when they pressed a lever, reinforcing the behavior through reward (Skinner, 1969; Terry, 2009). In contrast, negative reinforcement referred to the removal of an unpleasant stimulus to strengthen behavior. Eggen and Kauchak (2010) noted that behaviors increased in frequency when an aversive condition was eliminated as a result of the behavior, such as pressing a lever to stop a loud noise.

Applications of Behaviorism in Mental Health and Substance Use

The principles of operant conditioning found wide application in fields such as psychotherapy, education, and behavior modification. Particularly relevant to this study, behaviorism has played a critical role in understanding and treating substance use disorders. Behavioral theorists posited that drug use was reinforced both positively, through the euphoric effects of the substance, and negatively, by alleviating stress, anxiety, or withdrawal symptoms (Comer, 2005). For example, individuals who experienced relief from psychological distress after substance use were likely to repeat the behavior, illustrating negative reinforcement. Similarly, the pleasurable effects of substances acted as positive reinforcement, increasing the

likelihood of continued use (Foddy, 2017). These reinforcements created patterns of dependence, as users began associating certain behaviors, environments, or emotional states with substance intake.

Behavioral theorists also noted that individuals with co-occurring mental health conditions, such as mood disorders, PTSD, schizophrenia, or histories of trauma, were particularly susceptible to substance abuse (Comer, 2005). For these individuals, substances often served as self-medication, offering temporary relief from psychological symptoms. Furthermore, environmental cues present during drug use could become conditioned stimuli, later triggering cravings or similar emotional responses, further entrenching addiction. McCord and Laub (1995) emphasized that reinforcement shaped behavior through reward and avoidance of punishment, while punishment weakened behavior by introducing aversive consequences or removing positive reinforcers. These mechanisms provided the basis for behavioral interventions, such as contingency management and cognitive-behavioral therapy, both of which have demonstrated effectiveness in treating SUD and related mental health conditions.

Critiques and Strengths of the Behavioral Approach

Despite its contributions, behaviorism has faced criticism for minimizing the role of internal cognitive and emotional processes. Despite its experimental rigor and practical applications, critics have argued that behaviorism's focus on observable behavior excluded important psychological factors unique to human experience (Moore, 2011). Nevertheless, the behavioral approach remains one of the most empirically grounded and systematically studied theories in psychology. Cervone et al. (2010) noted that one of its key strengths lay in its reliance on replicable experiments and its ability to explain a wide range of phenomena through a single theoretical system. Therefore, the theoretical foundation of operant conditioning provided a

robust lens through which substance use and behavior change could be understood. Its relevance in mental health treatment, particularly during crises such as the COVID-19 pandemic, offers valuable insights into client behaviors and the strategies clinicians might employ to support recovery.

Alternative Approaches to Managing Addiction

All behavioral approach treatments utilized behavioral therapies in conjunction with the principles of reinforcement and punishment, as outlined in operant conditioning theory, to promote positive behaviors (Witkiewitz et al., 2011; Marlatt & Donovan, 2005). The behavioral approach commonly employs Behavioral Self-Control Training (BSCT) to treat individuals with alcohol use disorders. In this approach, clients monitor and record their alcohol consumption, noting key details such as the time, location, emotions, and situational triggers. This self-monitoring process increases awareness of the patterns and environmental cues that lead to excessive drinking (Hester & Miller, 2003). Based on this awareness, clients learn specific behavioral techniques and coping strategies to manage or avoid high-risk situations and reduce the likelihood of relapse.

Another commonly used behavioral method was relapse prevention training (RPT), in which individuals completed the same tracking exercises as in BSCT, but were also required to plan and set limits on the number of drinks they considered appropriate. This approach has been found to reduce the frequency of intoxication (Comer, 2005; Larimer et al., 1999). While these approaches were effective for individuals who abused alcohol but were not physically dependent, RPT was also successfully applied to the treatment of marijuana and cocaine abuse (Carroll & Onken, 2005; McKay et al., 2011).

One of the strengths of the behavioral viewpoint is its ability to reduce substance use in some clients. However, a notable weakness is that, although classical conditioning may have played a role in drug abuse and dependence, it lacked consistent research support as a key explanatory factor (Higgins & Silverman, 2008). Behavioral interventions often showed limited long-term success when used as the sole treatment modality, and their effectiveness depended heavily on the individual's motivation to continue despite the unpleasantness or demands associated with the treatment (Comer, 2005; McLellan et al., 2000).

Aversion therapy was another widely applied treatment for substance-related disorders and was grounded in the principles of classical conditioning. In this treatment, clients were exposed to unpleasant stimuli while consuming the substance, thereby creating a negative association with the drug (Smith et al., 1997). For example, in the treatment of alcohol dependence, drinking was paired with drug-induced nausea and vomiting. In other cases, clients were exposed to disturbing imagery while thinking about or consuming alcohol, which also elicited aversive reactions (Elkins et al., 2006). Additionally, contingency management strategies were implemented, in which clients received incentives for providing drug-free urine samples (Petry et al., 2000; Higgins et al., 1994).

During the COVID-19 pandemic, stressors related to isolation and anxiety-related disorders compromised individuals' resilience in coping with life changes. Individuals experiencing isolation were less likely to adapt effectively to the dramatic shifts in daily life (Avena et al., 2021; Pfefferbaum & North, 2020). Pandemic-induced isolation created a new context in which the causes, effects, and consequences of substance use disorder behaviors became increasingly evident (Volkow, 2020). While some individuals found the isolation tolerable or even enjoyable, others experienced it as deeply distressing. These environmental

shifts led many people to turn to substances as a coping mechanism for anxiety and uncertainty (Serafini et al., 2020; Taylor et al., 2021). This change in behavior was illustrated by a marked increase in substance use. For instance, national alcohol sales rose by 54% during the peak of the pandemic in March and April 2020, compared to the same period the previous year (Avena et al., 2021; Pollard et al., 2020). Such data reflected the heightened vulnerability to SUDs triggered by stress and isolation, further reinforcing the need to examine substance use behaviors in the context of pandemic-induced stressors (Clay & Parker, 2020).

COVID-19 Isolation Causes Co-Occurring Disorders to Develop

A co-occurring disorder refers to the simultaneous presence of a substance use disorder and one or more mental health disorders, such as depression, anxiety, or bipolar disorder (Desrosiers et al., 2019). Research showed that nearly 80% of individuals with mental health issues also experienced substance abuse, revealing a high degree of comorbidity between these conditions (Desrosiers et al., 2019; Regier et al., 1990). Often, one disorder appeared first, either the psychiatric condition or the substance use issue, which subsequently influenced the emergence of the other (Mueser et al., 1998). The development of these disorders occurred gradually and dynamically, with one condition exacerbating or altering the course of the other over time. However, researchers had not fully understood the precise mechanisms through which mental health disorders led to substance abuse or vice versa (Kessler et al., 2005). Co-occurring disorders frequently presented with symptoms such as emotional dysregulation, increased impulsivity, social withdrawal, and risky sexual or physical behaviors, which had significant consequences on the individual's well-being, relationships, and occupational functioning (Sacks et al., 2008; SAMHSA, 2020).

The Substance Abuse and Mental Health Services Administration (SAMHSA, 2020) described co-occurring disorders as involving a wide range of combinations, such as anxiety disorders, bipolar disorder, schizophrenia, and attention-deficit/hyperactivity disorder (ADHD), paired with substance use. Co-occurring disorders were considered among the most challenging and devastating diagnoses due to the complex interactions between symptoms, behaviors, and risk factors (Gordon, 2018). Epidemiological studies, such as the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), provided extensive data on the co-occurrence of mental illness and substance abuse. In one such study, Mericle, Ta, and Arria (2012) found that 20% of individuals with substance use disorders also suffered from non-substance-induced mental health conditions, particularly mood and anxiety disorders. In these cases, each disorder intensified the severity of the other, resulting in increased treatment difficulty, poorer outcomes, and higher relapse rates.

The severity of a co-occurring disorder varies based on the intensity of the mental illness and the level of substance dependency and requires integrated treatment that addresses both disorders simultaneously (Drake et al., 2004; Gordon, 2018). Treatment approaches that failed to address both conditions often resulted in suboptimal recovery outcomes and higher rates of relapse and rehospitalization (Sacks et al., 2008). Hence, the treatment process for individuals with co-occurring disorders is often complex. Effective recovery requires evidence-based, integrated care that treats both the psychiatric condition and the substance use disorder together rather than separately (Drake & Mueser, 2000).

Environmental factors, including trauma, stress, abuse, and socioeconomic disadvantages, played a major role in triggering co-occurring disorders (Mueser et al., 1998; Sher, 2021). Many individuals with dual diagnoses had histories of physical or emotional abuse,

which contributed to poor coping mechanisms and increased substance use as a means of self-medication (Khantzian, 1997). During the COVID-19 pandemic, environmental stressors were exacerbated, particularly due to pandemic-induced isolation, financial instability, and grief. In a study conducted in China, 19% of abstinent alcohol users and 25% of abstinent smokers relapsed, while 32% of regular drinkers and 20% of regular smokers increased consumption during the pandemic (Sher, 2021). These figures highlighted how pandemic stressors reignited or intensified co-occurring disorders.

The environmental impact of COVID-19 extended beyond isolation to include disrupted routines, limited access to mental health services, and the trauma of loss. These stressors contributed to the onset or worsening of psychiatric conditions, which in turn fueled substance use (Pfefferbaum & North, 2020). Clients reported worsening anxiety, depression, and PTSD symptoms, leading many to self-medicate with alcohol, nicotine, or illicit drugs, thereby increasing their vulnerability to relapse and dual diagnosis (Volkow, 2020).

SAMHSA also identified contributing factors like divorce, homelessness, income inequality, and limited healthcare access as central to the development and maintenance of co-occurring disorders. These socioeconomic and psychosocial stressors disproportionately affected marginalized populations, who experienced higher rates of both mental illness and substance abuse during and after the pandemic (Han et al., 2022; SAMHSA, 2020).

Substance Abuse

Substance abuse is different from general substance use in that prolonged use could escalate into a pattern of compulsive and harmful behavior. According to Hansell and Damour (2008), substance abuse assessment is based on a 12-month pattern of recurrent drug use, legal or illegal, that interferes with daily functioning. Clinicians often assess the severity of abuse using

the "Three C's" criteria: (1) continued use despite harm, (2) compulsive use, and (3) loss of control over use. These criteria provide a framework for understanding how substance use progresses into abuse and how it impacts an individual's functioning and decision-making (Washton & Zweben, 2006).

Individuals often engage in such use to alter consciousness, relieve stress or pain, or simply out of boredom. This pattern of abuse leads to clinically significant impairment, characterized by one or more of the following: failure to meet life's obligations, substance use in hazardous situations (e.g., driving while intoxicated), recurrent legal issues related to use, and continued use despite interpersonal and social problems (Hansell & Damour, 2008). Notably, Hansell et al. (2008) emphasized that substance abuse did not necessarily involve tolerance or physical dependence but was instead defined by the negative consequences of repeated use.

Substance abuse encompassed a wide range of drugs, including both naturally occurring substances like marijuana and synthetic or lab-created drugs such as opioids and stimulants (National Institute on Drug Abuse [NIDA], 2024). Legally available substances such as alcohol and nicotine is also commonly abused. For example, alcohol abuse was described by Comer (2005) as involving the consumption of large quantities of alcohol, often to the point of blackout or extreme intoxication, and becoming dependent on alcohol to engage in everyday behaviors or cope with anxiety. The patterns varied as some individuals drank heavily for days or weeks, losing memory of their intoxicated episodes, while others confined their abuse to specific times like evenings or weekends.

Repeated substance abuse alters brain chemistry, particularly by increasing dopamine activity, which reinforces drug-seeking behavior and impairs self-regulation (Volkow et al., 2016). Over time, these neurobiological changes lead to dependent learning, where the brain

adapts to expect the substance as part of its functioning (Mavrikaki, 2020). This maladaptive conditioning makes it increasingly difficult for individuals to cease use voluntarily, even in the face of serious negative consequences.

Etiological Perspectives on Substance Abuse

Substance abuse, whether recurrent or recent, has numerous etiological factors, indicating that no single variable accounts for its origin. Multiple theoretical perspectives—biological, behavioral, cognitive, and psychodynamic, offer explanations for the underlying causes of substance use disorders. However, no single perspective fully explains the complexity of substance abuse. Instead, a multifactorial model that integrates biological predispositions, cognitive distortions, learned behaviors, and unresolved psychological conflicts provides a more comprehensive understanding of the development and persistence of these disorders (McHugh, Hearon, & Otto, 2010; Marlatt & Donovan, 2005). This integrative approach enables clinicians to tailor treatment strategies to the unique needs and experiences of each individual, thereby enhancing the effectiveness of interventions (Najavits, 2002).

The biological perspective emphasized the role of genetic predisposition, neurotransmitter imbalances (e.g., serotonin and norepinephrine), and dysfunctions in the limbic system and HPA axis in the development of anxiety disorders (Hansell & Damour, 2008; LeDoux & Pine, 2016). The behavioral perspective explained anxiety through learning mechanisms such as classical conditioning (e.g., associating neutral stimuli with danger), operant conditioning (e.g., reinforcement of avoidance behavior), and modeling (e.g., observing anxious responses in others) (Kowalski & Westen, 2005; Mineka & Zinbarg, 2006).

Cognitive theories emphasized maladaptive thought patterns, including catastrophizing, selective attention to threat, and distorted beliefs about danger or vulnerability. These cognitive

biases contributed to persistent anxiety and panic symptoms, especially in uncertain contexts like a pandemic (Beck & Clark, 1997; Hofmann et al., 2012). The humanistic perspective linked anxiety to emotional dysregulation and unresolved internal conflicts, which were often rooted in adverse early experiences. According to this view, individuals with poor self-awareness and low self-worth were more susceptible to maladaptive emotional responses under stress (Hansell & Damour, 2008).

Biological Perspective.

From a biological perspective, researchers focused on genetic and neurobiological factors, arguing that substance use was often a form of self-medication driven by biochemical imbalances or genetic predispositions (Hansell & Damour, 2008). For instance, Shen et al. (2017) suggested that genetic vulnerability contributed to substance misuse via biochemical markers such as serum miRNAs, DNA methylation signatures, and single-nucleotide polymorphisms (SNPs) associated with addiction. These biomarkers indicate a predisposition to indulge in addictive behaviors. By revealing structural and functional brain alterations in individuals with substance use disorders, neuroimaging significantly contributed to the understanding of addiction and its neurobiological underpinnings. Hayes et al. (2020) emphasized that such advancements allowed for improved early diagnosis, treatment outcomes, and resilience profiling in those vulnerable to substance abuse.

Behavioral and Cognitive Perspectives.

The behavioral and cognitive perspectives emphasize that learned behavior, environmental cues, and cognitive distortions. From a behavioral standpoint, individuals often learn to use substances through operant conditioning, classical conditioning, or social learning, particularly from peers, family members, or media exposure (Hansell & Damour, 2008). In this

way, substance use becomes reinforced over time due to its perceived benefits (e.g., relaxation, escape), thereby increasing the likelihood of repeated behavior. Cognitively, individuals often hold irrational beliefs and expectations about drug effects, believing substances could solve emotional or psychological problems. Therefore, anticipation of a positive outcome, such as stress relief or confidence enhancement, often leads to continued or increased substance use (Beck et al., 1993).

Psychodynamic Perspective.

The psychodynamic perspective proposed that substance abuse served as a defense mechanism against unresolved emotional trauma or psychological conflict (Hansell & Damour, 2008). Early psychodynamic theorists hypothesized that individuals with emotional fixations or early attachment disruptions were more vulnerable to addiction (Flores, 2001; Khantzian, 1985), whereas modern psychodynamic approaches emphasize coping with painful emotions—such as grief, shame, or anxiety—as a central motive for substance use (Khantzian, 1997; Ulman & Paul, 2006). Bhatt (2022) noted that reinforcement (both positive and negative) could condition individuals to rely on substances for emotional regulation, creating habitual responses to emotional triggers.

Contributing Factors of Substance Abuse

The actualization of addiction often required an interaction between neurobiological vulnerability and environmental factors, including the availability of substances, access to healthy alternative rewards, and opportunities for goal-directed behavior (Heilig et al., 2021). In many cases, tell-tale signs and predisposing factors could work in tandem with probabilistic reasoning to determine the likelihood that an individual would engage in substance abuse. For instance, a genetic predisposition or family history of addiction significantly increased the

probability of future substance use, particularly when coupled with easy access to substances (Heilig et al., 2021). Thus, it could be concluded that individuals with both familial risk and high environmental availability faced a significantly higher probability of abusing substances. While each case varied individually, certain contributory factors remained predictive indicators of increased risk.

However, these contributing factors were not always causative. Stanovich (2010) warned against illusory correlations, wherein people mistakenly perceived two events as related based on preexisting beliefs, even when no statistical relationship existed. For example, assuming that all individuals with a parent who abused drugs would themselves become users reflected such a misconception. Instead, the researcher showed that belief in a relationship between variables (e.g., parental addiction and offspring substance use) increased the likelihood that individuals would perceive a connection, regardless of actual empirical evidence.

Illusory correlations were also frequently found in discussions of social status and domestic violence in relation to substance abuse. According to the National Health Care for the Homeless Council (2002), approximately 40% of homeless individuals struggled with alcohol or drug abuse, though this number varied by age, race, gender, and socioeconomic status. While peer pressure, trauma, dysfunctional parenting, and environmental stressors contributed to substance use onset, homelessness further exacerbated vulnerability through self-medication, lack of social support, untreated mental illness, and co-occurring physical disorders (Mosel, 2023).

Another commonly misinterpreted relationship was that between substance abuse and domestic violence. Several shared characteristics existed between the two conditions, including intergenerational transmission, denial or minimization, and social isolation (Martens, 2022).

However, despite frequent co-occurrence, the correlation was not necessarily causal. Research indicated that 25–50% of men who committed domestic violence had substance abuse problems, and that women who misused alcohol or drugs were more likely to be victims of domestic violence (Center for Substance Abuse Treatment [CSAT], 1997). Contrarily, substance abuse was found to be the leading trigger of adult violence some studies have shown that 26% of individuals who used substances such as alcohol, cannabis, or cocaine reported engaging in violent behavior within 12 months (Martens, 2022).

Nonetheless, experts emphasized that the association between substance abuse and domestic violence was often misinterpreted. The Women’s Rural Advocacy Program (2007) stated that no definitive evidence supported a direct causal link between the two phenomena. Some abusers were violent only while intoxicated, while others exhibited violent behaviors in the absence of substance use. Conversely, many individuals with substance use disorders did not perpetrate domestic violence. As such, using addiction as an excuse for abusive behavior was often a manipulative tactic rather than a reflection of causal influence (Women’s Rural Advocacy Program, 2007).

Stages of Substance Use and Abuse

It is important to examine the varying stages of substance use and treatment when assessing how pandemic-induced isolation affects substance use. Therapists determine appropriate treatment levels based on the client’s stage and pattern of substance use, which typically progresses from experimentation to addiction (Rosenbaum, 2016). Clinicians must assess the stage of use and then develop individualized treatment plans and goals accordingly. These stages include experimentation, recreational use, risky use, and dependency/addiction (Kaminer et al., 2018).

Experimentation Stage. The first stage, experimentation, involves infrequent or minimal use. Clients may try a substance once or a few times, often out of curiosity, and may stop if they do not enjoy its effects (Wright et al., 2020). According to Wright et al. (2020), individuals may enter this stage during COVID-19-related isolation, seeking relief from stress or emotional discomfort. They also noted that clients who progress beyond this stage often exhibit more severe symptoms, including signs of mental health disorders. Early intervention strategies, such as psychoeducation, are typically used at this stage. If the substance appears to relieve distress, clients may move to the next stage of use.

Recreational Use Stage. At the recreational use stage, individuals use substances more frequently, often in social or casual settings. Such usage may fluctuate based on stress, social influence, or opportunity (Shannon, 2020). Therapists often recommend preventive treatments such as psychoeducation, family intervention, or the creation of a treatment plan tailored to the individual's preferences and pattern of use. This stage can be difficult to assess because it can either remain stable or progress into riskier patterns depending on frequency and context.

Risky Use Stage. In the risky use stage, substance use begins to cause noticeable emotional and cognitive consequences (Sokolovsky et al., 2020). Clients may experience emotional dysregulation and cognitive dysfunction that disrupt daily functioning. These disruptions may lead to escalating use, transitioning into chemical dependency or addiction. Treatment at this stage may involve dual diagnosis approaches, which address both substance use and mental health concerns simultaneously, often with integrated care models (Sokolovsky et al., 2020).

Dependency/Addiction Stage. The final stage is dependency or addiction, where clients develop a significant physical and psychological reliance on the substance. This stage is marked

by compulsive use, increased tolerance, and withdrawal symptoms, which impair functioning and decision-making (Pickard, 2016). Individuals at this stage typically require intensive inpatient treatment, which may include Cognitive Behavioral Therapy (CBT) and Family Behavioral Therapy (FBT) to support recovery (Tagliareini, 2020). Unfortunately, during the COVID-19 pandemic, many of these intensive services were disrupted or inaccessible, contributing to the rise in substance use from experimentation to full addiction.

Substance Use and the COVID-19 Pandemic

The COVID-19 pandemic coincided with a significant increase in substance use disorders (SUD) and overdose rates in the United States, leading more individuals to seek psychological services, not only for mental health but also for substance use treatment (Abranson, 2021). The number of drug overdose deaths increased dramatically during the pandemic, with an estimated 93,000 deaths in 2020 compared to 50,963 in 2019 (Chacon et al., 2021). Pandemic-induced isolation contributed heavily to this surge, as many individuals turned to substances to cope with emotional distress and stress related to prolonged confinement.

In addition, shifts in drug availability led to increased illicit opioid consumption. For instance, individuals substituted heroin with fentanyl due to limited access to their usual drugs (Abranson, 2021). The combined impact of substance use and impaired pulmonary function due to COVID-19 proved especially dangerous. Research by Wang et al. (2021) found that among a sample of over 73 million patients, individuals diagnosed with SUD were significantly more likely to contract COVID-19, suffer from severe symptoms, and face barriers to accessing timely care due to pandemic-related restrictions. Vulnerable populations, including the homeless, incarcerated, and uninsured, were especially at risk due to limited access to recovery services (Volkow, 2020).

A systematic review by Saltzman et al. (2020) found that the COVID-19 pandemic worsened both physical and mental health through increased social isolation. Stress, depression, and anxiety surged due to the lack of social support and coping mechanisms during prolonged lockdowns (McLean et al., 2022). Ozturk et al. (2022) also reported that individuals turned to habitual substance use during isolation, and this pattern persisted even after restrictions were lifted. Guvich et al. (2021) added that these adverse effects continued long after the initial stages of the pandemic, leading to a prolonged mental health crisis.

Due to reduced in-person recovery services and harm-reduction programs during the pandemic, individuals with SUD faced significant treatment challenges. The situation was further aggravated by unsupervised take-home opioid replacement therapies, which, although necessary to support distancing, inadvertently increased the risk of misuse and relapse (Ornell et al., 2020). Economic hardships, social disruptions, and limited access to consistent healthcare further contributed to the deterioration of conditions for many individuals with SUD (Centers for Disease Control and Prevention [CDC], 2022).

Mental health and substance use disorder (SUD) crises significantly increased during the COVID-19 pandemic. A study conducted by the Kaiser Family Foundation (KFF) revealed that the prevalence of anxiety and depression symptoms among U.S. adults quadrupled, rising from 11% in early 2019 to over 41% by January 2021 (Panchal et al., 2023). Additionally, approximately 13% of adults reported new or increased substance use as a way to cope with stress and emotions related to the pandemic (Czeisler et al., 2020).

Emergency department visits for drug overdoses also rose markedly during the pandemic. According to the Centers for Disease Control and Prevention (CDC), overdose deaths exceeded

100,000 annually for the first time during the 12-month period ending in April 2021 an increase of nearly 29% from the previous year (CDC, 2021).

Additionally, CDC guidelines advised isolation for five to eleven days following a positive COVID-19 test, which further reduced social interaction and support systems (CDC, 2022). According to the CDC, approximately 13% of Americans reported starting or increasing substance use to cope with pandemic-related stress. This is further supported by the data from the Overdose Detection Mapping Application Program (ODMAP), that indicates an 18% nationwide increase in opioid overdoses during the pandemic (Chacon et al., 2021).

These studies indicate the need for qualitative research to explore the effects of pandemic-induced isolation on individuals with substance use disorders. Interviews with clinicians in the substance abuse field offer a grounded perspective on the challenges and adaptations in providing treatment during isolation (Kim et al., 2020). Understanding these professional experiences is essential in identifying the barriers to care and developing effective, resilient treatment models for future public health crises (Ozturk et al., 2022).

Substances Commonly Used During COVID-19 Isolation. During the COVID-19 pandemic, particularly amid mandated lockdowns and prolonged periods of social isolation, the use of certain substances increased significantly across age groups. Studies reported notable rises in alcohol and cannabis consumption, which were frequently used as maladaptive coping mechanisms to manage psychological distress, including anxiety, loneliness, and depression (Czeisler et al., 2020; Rogers et al., 2021). These increases were especially pronounced among individuals with preexisting mental health conditions and limited social support networks. The shift to remote work, job losses, and disruption of daily routines further contributed to increased

vulnerability and substance use (Volkow, 2020). Such trends underscore the critical intersection between mental health stressors and substance use behaviors during global crises.

Cannabis Use During Isolation. Cannabis (commonly referred to as marijuana, pot, or weed) was frequently reported as a substance of choice during isolation, not only among adults but also among adolescents. According to Bonnie et al. (2023), cannabis usage surged as individuals turned to it to cope with feelings of anxiety, social disconnection, and mental health deterioration during lockdown. Cannabis is derived from the cannabis sativa plant, with the primary psychoactive component being tetrahydrocannabinol (THC). When smoked or ingested, THC rapidly affects the brain, altering perception, mood, cognition, and coordination (Hansell & Damour, 2008).

While cannabis was often cited for its medical benefits—such as appetite stimulation in patients with AIDS or nausea relief among those undergoing chemotherapy (National Academies of Sciences, Engineering, and Medicine, 2017), it remained controversial due to its potential for both psychological and physiological harm, including cognitive impairment, dependence, and exacerbation of psychiatric symptoms (Volkow et al., 2014). Regular use is associated with tolerance, withdrawal symptoms, impaired judgment, and mental health disorders, including heightened risks of anxiety, depression, and psychosis in susceptible individuals (Volkow et al., 2014; Hansell & Damour, 2008). Users may experience hallucinations, paranoia, confusion, and impulsivity, particularly with high-THC strains or heavy use (National Institute on Drug Abuse [NIDA], 2020).

Alcohol Use During Isolation. Alongside cannabis, alcohol consumption also increased dramatically during the pandemic. Nielsen IQ (as cited in Calina et al., 2021) reported a notable spike in alcohol sales by the end of April 2020, indicating increased use at the population level.

The World Health Organization (WHO) cautioned against this trend, warning that alcohol misuse during isolation could compound public health risks and exacerbate psychological distress. Alcohol, though legal and widely available, is a central nervous system depressant and one of the most commonly abused substances.

According to Comer (2005), alcohol abuse involves excessive consumption that interferes with a person's behavior, thoughts, responsibilities, and ability to function. Patterns of abuse may include binge drinking, chronic intoxication, or periodic heavy use, sometimes lasting for days or weeks, during which individuals may lose memory of events due to alcohol-induced blackouts. Repeated alcohol use also leads to neuroadaptation, where the brain adjusts to the presence of alcohol and begins to rely on it for normal function. Halgin and Whitbourne (2009) explained that such adaptation can result in neural sensitization, heightening the risk of cravings and relapse, even after prolonged abstinence. This phenomenon is especially dangerous during isolation, when environmental and emotional stressors are heightened, and social support may be lacking.

COVID-19, Substance Abuse, and Isolation. The lack of social connection, especially prolonged isolation and solitude, has been identified as a key driver of substance abuse (Roe et al., 2020). Individuals separated from family and loved ones during the COVID-19 pandemic often found themselves alone and vulnerable, sometimes turning to substances as a coping mechanism. Roe et al. (2020) emphasized that pandemic-induced isolation significantly contributed to the development of both substance use disorders and co-occurring mental health issues, particularly among already vulnerable populations. These conditions often led to comorbid disorders, including depression, anxiety, and stress, as a result of the social disconnection enforced by pandemic safety measures (Czeisler et al., 2020).

Moreover, the pandemic disrupted drug supply chains, limiting access not only to substances but also to the tools and services necessary for harm reduction. This disruption impacted drug users' tolerance levels and increased their risk of overdose. Isolation also hindered access to harm reduction resources, such as syringe exchange programs and supervised consumption sites, further heightening the health risks for those actively using substances (Roe et al., 2020).

A critical consequence of this isolation was the disruption of community support, a fundamental component of recovery from addiction. According to Dent (2020), connection with others serves as a protective factor, reducing the likelihood of substance use and promoting sustained recovery. Without social support networks, individuals faced higher risks of relapse and were more likely to engage in high-risk behaviors. The mental health toll was evident, with increasing reports of anxiety and stress related to the enforced isolation. Bland et al. (2020) noted that the pandemic has illuminated the complex ways in which isolation can trigger or worsen mental health issues, with lasting psychological consequences.

Disorders that Increased during COVID-19 Isolation

During the COVID-19 pandemic, particularly amid extended lockdowns and social distancing mandates, the prevalence of various mental health disorders increased markedly across global populations. Isolation, uncertainty, disrupted routines, and limited access to in-person care created a perfect storm for psychological distress (Xiong et al., 2020; Vindegaard & Benros, 2020). Among the most commonly reported conditions were depressive disorders, including major depressive disorder and bipolar depression, which surged due to prolonged loneliness, grief, and diminished social interaction (Holm-Hodulla et al., 2023; NIMH, 2024). Likewise, anxiety disorders—such as generalized anxiety disorder (GAD), panic disorder,

obsessive-compulsive disorder (OCD), and post-traumatic stress disorder (PTSD), became increasingly prevalent, often triggered or exacerbated by fears of illness, financial instability, and lifestyle disruptions (Asmundson & Taylor, 2020; Cullen et al., 2020). Additionally, acute stress disorder (ASD) and various phobias, particularly health-related and social fears, rose sharply as individuals responded to the trauma and unpredictability of the pandemic (Bryant, 2018; Tull et al., 2020). These trends reflect the profound psychological toll of COVID-19 and its impact on mental health systems worldwide.

Depressive Disorders. The National Institute of Mental Health (NIMH, 2024) defined depressive disorder as a persistent sad or irritable mood that exceeded typical emotional responses to everyday stressors or grief. Unlike transient sadness, depression was marked by greater intensity, longer duration, and significant impairment in daily functioning. Common symptoms included persistent negative thinking, emotional withdrawal, fatigue, somatic complaints (e.g., headaches, body aches), and disruptions in sleep and eating patterns. Individuals with bipolar depression were found to have a stronger hereditary predisposition to the condition (NIMH, 2024).

A major depressive episode was typically diagnosed when symptoms such as persistent sadness, hopelessness, guilt, loss of interest or pleasure, fatigue, concentration difficulties, and thoughts of death or suicide occurred nearly every day for at least two weeks (NIMH, 2024). Even in the presence of positive experiences, individuals with depression often remained emotionally detached and unresponsive.

Bipolar and Unipolar Depression. According to Comer and Kendall (2005), the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) categorized mood disorders into bipolar I, bipolar II, and unipolar depression. Bipolar I disorder involved full manic episodes

accompanied by major depressive episodes, while bipolar II disorder included hypomanic episodes alongside major depression. Unipolar depression, in contrast, did not include any history of manic or hypomanic episodes.

Bipolar disorder, also referred to as manic-depressive illness, was characterized by extreme mood fluctuations that impaired social and occupational functioning and increased suicide risk (NIMH, 2024). Manic episodes were defined by elevated mood, increased energy and activity, impulsivity, racing thoughts, and inflated self-esteem. A diagnosis of mania required these symptoms to persist most of the day, nearly every day, for at least one week (NIMH, 2024). Unipolar depression affected emotional, motivational, behavioral, cognitive, and physical functioning. Common symptoms included persistent sadness, irritability, anhedonia, social withdrawal, low self-esteem, suicidal ideation, and difficulty concentrating (Cuellar et al., 2005).

Researchers suggested that depression was associated with reduced activity in neurotransmitters such as serotonin and norepinephrine. Hormonal imbalances and genetic vulnerabilities were also implicated (NIMH, 2024). Treatment options included antidepressant medications such as monoamine oxidase inhibitors (MAOIs) and tricyclics, electroconvulsive therapy (ECT), and psychotherapeutic approaches. From a psychodynamic perspective, depression was believed to stem from unresolved losses and internalized anger, with therapy aimed at helping individuals process these unconscious conflicts (Comer & Kendall, 2005). In contrast, the behavioral model proposed that depression resulted from a loss of positive reinforcement, and treatment focused on reintroducing rewarding activities and enhancing social skills (NIMH, 2024).

Anxiety Disorders. The COVID-19 pandemic brought widespread uncertainty and major disruptions to daily life, leading to increased psychological distress, particularly in the form of heightened stress and anxiety. Prolonged social isolation contributed to persistent states of fear and hyperarousal, especially among individuals with preexisting mental health vulnerabilities (Dos Santos et al., 2021; Vindegaard & Benros, 2020). These lifestyle changes, coupled with fears of infection, economic instability, and diminished social support, exacerbated global anxiety levels (Xiong et al., 2020).

Anxiety disorders were defined as conditions characterized by excessive, irrational fear and apprehension, often accompanied by a heightened sense of vulnerability (Hansell & Damour, 2008; American Psychiatric Association [APA], 2013). Common symptoms included motor tension, restlessness, hypervigilance, and cognitive disturbances. These disorders included generalized anxiety disorder (GAD), panic disorder, obsessive-compulsive disorder (OCD), post-traumatic stress disorder (PTSD), acute stress disorder (ASD), and various phobias (Cullen et al., 2020).

Generalized Anxiety Disorder (GAD). GAD involved chronic, excessive worry across multiple domains of life. Individuals with GAD often experienced persistent tension, irritability, muscle tightness, and restlessness (Kowalski & Westen, 2005). During the pandemic, many individuals with GAD reported intensified health-related anxiety and compulsive media consumption, which exacerbated their symptoms (Asmundson & Taylor, 2020; Pfefferbaum & North, 2020).

Panic. Panic disorder was characterized by recurrent, unexpected panic attacks featuring symptoms such as palpitations, chest pain, shortness of breath, and dizziness. These episodes often led to anticipatory anxiety and avoidance behaviors, which significantly impaired quality

of life (Hansell & Damour, 2008). The pandemic heightened awareness of physical symptoms, causing some individuals to misinterpret normal bodily sensations as signs of COVID-19 infection (Asmundson & Taylor, 2020).

Obsessive-compulsive disorder (OCD). OCD involved intrusive, distressing thoughts (obsessions) and repetitive behaviors (compulsions). The pandemic led to a rise in contamination-related obsessions and compulsive behaviors such as excessive handwashing and sanitizing, which substantially interfered with daily routines (Fontenelle & Miguel, 2020).

Post-traumatic stress disorder (PTSD). PTSD developed in response to exposure to traumatic events and was characterized by flashbacks, nightmares, emotional numbness, and hypervigilance (APA, 2013). Elevated rates of PTSD symptoms were observed among healthcare workers, COVID-19 survivors, and individuals exposed to pandemic-related trauma (Lai et al., 2020; Carmassi et al., 2020).

Acute stress disorder (ASD). ASD was a short-term reaction to trauma that shared many features with PTSD but was limited to a duration of three days to one month (Miller & Smith, 2007). During the pandemic, many individuals experienced ASD in response to sudden lockdowns, job loss, or the death of loved ones. With timely intervention and support, symptoms often subsided (Bryant, 2018).

Phobias. Phobias were characterized by persistent, excessive, and irrational fears of specific objects or situations. These included social phobia (fear of being judged), agoraphobia (fear of public or crowded spaces), and specific phobias such as fear of illness or hospitals (Comer, 2005; APA, 2013). During the pandemic, fears related to infection and social scrutiny intensified social and health-related phobias, sometimes causing individuals to avoid essential medical care (Tull et al., 2020).

Substance Abuse Treatment

Effective treatment for substance abuse often involves a combination of multidisciplinary, integrated, and comprehensive approaches. As Peters et al. (2015) explain, a multidisciplinary approach is typically the first step in creating a robust treatment plan. This model combines medical, psychological, and mindfulness-based interventions to address all facets of the disorder. This approach allows clinicians to tailor treatment strategies to the severity and nature of the substance use disorder.

Integrated treatment, as described by Kelly and Daley (2013), goes a step further by simultaneously addressing co-occurring mental health disorders and substance use through a combination of psychotherapy and pharmacotherapy. This approach requires a strong therapeutic alliance among counselors, therapists, family members, psychiatrists, and other healthcare professionals. The inclusion of family members is vital, as they play an essential role in supporting the client's recovery and reinforcing treatment objectives (American Addiction Centers [AAC], 2020).

A comprehensive treatment model incorporates medical care, therapy, and holistic resources to provide clients with the tools needed to manage symptoms and maintain recovery after formal treatment ends. These services often include relapse prevention strategies, lifestyle modification plans, and continued support systems (AAC, 2020). Outreach programs also play a critical role in substance abuse treatment by expanding awareness, reducing stigma, and promoting early intervention (Drake et al., 2001). Family involvement is further supported through family psychoeducation programs, which inform relatives about the nature of substance use and mental health disorders and teach them how to support their loved ones through recovery, including how to respond to relapse (Mueser et al., 2009). Psychoeducational programs

also focus on skill-building and problem-solving, using stress management and cognitive-behavioral strategies to help individuals overcome challenges associated with substance abuse (Corey, 2016). These programs not only benefit the individuals receiving treatment but also empower families to take a proactive role in the recovery process.

According to the AAC (2020), motivation is a crucial component of successful treatment. Ensuring that the client is engaged in the process, committed to overcoming the disorder, and able to maintain adherence to the treatment plan significantly improves long-term outcomes. Motivation plays a critical role not only in the onset of addiction but also in achieving and maintaining recovery. Its influence on behavioral change has been extensively studied across fields such as psychology, neuroscience, and addiction medicine. Motivation is also closely linked to the individual's readiness for change and belief in their ability to recover, both of which are essential for successful outcomes in treatment (DiClemente, 2018; Miller & Rollnick, 2013).

Researchers have also found that motivational factors can predict engagement, persistence, and success in substance use treatment programs (NIDA, 2018; Ryan, Plant, & O'Malley, 1995). As part of the recovery process, individuals are taught to develop coping and strategy-building skills that help them deal with emotional distress, triggers, and cravings without reverting to substance use (Hendershot et al., 2011; Marlatt & Donovan, 2005). These techniques form the foundation of relapse prevention and long-term behavioral regulation. Treatment providers, therefore, emphasize comprehensive aftercare planning, including cognitive-behavioral therapy (CBT), social support systems, and lifestyle restructuring to reinforce sobriety and emotional resilience (McLellan et al., 2000; American Addiction Centers [AAC], 2020). The integration of these long-term strategies has been shown to reduce relapse risk and improve quality of life for individuals in recovery (Moos & Moos, 2006).

Telehealth and the Transformation of Substance Use Disorder (SUD) Treatment During and After COVID-19

The concern surrounding mental health and substance use disorders (SUDs) intensified significantly in the aftermath of the COVID-19 pandemic. Approximately 90% of individuals affected by these conditions reported experiences of isolation, grief, illness, and general life instability (Panchel et al., 2023). Disruptions to daily life, social structures, and healthcare systems exacerbated both the prevalence and severity of mental health issues, prompting an urgent need for innovative treatment approaches.

One of the most significant transformations in behavioral health care was the widespread adoption of telehealth services. Though telehealth existed prior to the pandemic, it had not been widely utilized in the context of SUD treatment. In response to lockdowns and physical distancing measures, providers rapidly transitioned to virtual platforms, ensuring continuity of care while mitigating the risk of infection. By 2021, approximately 40% of outpatient substance abuse services were delivered via telehealth (Panchel et al., 2023; Huskamp et al., 2022). According to the World Health Organization (2016), telehealth refers broadly to the delivery of health services and information through electronic and telecommunication technologies. In behavioral health, it offers critical advantages, including increased accessibility for individuals in remote or underserved areas, reduced transportation and scheduling barriers, and the ability to engage in care privately—thereby reducing stigma (Kruse et al., 2017; MedlinePlus, 2020; Shachar et al., 2020).

Additionally, virtual platforms enable more frequent communication between clients and providers, which can enhance treatment adherence and outcomes. The increased reliance on telehealth during the pandemic was driven by multiple factors, most notably the rising rates of

isolation, unemployment, and psychological stress, all of which disproportionately impacted individuals with preexisting mental health or substance use conditions (Volkow, 2020). These challenges underscored the necessity for flexible, accessible, and scalable treatment options. To comply with public health guidelines, such as those established by the Centers for Disease Control and Prevention (CDC, 2024), many treatment facilities transitioned entirely to virtual services. These precautions included physical distancing, screening protocols, and quarantine mandates for individuals exposed to COVID-19. In response, clinicians utilized widely available platforms like Zoom and Microsoft Teams to deliver both individual and group therapy, including court-mandated outpatient services (Smith et al., 2021).

While telehealth provided a lifeline for many, its rapid expansion revealed several barriers. Clients with limited internet access, inadequate digital literacy, or lack of a private space often struggled to fully engage in virtual care (Pierce et al., 2021). These challenges raised concerns about confidentiality, therapeutic rapport, and treatment consistency. To mitigate these barriers, some clinicians partnered with community organizations to create centralized, technology-enabled spaces for vulnerable populations, including individuals facing housing insecurity (Watson et al., 2021). Furthermore, the shift to virtual care introduced new ethical and logistical concerns. Providers were required to ensure that telehealth platforms were HIPAA-compliant and implemented cybersecurity measures such as encryption, multi-factor authentication, and antivirus protections to safeguard personal health information (Calkins, 2021; Kruse et al., 2017). Updated informed consent procedures also became standard practice, helping clients understand the limitations, risks, and responsibilities involved in virtual treatment delivery (Shachar et al., 2020).

Despite its advantages, telehealth is not without limitations. Gaps in internet infrastructure, restrictive insurance policies, and lack of interoperability between telehealth and traditional care systems can hinder accurate diagnosis and continuity of care (Mehrotra et al., 2020; MedlinePlus, 2020). These shortcomings point to the need for systemic reforms, including expanded insurance coverage, enhanced digital infrastructure, and sustained investment in telehealth training and technology. Ultimately, the pandemic catalyzed a digital transformation in behavioral health care that is likely to have lasting effects. While challenges remain, the rapid integration of telehealth has improved access to care for many and highlighted the potential for hybrid treatment models to address the complex needs of individuals with substance use disorders in a post-pandemic world (Torous et al., 2020; Nouri et al., 2020; SAMHSA, 2021).

Research Needs

The literature reviewed indicated that adults experienced heightened loneliness and increased suicidal ideation, often connected to deteriorating mental health and greater use of alcohol and drugs (Panchal et al., 2023). The cumulative effects of isolation during the COVID-19 pandemic on individuals with substance use disorders (SUDs) raised urgent clinical concerns, such as elevated suicide risk and reduced participation in treatment, along with long-term public health consequences related to addiction and mental illness (Volkow, 2020). Although these patterns were well-documented, many studies relied on quantitative self-report data, which provided limited insight into the complex and nuanced experiences of affected individuals (Rogers et al., 2020; McKnight et al., 2021; Yeager et al., 2022). In response, researchers advocated for the use of more in-depth qualitative methods. Dowd et al. (2022) emphasized the importance of including clinicians' perspectives, as they observed firsthand the behavioral changes, relapse patterns, and barriers to care experienced by their clients. Incorporating

clinician insights addressed this gap and contributed to a deeper understanding of the pandemic's impact on adults with SUDs, supporting the development of more effective treatment approaches and public health responses.

Summary

The literature review explored the immediate and long-term effects of COVID-19-related isolation on individuals with substance use disorders (SUDs), using B.F. Skinner's operant learning theory and a multifactorial model to analyze addiction's complexity. It emphasized how pandemic-induced stress, boredom, and disrupted routines led to increased substance use, particularly among vulnerable populations and those with preexisting mental health conditions. Substance abuse was examined through biological, behavioral, cognitive, and psychodynamic lenses, highlighting factors such as genetic predispositions, trauma, irrational beliefs, and social influences.

Misconceptions, such as presumed links between substance abuse and domestic violence, were challenged to promote a nuanced understanding. A major development during the pandemic was the rapid adoption of telehealth for SUD treatment. While telehealth improved access and continuity of care, particularly in underserved areas, it also introduced barriers like digital inequality and privacy concerns. Clinicians adapted by ensuring HIPAA compliance, enhancing digital infrastructure, and collaborating with community partners. The review concluded that COVID-19 reshaped behavioral health care, underscoring the need for flexible, integrated, and resilient treatment models that address both addiction and comorbid mental health disorders. Telehealth emerged as a transformative but imperfect solution, with long-term potential in hybrid care models.

Chapter 3: Research Method

COVID-19 first emerged in 2019 and was subsequently considered one of the most devastating public health crises of the 21st century (Yang, 2021). The pandemic disrupted global health systems and social structures, contributing to a significant rise in substance use and addiction rates (Andrew et al., 2020; Volkow, 2020). The problem to be addressed by this study was that the isolation conditions resulting from the COVID-19 pandemic contributed to increased relapses, intensified substance use, and disrupted access to treatment among adults with substance use disorders (SUDs) and co-occurring mental health conditions (Rogers et al., 2020; Yeager et al., 2022). The purpose of this qualitative descriptive study was to explore and to examine the underlying reasons and mechanisms influencing clients' experiences with substance use during pandemic-related isolation. The research design allowed for an in-depth understanding of the subjective experiences of individuals with SUD by exploring the "how" and "why" of their behavioral responses during the pandemic (Brennen, 2017; Merriam & Tisdell, 2016).

The widespread social and economic disruptions caused by the pandemic intensified over time, forcing nations to implement strict lockdowns, quarantines, and social distancing measures (Dubey et al., 2020; Pfefferbaum & North, 2020). These measures contributed to increased social isolation, economic instability, and reduced access to treatment services, all of which exacerbated substance use behaviors. In 2021, over 106,600 overdose-related deaths were reported in the United States, with a significant proportion involving synthetic opioids, such as fentanyl, representing the highest number recorded in U.S. history (Ahmad et al., 2022; Panchal et al., 2023).

Individuals with SUD experienced heightened vulnerability during this period, particularly due to reduced access to harm-reduction services, in-person therapy, and support systems (Ingram et al., 2020; Knopf, 2020). The pandemic-induced isolation intensified emotional distress and contributed to increased relapse rates, reuse, and heavier substance use among individuals with pre-existing addiction and mental health disorders (Rogers et al., 2020; Serafini et al., 2020). Moreover, the lack of consistent support and treatment access increased the risk of mental health deterioration and suicidal ideation among this population (Czeisler et al., 2020).

The focus of this chapter is on explaining the rationale for the chosen qualitative methodology and population sample of adult clients who had received therapy for SUD and co-occurring mental disorders during the COVID-19 pandemic. The chapter next provides details about data collection, which involved semi-structured interviews conducted via Zoom and email, and data analysis approach that identified recurring themes and patterns in participant narratives. This chapter also includes a discussion of the study's assumptions, limitations, delimitations, and ethical considerations, ensuring a rigorous and ethical approach to data collection and analysis.

Research Methodology and Design

This study employed a qualitative descriptive methodology to examine the real-world experiences of individuals during the COVID-19 pandemic. The approach allowed for an exploration of the shared experiences and conditions of clients who endured pandemic-induced isolation, focusing on the commonalities in their responses and behaviors (Yin, 2018). Qualitative descriptive research was well-suited for this investigation because it enabled the researcher to study participants in their natural settings, offering a comprehensive understanding

of the complex phenomena and the interplay of various factors that may have triggered these experiences (Sandelowski, 2000; Yin, 2018).

The qualitative approach provided a valuable framework to investigate the effects of pandemic-induced isolation on individuals with substance use disorder (SUD) and co-occurring mental health conditions. This approach was deemed appropriate because qualitative methods are particularly effective in analyzing verbal, experiential data and real-world phenomena that cannot be quantified easily (Tenny et al., 2022). It facilitated an exploration of both the positive and negative consequences of the pandemic for this vulnerable population. The focus of the study was on the perspectives of therapists, who reported the experiences and behavioral changes observed in their clients throughout the isolation period (Yin, 2018).

While qualitative data centers on perception, verbal understanding, and deductive reasoning that helps test or apply existing theoretical frameworks, quantitative data emphasizes measurement, objectivity, and inductive reasoning to develop theories (Boulmetis and Dutwin, 2005). Unlike quantitative methods, which rely on objective tools and numerical data, qualitative research treats the researcher as the primary instrument of data collection and interpretation (Creswell & Poth, 2018). Whereas, quantitative approaches are often used to identify statistical trends across large populations. Thus, qualitative inquiry allowed this study to delve into nuanced, context-specific insights that would be difficult to capture using statistical tools alone.

Mills (2002) noted that quantitative research typically addresses patterns and relationships among variables in large datasets. Although such methods offer valuable generalizations, they were not suitable for this study, given the unique and context-dependent nature of COVID-19 isolation and its impact on adults with SUD and mental health disorders. A

qualitative approach provided deeper, more subjective insights by capturing participants' lived experiences through their therapists' interpretations.

This study specifically employed a qualitative descriptive design to explore the "what," "who," and "where" of the phenomenon of pandemic-induced isolation (Kim et al., 2016). This design is less theory-bound than approaches such as grounded theory, providing flexibility in methodological choices and allowing the researcher to draw from existing conceptual frameworks without the need to generate a new theory (Sandelowski, 2000). Although grounded theory involves the systematic generation of new theory from data (Chun et al., 2019), it was not appropriate for this research, which was based on established literature and grounded in Skinner's learning theory as a conceptual foundation.

Alternative qualitative research designs such as case study and phenomenological research were considered but ultimately deemed unsuitable. Case study involves comprehensive investigations of specific problems using multiple data collection methods (e.g., interviews, observations, psychological testing) (Shaughnessy et al., 2009).. However, this design was not employed, as the aim of this study was not to solve a defined problem but to describe clients' therapeutic experiences. Similarly, a phenomenological approach, which focuses on participants' direct interpretation of their lived experiences (Lodico et al., 2010), was not applicable because the data in this study were reported by therapists based on client interactions, rather than being directly collected from the clients themselves. The qualitative descriptive design provided a suitable framework to capture the complexity and subjectivity of client experiences during the COVID-19 pandemic, as observed and interpreted by their therapists. This approach allowed for the collection of rich, detailed data that revealed how pandemic-induced isolation affected substance use behaviors and mental health conditions among adults.

Population and Sample

This study examined the impact of pandemic-induced lockdown and isolation on adults with substance use disorders (SUD) by collecting data from therapists who had direct clinical experience with these individuals before, during, and after the COVID-19 pandemic in the United States. The population for this research consisted of mental health professionals and substance use therapists who worked with adult clients affected by both mental health disorders and substance use challenges during the pandemic period.

The sampling strategy combined purposeful sampling and snowball sampling techniques. Purposeful sampling was used to identify therapists with direct clinical experience related to the study's focus, namely, those treating clients with SUD and mental health disorders during the COVID-19 pandemic (Palinkas et al., 2015). Snowball sampling was also utilized, whereby initial participants referred other qualified therapists who met the inclusion criteria. This approach helped expand the sample in a targeted and efficient manner.

Some participant contact information was obtained from the researcher's existing professional network, while additional contacts were acquired via email outreach using institutional directory. Seven participants responded to the email and were recruited for the study. The researcher sent an introductory recruitment letter (see Appendix D) explaining the study's purpose, procedures, and voluntary nature. This ensured ethical transparency and participant understanding prior to engagement in the study. Semi-structured interviews were conducted with a sample of seven therapists, selected from an intended range of eight to 12 participants, which aligns with qualitative research standards for achieving data saturation (Hennink et al., 2021). Data collection was completed after interviews with seven participants, at which point thematic saturation was reached, indicating that no new themes were emerging from

the data (Guest, Bunce, & Johnson, 2006). Of the seven participants, five therapists participated in live interviews, while two therapists completed the interview questions via email due to scheduling conflicts. All participants were licensed therapists or counselors practicing in the United States, with relevant experience in treating clients with co-occurring mental health and substance use disorders. Overall, the sample size and methodology were appropriate for a qualitative descriptive study. The participant group was sufficient to provide rich, detailed insights into the experiences of clients with SUD during COVID-19-related isolation, as interpreted through the lens of their treating therapists.

Materials or Instrumentation

This study employed semi-structured interviews as the primary data collection instrument (See Appendix B), which is widely recognized in qualitative research for enabling deep exploration of participants' perspectives. Semi-structured interviews provide the flexibility of open-ended questioning while maintaining a consistent structure across participants (Kallio et al., 2016; DeJonckheere & Vaughn, 2019). Semi-structured interviews are particularly useful in qualitative descriptive studies, as they allow for the use of probing questions to elicit rich, detailed accounts and clarify participants' experiences with the phenomenon under investigation (Bradshaw, Atkinson, & Doody, 2017). The format allowed the researcher to explore therapists' insights regarding the impact of COVID-19-induced isolation on clients with substance use and mental health disorders.

To ensure the clarity and validity of the interview questions, a field test was conducted with licensed therapists at a therapy clinic where the researcher worked. Therapists chosen for the field test had extensive clinical experience in treating individuals with substance use disorders, both during and after the COVID-19 lockdown. The interview guide comprised open-

ended questions that were designed to explore the challenges faced by clients during the pandemic, the treatment modalities that were employed by clinicians, and the perceived changes that were needed to enhance service delivery (Appendices A & B). This structure allowed for the evaluation of question relevance, flow, and comprehensibility. The feedback process involved a comprehensive review of all interview questions. The experts recommended rephrasing certain items for improved clarity and suggested the addition of questions related to clients' coping strategies, changes in service delivery, and clinicians' observations of relapse or behavioral changes during the pandemic. (Appendix B), which informed modifications to the interview guide (Appendix C). This process ensured that the interview instrument was contextually appropriate and aligned with the study's purpose (van Teijlingen & Hundley, 2002).

Their feedback helped refine questions to maintain openness and relevance, which are essential in qualitative interviews designed to capture lived experiences (Brinkmann & Kvale, 2018). Changes based on their feedback increased the content validity of the instrument and improved the likelihood of generating rich, meaningful responses during actual data collection.

Prior to each interview, participants received an email with the interview guide, allowing them to prepare and consider their experiences. Interviews were conducted via Zoom, lasting approximately 60 minutes, and were recorded for transcription and analysis. This virtual format ensured consistency and accessibility, a method widely adopted during the pandemic era to maintain researcher-participant connection (Archibald et al., 2019). Follow-up questions were used throughout the interviews to elicit deeper insights and clarify responses when necessary.

The study adhered to Lincoln and Guba's (1985) four criteria for trustworthiness in qualitative research: credibility, dependability, confirmability, and transferability. Credibility was enhanced through member checking, where participants reviewed their transcripts to verify

accuracy (Birt et al., 2016). Dependability was ensured by documenting the research design and procedures in detail, providing an audit trail that enables replication (Nowell et al., 2017).

Confirmability was achieved by minimizing researcher bias and maintaining transparency in the data analysis process. Transferability was addressed through the provision of thick, contextual descriptions, allowing readers to determine the applicability of the findings to similar settings (Elo et al., 2014). These strategies reinforced the quality and reliability of the data collected and ensured that the instrumentation was methodologically sound and ethically robust.

Study Procedures

Data for this study were collected using an online process in which research questions were emailed to therapists working with clients diagnosed with substance use disorders (SUD). This method allowed participants to respond at their convenience and helped accommodate scheduling limitations, a common practice in qualitative research with professionals (Archibald et al., 2019). Prior to initiating data collection, the study underwent Institutional Review Board (IRB) review and approval by Northcentral University to ensure adherence to ethical research standards (Creswell & Poth, 2018). A copy of the research proposal was submitted to the IRB, and approval was granted before recruitment and data collection began.

Following IRB approval, the researcher contacted 8–12 therapists identified as suitable participants based on their experience working with clients who have both SUD and co-occurring mental health disorders during and after the COVID-19 pandemic. Potential participants were contacted via their professional email addresses using the researcher's Northcentral University (NCU) email account. Once an eligible participant responded affirmatively, a consent form outlining the purpose of the study, confidentiality protocols, and their rights as participants was emailed to them. Upon receiving the signed consent form, it was

securely stored in a password-protected file to ensure participant confidentiality, consistent with best practices in research ethics (Beskow et al., 2010).

Subsequently, participants were emailed a copy of the research questions in advance of their scheduled interviews. This provided them time to reflect and prepare for the session, which is beneficial for data quality in semi-structured interviews (Gill et al., 2008). A follow-up email was sent to schedule a 30- to 60-minute interview via Zoom, based on participant availability. With the participants' consent, each session was recorded for transcription and analysis purposes. Interviews were semi-structured and allowed for flexibility in follow-up questioning to gain deeper insights and clarify participant responses (Kallio et al., 2016).

After each interview, a transcript was generated and sent to the participant for review and validation, a process known as member checking, which enhances the credibility of qualitative research (Birt et al., 2016). The combination of email responses and Zoom interviews allowed for greater participation and adaptability, particularly considering time constraints and COVID-19-related professional demands on therapists. This hybrid data collection strategy ensured that the study maintained methodological rigor while remaining accessible to participants (Sullivan, 2012).

Data Analysis

Thematic analysis was employed to analyze the therapists' narratives concerning their clients' experiences with pandemic-induced isolation and its impact on substance use and mental health. A six-phase thematic analysis approach, as outlined by Braun and Clarke (2006), was used to guide the analysis process. The first phase involved familiarization with the data, during which the interview transcripts were read and re-read to gain a comprehensive understanding of clinicians' perspectives and to note preliminary observations related to their experiences during

the COVID-19 pandemic. In the second phase, initial codes were generated by systematically identifying and labeling meaningful segments of the data that reflected key challenges, adaptations in treatment delivery, and observations of client behavior. In the third phase, themes were developed by organizing the codes into broader patterns that represented shared meanings across clinician narratives, such as changes in relapse trends, barriers to care, or shifts in therapeutic strategies. During the fourth phase, the preliminary themes were reviewed and refined to ensure they accurately captured the complexities of clinician experiences and maintained internal coherence. In the fifth phase, the themes were clearly defined and named to represent their central ideas and relevance to the research questions. In the final phase, the findings were written up using illustrative quotes from participants to support each theme and provide depth to the interpretations, offering valuable insight into the impact of pandemic-related isolation on adults with substance use disorders and the treatment landscape.

This approach enabled the researcher to construct a narrative that reflected both individual experiences and shared patterns among participants. In this study, qualitative data analysis was conducted using a systematic coding process. After data collection, interview transcripts were transcribed and verified by participants to ensure accuracy and credibility, a process that reinforced trustworthiness (Birt et al., 2016). The transcripts were then imported into NVivo, a qualitative data analysis software that facilitated the organization, coding, and interpretation of large textual data sets (QSR International, 2020). NVivo allowed for the categorization of text through color-coded codes, enabling the researcher to identify recurring themes and patterns across participant responses.

A critical component of this study involved the analysis of qualitative data to ensure both the reliability and validity of the findings (Yin, 2018). Reliability and validity are foundational to

establishing the trustworthiness of qualitative research (Lincoln & Guba, 1985). Internal validity referred to the extent to which the collected data reflected the real-life phenomena being studied, while external validity concerned the generalizability of findings to broader contexts (Creswell & Poth, 2018). According to Mills (2002), validity involved ensuring that the data accurately measured what the researcher intended to explore by aligning the analysis with the research questions and the theoretical framework. Internal validity was maintained by using systematic interview protocols and participant validation (i.e., member checking), while external validity was considered through careful sampling and contextual description. Reliability, on the other hand, reflected the consistency and stability of the research findings over time and across researchers. Hogan (2007) emphasized that reliability in qualitative research often referred to the dependability and replicability of thematic patterns. The themes that emerged from the data showed clear parallels with existing literature on the impact of the COVID-19 pandemic on individuals with substance use disorders. Clinicians described increased relapse rates, disruptions in access to treatment, and heightened psychological distress among clients—findings that were consistent with those reported in previous studies (Rogers et al., 2020; McKnight et al., 2021; Yeager et al., 2022). Additionally, the intensification of co-occurring mental health symptoms such as anxiety, depression, and mood instability aligned with the broader body of research that documented the mental health consequences of prolonged isolation and service disruption during the pandemic (Horigian et al., 2020; Panchal et al., 2023).

These parallels supported the credibility of the identified themes and reinforced the value of clinicians' insights as a meaningful supplement to existing quantitative findings. The congruence between the data and the literature underscored the importance of incorporating practitioner perspectives in understanding the multifaceted effects of pandemic-related

challenges on addiction and mental health treatment. Through systematic coding, pattern recognition, and data triangulation, the study achieved dependability, confirmability, and credibility, hallmarks of rigorous qualitative research (Lincoln & Guba, 1985). The NVivo software was instrumental in supporting these standards by managing the complexity of the data while maintaining the integrity of participant narratives.

Assumptions

In qualitative research, assumptions refer to the foundational beliefs accepted as true without empirical evidence, which allow the study to progress despite being outside the researcher's direct control (Creswell & Poth, 2018). These assumptions must be clearly stated and justified to enhance the transparency and reliability of the study (Walther et al., 2012). The first assumption underlying this study was that the participating therapists were genuinely interested in contributing to a deeper understanding of how COVID-19-induced isolation impacted their clients with substance use disorders. It was presumed that their motivation to participate was linked to professional insight and a desire to inform future clinical practices should a similar circumstances arise.

The second assumption was that participants would provide truthful and accurate accounts of their experiences, especially regarding their professional interactions with clients during the pandemic. The credibility of qualitative research depends significantly on the honesty and openness of its participants (Lincoln & Guba, 1985). The third assumption was that participants would offer responses that were not only truthful but also detailed and meaningful, thereby contributing rich qualitative data. This assumption supported the expectation that data saturation could be achieved within the selected sample size (Hennink et al., 2021).

A final assumption was that the data collected from participants' responses would be valuable in shaping future evaluations, strategies, or interventions for mental health and substance use treatment in the event of future public health crises. This assumption is grounded in the belief that experiential knowledge from practitioners can inform both theory and practice in unpredictable situations such as pandemics (Patton, 2015). By articulating these assumptions, the study aimed to establish a clear framework within which the research findings could be understood, evaluated, and applied.

Limitations

Limitations in qualitative research refer to potential weaknesses or constraints that may impact the interpretation or generalizability of the findings. While these limitations are often beyond the researcher's control, they must be acknowledged and addressed to maintain the study's credibility and trustworthiness (Creswell & Poth, 2018). One key limitation of this study was that the researcher did not directly interview the clients affected by substance use and mental health challenges during the COVID-19 pandemic. As a result, the data relied solely on the therapists' interpretations of their clients' experiences. This limitation may have restricted the depth of insight into clients' lived experiences. To mitigate this, the researcher collected rich, descriptive data from multiple therapists (Patton, 2015; Flick, 2018).

Another limitation involved the mode of data collection. Interviews were conducted remotely, primarily via email and video conferencing. While necessary due to logistical and safety concerns, this method may have influenced the depth of disclosure and rapport between the researcher and participants (Janghorban et al., 2014). In-person interviews often allow for more nuanced communication and nonverbal cues, which may have been lost in remote settings.

Nonetheless, efforts were made to ensure clarity and comfort for participants through follow-up questions and by offering flexibility in communication methods.

Additionally, therapist bias posed a potential limitation. Therapists may have presented their clients' situations in ways that aligned with their personal or professional viewpoints, potentially influencing the objectivity of the data. Recognizing this, the researcher-maintained reflexivity throughout the research process and adhered to ethical standards that emphasize transparency and integrity (Guba & Lincoln, 1994; Tracy, 2010). By acknowledging the possibility of subjective interpretations, the researcher aimed to present a balanced and ethically grounded analysis. Despite these limitations, the study provided meaningful insights into the effects of COVID-19 isolation on individuals with substance use and mental health disorders, as observed by experienced clinicians.

Delimitations

Delimitations refer to the boundaries and scope that the researcher intentionally established to narrow the focus of the study (Creswell & Poth, 2018). These parameters were set to ensure the research remained manageable, relevant, and aligned with the study's objectives. One key delimitation of this study was the decision to focus exclusively on therapists working with clients who had substance use and mental health disorders during and after the COVID-19 pandemic. The study did not include direct interviews with clients themselves. This choice was made to obtain professional perspectives and maintain ethical boundaries, particularly concerning confidentiality and client vulnerability (Patton, 2015).

Another delimitation was the geographic scope of the study. Participants were selected solely from within the United States, which limited the study's cultural and systemic variability. This decision was made to ensure consistency in public health policy exposure, such as

lockdown protocols and mental health service access, which varied significantly across countries during the pandemic (Galea et al., 2020).

The study was also delimited by the use of qualitative, semi-structured interviews as the primary data collection method. While this approach allowed for in-depth exploration of therapist perspectives, it excluded quantitative data or mixed methods that could have offered statistical generalizability. This was intentional, as the study aimed to gain rich, narrative insights rather than broad statistical trends (Merriam & Tisdell, 2016).

Additionally, the sample size was limited to seven therapists, although the initial goal was to recruit eight–12 participants. This was considered acceptable within the context of qualitative research, where data saturation, rather than statistical power, is the goal (Hennink, Kaiser, & Marconi, 2017). The study's timeframe was also a delimitation, as data collection focused on experiences during and shortly after the height of the pandemic, without extending into long-term post-pandemic effects. These delimitations were necessary to provide a focused and accurate exploration of therapists' experiences and to maintain feasibility within the scope of the research design.

Ethical Assurances

Ethical considerations were a central component in the design and implementation of this qualitative research study. Since the research involved human participants, the ethical protection of their rights, privacy, and dignity was prioritized throughout the research process (American Psychological Association [APA], 2020). Prior to beginning data collection, approval was obtained from the Institutional Review Board (IRB) at Northcentral University. The IRB reviewed the research proposal, instruments, and consent process to ensure participant safety and

ethical compliance (Sieber & Tolich, 2013). This ensured that the study met all ethical standards and guidelines for research involving human subjects.

Informed consent was obtained from each participant before conducting any interviews. Participants were emailed a consent form that clearly outlined the purpose of the study, the voluntary nature of participation, the procedures involved, the expected duration of the interview, and their right to withdraw at any time without any penalty. Participants were also informed about how their data would be used, stored, and protected. Only after they signed and returned the consent forms did the interviews proceed.

Confidentiality and anonymity were strictly maintained. All identifying information, such as names, organizations, and other personal details, were omitted or coded to protect participant identity. Pseudonyms were used in all transcripts and research documentation to maintain anonymity. Interview recordings and transcripts were stored on a secure, password-protected device accessible only to the researcher. Data were backed up using encrypted storage systems, and all files will be deleted after a period specified in the IRB protocol. Given that the research dealt with sensitive topics related to mental health and substance use, efforts were made to ensure the psychological safety of participants. Although the participants were licensed therapists and not clients, the interview questions were structured to avoid distress or coercion. The participants were reminded that they could skip any question or withdraw from the interview at any point.

Additionally, researcher bias was acknowledged as a potential ethical concern. As the researcher had prior professional relationships with some participants, steps were taken to mitigate bias by maintaining objectivity, transparency, and consistency in data collection and interpretation (Patton, 2015). Member checking was also conducted by sending transcripts back

to participants for verification, allowing them to confirm the accuracy of their statements and correct any misinterpretations (Lincoln & Guba, 1985). Overall, the study followed ethical protocols to ensure respect, fairness, and protection for all participants, in accordance with professional and academic standards.

Summary

This qualitative study employed a descriptive methodology to explore the impact of COVID-19-induced isolation on individuals with substance use and mental health disorders, as observed by therapists in the United States. The research aimed to capture real-world experiences by engaging therapists through semi-structured interviews, allowing for the collection of rich, detailed data on the behavioral and psychological changes observed in clients during and after the pandemic lockdowns.

The population of interest consisted of therapists who treated adults with substance use disorders during the pandemic, and the sample included seven therapists selected through purposeful and snowball sampling techniques. These therapists provided insights based on their clinical experiences before, during, and after the COVID-19 pandemic. Data collection was conducted primarily via Zoom interviews and supplemented by emailed questions. The instruments used in the study were developed and refined through field testing, and the interview questions were designed to align with the study's research objectives and increase reliability.

The framework of thematic analysis was used to identify emergent themes, and NVivo software was employed to assist with coding and organizing the data into coherent themes. Measures were taken to ensure the trustworthiness of the study, including strategies to establish credibility, dependability, confirmability, and transferability. Ethical considerations were

thoroughly addressed, including informed consent, confidentiality, and adherence to IRB guidelines.

While limitations such as remote data collection and potential therapist bias were acknowledged, they were mitigated through careful planning and triangulation. Delimitations included focusing solely on therapists' perspectives and restricting the study to participants within the United States. Assumptions underlying the research included the honesty of participant responses and their willingness to engage thoughtfully with the research process. Overall, the study provided valuable qualitative insights into how the unique context of pandemic-related isolation influenced clients with substance use and mental health disorders, offering implications for future practice, crisis response, and mental health care delivery.

Chapter 4: Findings

The research was conducted on clinicians who work in the field of substance abuse and mental disorders to allow the gathering of data based on the problem and purpose statements for this study. The problem to be addressed in this study was substance abuse among adults with substance use disorder (SUD) related to pandemic-induced isolation during the COVID-19 pandemic (Rogers et al., 2020; Yeager et al., 2022). The purpose of this qualitative descriptive study was to provide a comprehensive examination of the client's experiences during the pandemic-induced isolation providing insight into the effects of isolation on substance abuse disorder changes during the COVID-19 pandemic. The data collected was based on two research questions:

RQ1: How do therapists working with substance users describe the way that pandemic-induced isolation during the COVID-19 pandemic affected their client's substance use and mental disorder?

RQ2: What accommodations and strategies did clinicians use to address the challenges of social isolation during the pandemic?

A qualitative research methodology was used to provide further information on the effects of social isolation on clients suffering from SUD and mental disorders based on the clinicians' perspectives provided through interviews. Applying a qualitative descriptive design enabled the researcher to interview clinicians in the field of therapy which provided further information, investigation, and data (McGrath et al, 2019). It was further useful in exploring and understanding the effects of isolation during the pandemic on clients suffering from SUD and mental disorders. This enabled the clinicians to provide details of the struggles, and changes made to accommodate clients during such hard times. The clinicians also discussed their

perceptions and experiences about what worked and what did not during the pandemic.

Therefore, such data was useful in creating an understanding of the process used to accommodate clients during isolation to meet their needs and the effects of induced isolation on client's life through the clinicians' perceptions and experiences.

The qualitative research interviews occurred over a month in the United States of America. Five participants were interviewed via Zoom individually and two other participants responded to the questions via e-mail. The codes, categories, and themes were identified to do a thorough and robust analysis as it is important to highlight the patterns from the data to make the analysis more transparent (Lester et al, 2020). In the following sections, the researcher will present a discussion of how the trustworthiness of the data was ensured with respect to the four criteria of credibility, transferability, dependability, and conformability.

Trustworthiness of the Data

Trustworthiness of the study is essential to ensure confidence in the findings of the data is confident by applying a set of criteria (Craig et al., 2021). These trustworthiness criteria are derived from the concepts of credibility, transferability, dependability, and conformability. These criteria were applied during the processes of data collection, analysis, and presentation of findings.

Credibility is considered as the confidence in the research finding and how its interpreted, hence creditability is equivalent to internal validity and truth finding (Korstjens & Moser, 2017). Credibility in this qualitative research was established by following the interview protocol, allowing the participant clinicians to explain their perspectives and respond to questions, and asking for clarification and elaboration of their responses when needed during the interview. Therefore, credibility was established in the data through the consistency in answers provided by

clinicians. This ensured that the data collected was accurate and representative of the experiences of the different participants.

Transferability is the researchers' ability to transfer and apply the findings from a certain study to another study in another context, people, and times (Drisko, 2024; Morse, 2015). Transferability was obtained in this research through the detailed description of the interview data and context of the pandemic-induced isolation provided by the clinician participants which may apply to other studies on clinicians experienced in the field of mental health and substance abuse who lived in the United States of America. Transferability in this research was also established by developing the study based on previously used research on the impact of isolation on clients with SUD and mental disorders. The presentation of data in this chapter is also focused on details presented by the clinicians regarding the effects of social isolation.

Dependability is considered as the consistency of data collected; it is identified as the reliability of data irrespective of the data collection methods used by the researcher (Janis, 2022). Moon et al. (2016) presented dependability as a form of evaluation conducted of the research from an outside source to ensure its finding and process. Dependability was applied in this research in three ways. Firstly, the researcher provided a detailed explanation of the data collection procedures and analysis. Secondly, it included the utilization of a semi-structured interview protocol that was reviewed and approved by the doctoral committee. Thirdly, interviews were conducted via Zoom, and the same set of questions and requests for consent were also emailed to participants who were not available for an interview. Clinicians provided a diverse set of responses about the effects of induced isolation on clients during the pandemic. Many of these findings were consistent with previous studies on induced social isolation. This further validated the implementation of the research methodology and design.

The last criterion to ensure the trustworthiness of data in qualitative research is conformability which is considered by Korstjens (2018) as the degree to which research findings can be confirmed by another research. It also includes ensuring that the data interpretation is not a figment of the researcher's imagination but evidence from the data collected from participants. Confirmability in this qualitative research was established by asking clarification questions to ensure a clear understanding of the data. The participant clinicians engaged freely during the interview process and no opinion from the researcher was included in the interview to avoid bias. Conformability was established by providing the clinicians who interviewed with transcripts from the discussion during the process to ensure transparency and accuracy of data collected through the affirmation of the participants.

Results

The results section will begin with a description of the participants and how they were recruited and anonymized for analysis. This will be followed by a sub-section on data analysis that will offer a clear understanding of how the data was coded, categorized, and thematized. This is followed by evaluation of finding which provides extensive information on the finding of the research in relation to other research done during and after the pandemic

Participant Information

Following the approval from the IRB a recruitment letter was sent to clinicians and after they responded that they would be participating in the research a consent email. Each participant responded by e-mail to verify their desire to participate in the research then an e-mail consent was sent to each to agree on the research process. After the consent was sent and an agreement was provided two participants wanted to answer the questions via e-mail without an interview and five participants consented to an interview via Zoom. The participants determined their most

convenient time for the interview to help in answering the questions accurately and the time frame needed for responses to guide research questions.

The sample included seven participants. After various recruitment emails were sent to over 20 clinicians seven agreed to participate in the research. The seven participants met the criteria of being clinicians who worked with clients with substance abuse and mental disorders before, during, and after the COVID-19 pandemic. All the participants in the research were from the USA and no other data about demographic attributes was collected to protect the participants privacy and anonymity. Data saturation was reached based on the information provided by the seven participants.

Numerical identifications were assigned to each participant ranging from P1-P7. Anonymization of participants was accomplished with giving them numerical identifiers and doing Zoom interviews can be linked with the email interviews. The two emailed interviews were also saved in a confidential document. After a couple of days, participants received a copy of transcripts after the interview via e-mail for their review.

Data Analysis

The transcripts from the interview were reviewed by the researcher for accuracy after it was reviewed by the participants and after those were reviewed and verified by the participants no changes were made. The researcher began with coding each sentence in the transcript from the seven participants. Then the transcripts were transferred to NVivo for coding and analysis clarification, which then led to the creation of 96 codes in the first round. In the second round of coding the researcher reviewed the codes further and merged those into 75 codes. Some examples of codes that were merged included contiguous issues, online treatment problem solution, and many more. In the third round of coding the researcher combined the 75 codes and

created 10 categories based on data from participants' responses to the interview questions. Creating these categories allows to combine codes that discusses the same rational of the data that best fits what the participants have discussed regarding the questions provided to them during the interview. These categories were then classified under three themes to help combine similar responses related to the questions participants answered during the interview, and which are in alignment with the research questions RQ1- RQ2 (see Appendix G and Table 1). Creating categories to include codes helps gather the data that falls under the research question and describes the rational of that question based on the participants responses thus clarifying the impact of isolation on clients and what accommodations were made during that hard time for people suffering from SUD and mental disorder.

Table 1

List of themes and categories

RQ	Themes	Categories
RQ1: How do therapists working with substance users describe the way that pandemic-induced isolation during COVID-19 affected their client's substance use and mental disorder?	Theme 1 – Positive and negative impact of COVID-19 isolation on clients' substance use and mental health.	Category 1 – Lack of treatment Category 2 – Types of substances Category 3 – Issues affecting clients (mental disorders experienced during isolation)

RQ	Themes	Categories
<p>RQ 2: What accommodations and strategies did clinicians and clients used to address the challenges of social isolation during the pandemic?</p>	<p>Theme 2- Other variables that affected clients with SUD and mental disorder during social isolation</p> <p>Theme 3– Changes and accommodations made by clinicians and clients during COVID-19 pandemic isolation</p>	<p>Category 4 – Access of treatment during social isolation</p> <p>Category 5 – Different social and mental issues affecting clients during social isolation</p> <p>Category 6 – Hidden or lessened variables. On the other hand, four categories and one theme</p> <p>Category 7 -Steps that clients used to address the issue</p> <p>Category 8 — Therapy techniques and strategies used</p> <p>Category 9 –Changes made to accommodate clients</p> <p>Category 10 – Online and telehealth</p>

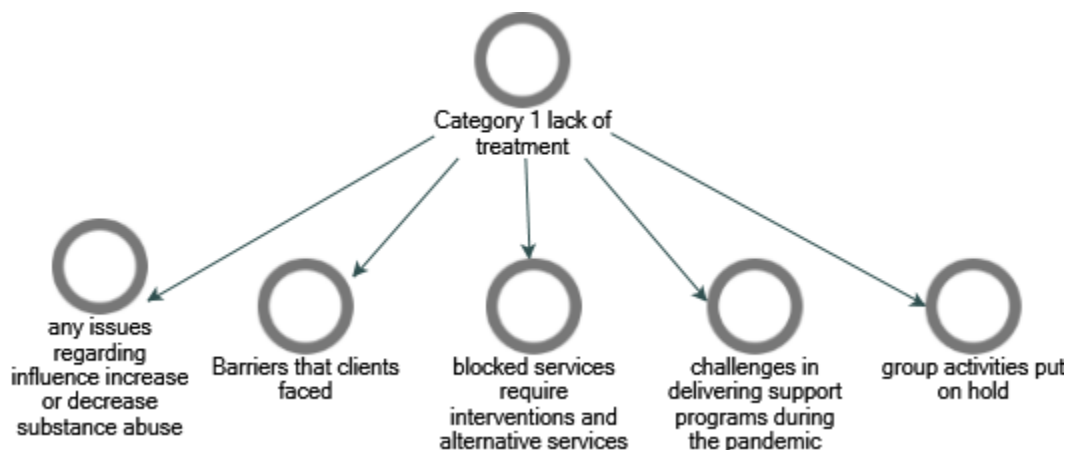
Research Question 1: How do therapists working with substance users describe the way that pandemic-induced isolation during COVID-19 affected their client's substance use and mental disorder?

This research question will be addressed with reference to Themes 1 and 2. Theme 1 captures the positive and negative impact of COVID-19 isolation on client's substance use and mental disorder. This finding relates to the identification of challenges and conditions experienced by the clients. Theme 2 further expands on the issue of induced isolation by presenting the other hidden variables that affected clients with SUD and mental disorders during social isolation. This finding is critical to understanding how therapists treated clients during pandemic induced isolation.

Theme 1. The first theme, positive and negative impact of COVID-19 isolation on clients suffering from substance abuse and mental disorders captures the different ways in which clients were impacted during the pandemic-induced isolation. These different ways are classified into four categories under this theme including: lack of treatment, types of substances used during isolation, issues affecting clients (mental disorders experienced during isolation), and access of treatment during social isolation.

Figure 1

Category 1 Lack of Treatment



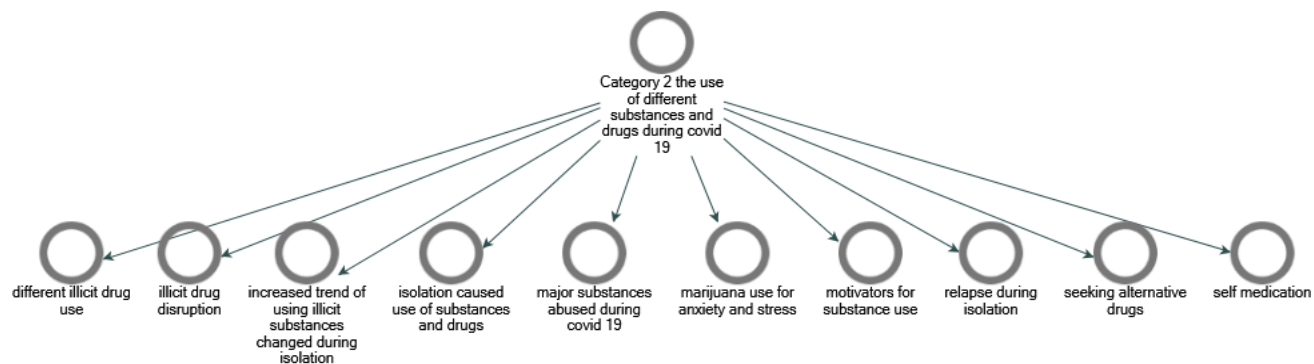
Category 1 – Lack of Treatment. This category includes the participants' perceptions regarding the issues faced by clients in assessment treatment, the disruption in services, which further led to the challenges faced by providers regarding offering services. The first two codes' issues regarding the influence of increase or decrease substance abuse, and barriers that clients faced were discussed by three participants explaining how these issues caused the changes in substance use and abuse. Participant 5 for example, stated that the increase in substance use was the “result of a client being isolated with a person that caused them harm thus allowing them to seek substance to overcome their fear.” On the other hand, Participant 7 didn't see any change in substance use.

The last three codes blocked services that require interventions and alternate services, challenges in delivering support programs during the pandemic, and group activities put on hold capture similarities in finding support and in blocked services that require creating new and alternate services. Participant 4 for example, stated that all “group activities were either stopped or moved online and were difficult to find.” Similarly, Participant 7 stated that there “was difficulty in attending sober support groups like AA groups due to social closeness attached.”

Similarly Participant 2 stated that “blocked services caused us to create access to alternative strategies and interventions to access services.”

Figure 2

Category 2 The use of different substances during COVID-19



Category 2- The Use of Different Substances and Drugs During COVID-19. This category includes ten codes on the issues of self-medication, seeking alternative drugs, relapse during isolation, motivators for substance use, marijuana use for anxiety and stress, major substance abuse during COVID-19, isolation-caused use of substances and drugs, increased trends of using illicit substances, illicit drug disruption, and different illicit drugs. There were several similarities in the way participants reported the clients’ patterns of self-medication and illicit drug use during the pandemic induced isolation. Participants 2, 5, and 7 reported the increased use of alcohol, marijuana...Participant 5 also mentioned cannabis.

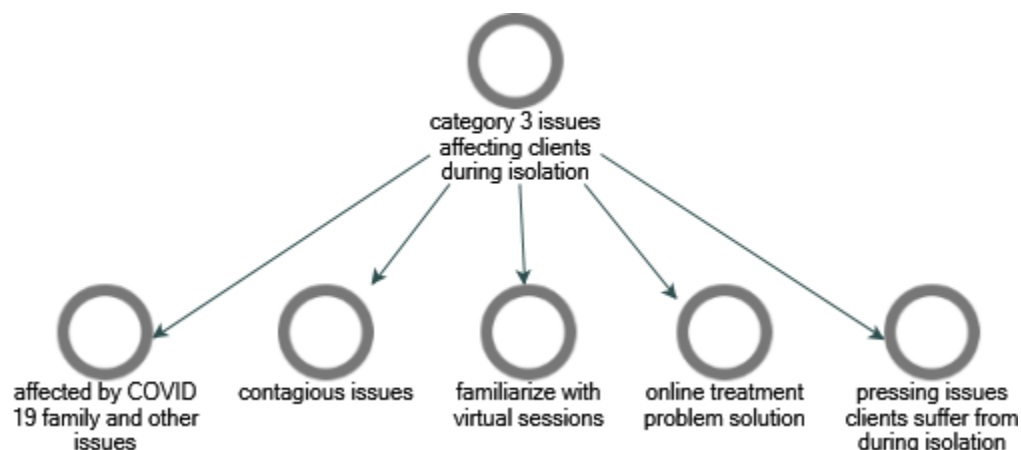
Participant 2, 5, and 7 reported the increased use of alcohol, marijuana, opioids, nicotine, cocaine, and fentanyl. Participant 2, for example, stated that “clients relied on self-medication and alternative drugs due to lack of psychiatric care for their anxiety and depression symptoms including nicotine and marijuana.” Participant 7 discussed the increased use of substances such as “alcohol, marijuana, opioids, cocaine, fentanyl, etc.” during the period of isolation. Participant

1 and 5 included more substances used during the pandemic than Participant 7. Participant 1 stated the use of “alcohol, and marijuana both for recreational and medicinal purposes and variety of drugs including ADD medication, Benzodiazepines, and Opiates.” Similarly Participant 5 stated that during the pandemic-induced isolation caused increase in substance consumption as “alcohol, cannabis, Aaron, methamphetamine, heroin, and cocaine.”

Participants offered similar explanations related to difficulty in finding treatments, and the stress related to the isolation for the increased substance and drug use of the clients. Participant 6 added to the information by linking the increased use of drugs to difficulty in accessing treatment. Participant 6 stated that “definitely they saw an increase in drug use as heroin and relapse because of the lack of face-to-face interaction, monitoring, and difficulty transitioning to telehealth.” Participant 3 stated that “Drug use and abuse was inclined. Many patients were fearful which fed into their stress levels and mental health issues which triggered them to use more.” Participant 5 stated that substance use and accidental overdose increased during isolation because of a “decrease in constant monitoring due to the isolation at the beginning of the COVID-19 pandemic.”

Figure 3

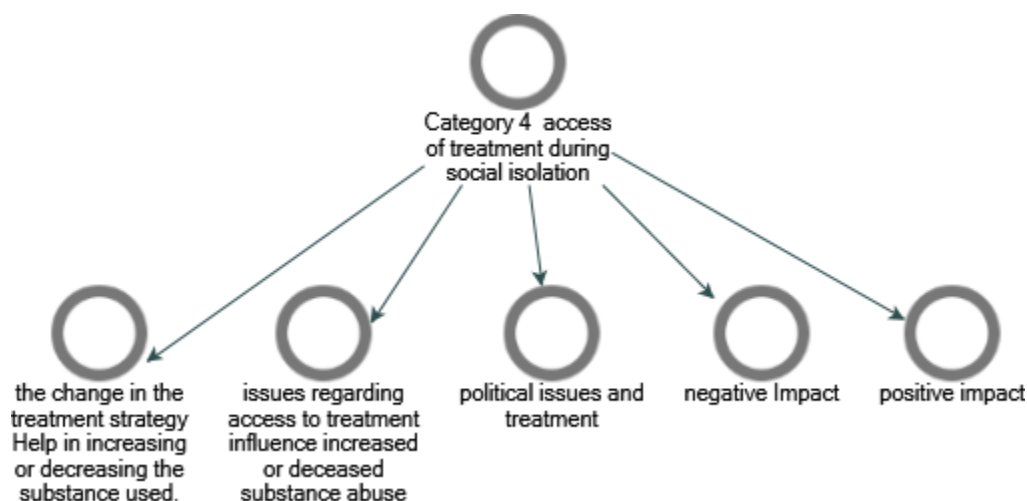
Category 3 Issues Affecting Clients During Isolation



Category 3- Issues Affecting Clients During Isolation. Category three included five codes on the issues that affected clients during the isolation as family and other issues, contagious issues, familiarity with virtual sessions, online treatment problem solutions, and pressing issues clients suffered from during isolation. Participant 1, for example, presented an online treatment solution as the clients shut off their cameras during sessions which made the therapists sometimes ask questions to ensure the client is present but without “making it to be a test for them but allow them to soak the treatment strategies in.” The cause of another problem facing clients during COVID-19 isolation was familiarizing themselves with technology. This is interpreted by Participant 2 as “switching over from face to face to the online virtual session and familiarize themselves with some technology was hard for some older clients then the clinicians had to help guide them through the process and sometimes was seamless.”

Another problem facing clients during the isolation was the physical disability of some clients with co-occurring disorders which caused limitation to services. As Participant 3 stated “Many of the co-occurring chronically addicted population were also physically disabled or had autoimmune disorders which limited their access to the services.” On the other hand, Participant 6 stated that some clients “reported not understanding the crises and not knowing how to get services.” Participant 7 stated that many clients “feared confidentiality issues as they needed to meet in different settings than individual face to face.”

Contagious issues code was presented by Participant 2 who stated that many clients “were concerned about contagious issues.” Participant 2 also stated that people were affected by COVID-19 isolation and many “families that were in substance abuse and addiction programs suffered a family loss which was devastating so new issues had to be covered through sessions as grief, and issues of anxiety from getting contagious.”

Figure 4*Category 4 Access of Treatment During Social Isolation*

Category 4- Access of Treatment During Social Isolation. Category four includes five codes on the positive and negative impact of COVID-19 isolation including negative impact, political issues and treatment, positive impact, changes in treatment strategy help increase or decrease the substance used, trends using illicit substances change during COVID-19 isolation. Participant 4 mentioned that some treatment issues were related to the time it took to start as stated “a month or more to start after COVID-19 started.” Participant 3 discussed how uncertainty caused fear and anxiety which led to relapse as stated, “due to fear, uncertainty, increased anxiety and depression during COVID, clients used more and relapsed more often.” Participant 2 discussed a hidden issue of political concerns which led to anxiety and anger Participant 2 described this as follows -

Because COVID became a political firestorm, a lot of people, especially people who are kind of caught up in politics and have an interest or political affiliations they had, anger issues and were disruptive in their own families driving their self, their families crazy by their refusal to

get vaccinated or having issues or jumping up and down about government control. Politics was unexpected.

Participant 2 also discussed how social isolation was an issue in the lives of families with clients with polarized political views that many clients faced describing it as follows -

Regarding social isolation, people with these polarizing political beliefs were at home more they were constrained, and that created kind of a pressure within their family or attention within their families to express these opinions, and that created more conflict. And the conflict then created more anxiety and other issues.

Another negative impact of COVID-19 isolation was the uncertainty of the disease which caused fear of coming to group therapy sessions and use of excuses about having COVID symptoms and relapse because of the fear and anxiety of the uncertainty as stated by Participant 2. Then again Participant 7 stated the negative impact was the lack of physical presence because of the isolation as stated, “the negative impact was the lack of physical presence that the stay-at-home order restricted.”

On the other hand, four participants discussed the positive impact of the COVID-19 isolation, which ranged from the client not being able to get their hands on certain drugs, to telehealth service which made things somehow easier for some clients, and also to seeking community therapeutic environment resources which helped minimize use. For example, Participant 4 stated that “the positive impact was that location, and transportation did not prevent clients from obtaining services. Participant 5 gave an example of the positive impact of isolation and described that as follows-

I would say some of the positive impacts that it had were for those that were catching hold to or being in recovery to be able to look at the community of the therapeutic

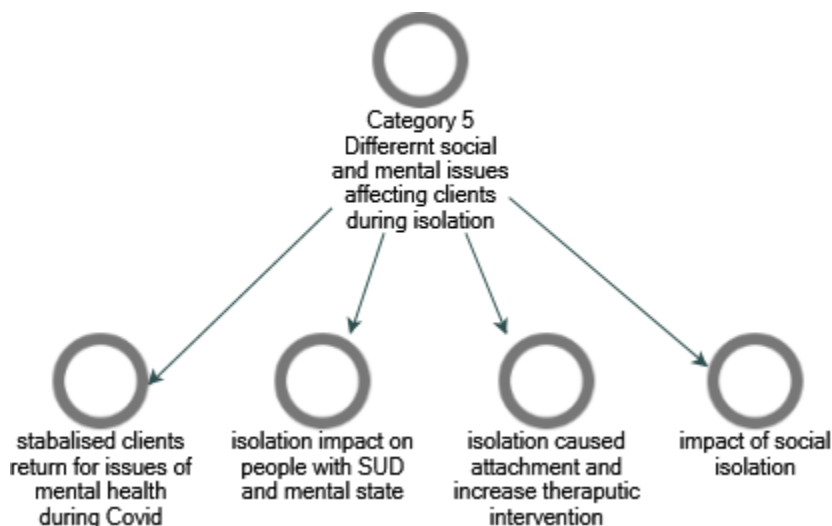
environment as a resource that was helpful that even minimizing use or continuing to use, and a lot of clients didn't have their hands on drugs. Like certain types of drugs, that limited their use.

Participant 7 stated the positive impact was in telehealth services as stated: “Telehealth services were a positive outcome of COVID-19; it is a very convenient tool that has continued in other disciplines.”

Theme 2. Other variables that affected clients with SUD and mental disorder during social isolation. This theme included two categories which are different social and mental issues affecting clients during social isolation and hidden or lessener variables.

Figure 5

Category 5 Different Social and Mental Issues Affecting Clients During Isolation



Category 5- Different Social and Mental Issues Affecting Clients During Isolation.

Category five includes four codes on the issues of the impact of social isolation including stabilized clients return for issues of mental health during COVID-19, isolation impact on people

with SUD and mental disorder, isolation caused attachment and increased therapeutic intervention, and impact of social isolation. Participant 2 stated that many clients who were stabilized before the COVID-19 pandemic came back for treatment for anxiety and depression issues from isolation as stated, “so many of my clients who had otherwise stabilized and completed treatment came back to me and requested services mostly for anxiety or depression issues related to the isolation of COVID.” Participant 1 discussed how social isolation decreased recovery because many clients during the isolation had no way to be around others who helped them or had limited access to help thus making them seek substances such as liquor which they got from open stores. Participant 1 also mentioned that the pandemic was a trigger for many clients to use substances especially people who had addiction problems as stated “If somebody has the disease of addiction. Somehow, it is going to get triggered by the pandemic may have just become another reason for another trigger to cause people to have their disease manifest.” Another problem that impacted clients was being scared to be in public or go to work because they feared getting ill which caused them to suffer financially. Participant 4 stated “Clients developed fears of being ill and being out in the public arena. They suffered financially and experienced isolation from family and friends due to quarantine.”

In contrast Participant 2 discussed more problems as loss of immediate family members or losing friends because of COVID-19 causing people to seek substances. The isolation triggered their anxiety or mental state causing co-occurring disorders to develop. This led clinicians to create more treatment strategies that help cope with the loss or provide grief therapy. Participant 2 described this as follows-

Some people on my caseload did lose family members or extended family members or friends to COVID-19 so those losses ended up creating topics of targets for therapy in

terms of grief therapy expression therapy social issues helping them cope dealing with anxiety if you know if they got sick and died, fears other kinds of issues COVID presented several triggers for increased use and co-occurring mental health issues.

Participant 1 discussed the strategies that needed to be used for clients to report their attendance, especially mandated ones who had to keep a log that was signed by a chairperson or secretary to show their compliance with orders from the court. Participant 1 described this as follows -

Clients that need to report to me regularly. One of the items that they need to report to me is their attendance at continuing care, therapy sessions, and recovery meetings for drug addiction and process addiction. And so, typically, at in-person meetings they get a meeting log that lists a meeting that is signed by the secretary or chairperson of the meeting.

On the other hand, Participant 2 discussed the various procedures used by their institution such as screening clients to stay in compliance with the isolation orders when clients needed to meet in the office. Participant 5 discussed how isolation was the cause of the increase in use and increase in underreporting and abstinence was far from true to many clients. Participant 5 also discussed the increase in depression episodes, anxiety, and social anxiety from isolation with attachment issues on the rise between family members and partners leading to the rise in family therapeutic encounters and partner therapy. Participant 5 stated that “The biggest thing the increase of use with isolation and the increase of under-reporting the increase of minimizing use. And, at times. Yes, reporting compliance to abstinence when that was far from the case.”

Participant 4 discussed how isolation was difficult for clients living alone and for students to adjust to the loss of social activity and schooling online causes them depression and anxiety as stated “Anxiety and depression increased for many people. Isolation was difficult for

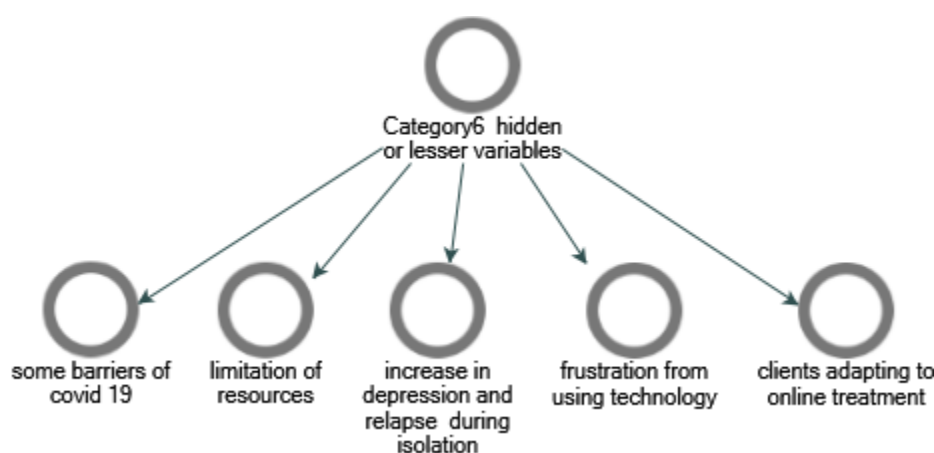
those living alone and for students to adjust to the loss of social activity and being schooled online.” Participant 4 described this as follows-

Overall, I have noticed an increase in depressive episodes that increase illness anxiety as well as social anxiety. There was an increase in I want to say attachment. There was a rise in the number of family therapeutic encounters. as well as couples or partners. As far as reaching out for therapeutic and in therapeutic interventions.

Participant 6 discussed also the increase in anxiety, depression, and fear among clients during isolation as stated, “Increased anxiety, fear, and depression.”

Figure 6

Category 6 Hidden or lesser variables



Category 6- Hidden or Lesser Variables. Category 6 hidden or lesser variables includes five codes that relate to the barriers and limitations of online treatments and relapse. These codes are some barriers to COVID-19, limitations of resources, increased depression, relapse during isolation, frustration from using technology, and clients adapting to online treatment. The barriers related to canceled sessions because of getting sick and not being able to get access to treatment was stated by Participant 2 as “the barriers were the access issues, and you know, people would cancel sessions because they were sick.” Participant 2 also discussed the social

isolation barrier that may have been okay with some but not others which had a great impact.

Participant 2 stated as follow:

I think the biggest thing that we could call, you know, hidden or unexpected. You know, would be the overall effect of social isolation. Social isolation for some people they liked it and other people it drove them crazy you know, and, so, See, you know, ordinarily I never would have seen.

On the other hand, the effects of social isolation on sober groups was discussed by Participant 7 as “Sober support groups suffered the most when it came to isolation. There is a benefit to individuals sharing a physical presence with someone else, and that was taken away with the mandated stay-at-home order.” Participant 6 discussed how social isolation caused an increase in substance use as stated, “increase in drug and alcohol use, and sex.”

The limitation of services was seen with the lapse of services that didn’t start till the government issued the protocol for the use of telehealth services. Participant 4 discussed the lapse of services in using telehealth and phone to conduct treatment after the government issued the crisis order. They discussed that as follows-

There was a lapse in services until the government placed the crisis order for professionals to use telehealth services via phone and video call. Once this was in place, services were accessible unless there were phone or internet service delays.

The topic on issues of hindrance services from isolation was access to transportation or public transportation for people who didn’t have rides. As Participant 5 elaborated on the topic as stated “access to transportation could have been some of them. Because the necessary mandates on that with social distancing being there.” The lack of funding for people who needed access to phones in intense outpatient programs was discussed by participant 5 that stated that “access for

clients that are doing like an intensive outpatient sometimes just the access to for in person, and access to resources for funding. There was also the limitation of phones for many of my clients that I worked with.” Participant 6 discussed the limitation in food resources and traveling or transportation issues with their clients as stated, “food became an issue, and traveling became difficult for clients.”

Another significant hidden variable, discussed by Participant 3 pertained to isolation and fear of disease. The participant described this concern further elaborating its effect on the clients’ mental health. They said “due to fear, uncertainty, increased anxiety and depression during COVID clients used more and relapsed more often.” On the other hand, Participant 5 discussed the fear of COVID causing problems for clients as stated, “Being triggered by quarantine. And a disease that was life-threatening. That no one had any accurate knowledge about.”

The frustration from technology use was seen in clients who were savvy in using such process as Participant 2 discussed the frustration of people who did not know anything about technology as stated, “a lot of people were unfamiliar with the technology.” Thus, causing frustration not just from the technology but from the isolation Participant 1 stated, “Oh, why one could be computer frustration. Another would just be the general isolation.” Participant 5 discussed the problem of clients not engaging in the process of treatment because of a lack of technology use and knowledge. Participant 5 described this as follows -

Some clients were not tech-savvy. And so that resulted in them not being able to engage at times, especially in telehealth groups. Or even an individual session or being able to follow up with things possibly online. That would help with the interventions. So. That would, that was a big, that was a big barrier, the lack of technology and the lack of experience with technology when it was available.

Participant 3 on the other hand, discussed how technology frustration was at first and after people were able to navigate through the process. Participant 3 also discussed some of the services that were provided online and in person. Participant 3 described this as follows -

The client was offered telehealth services and in-clinic counseling, case management, and nursing services. Also provided Onsite mental screening and other related processes after ensuring their safety and that of others because of COVID-19. Very few were technologically savvy and were able to navigate to sessions the majority had issues and were unable to use telehealth effectively. Many also feared privacies, especially through group therapy and being anonymous.

The code of clients adapting to online treatment was discussed by Participant 2 who specified that people were getting acclimated to using technology and telehealth for treatment as stated.” So people who ordinarily would have canceled appointments in the future now were acclimated to an acceptance of telehealth. Virtual access issues. And we had more sessions instead of less sessions.” Participant 1 discussed also the acceptance of clients to the online treatment using Zoom and acclimation to it as stated, “well, at first. Everyone was extremely nervous about changing from in-person. Meetings and there was trepidation about that but gradually clients have adapted to online. We substituted just with Zoom Meetings.” Participant 4 discussed how their caseload was small and after the isolation order was in place clients used telehealth services as stated, “My caseload, in a private practice setting, is small and after the initial shut down they were able to use telehealth.”

Participant 5 discussed the use of community resources to help people during the pandemic to find support and use technology as a resource. Participant 5 described this as follows -

Part of the community that I was working in there was diligent work to make sure that everyone had access to support especially substance use disorder services and so that came via Zoom via the EHR platform, making sure that they were HIPAA compliant. There were also, I mean, community resources available as far as telehealth. Or telecommunication, some type of telecommunication for the client to receive care and support.

Participant 6 discussed that there was difficulty in some clients using technology as stated “very difficult; clients need help with technology and cell phones.” Participant 7 discussed the adjustment periods needed for clients to get used to the technology used during isolation as stated, “Reports related to client’s experiencing telehealth services were that there was an adjustment period needed when using telehealth.”

Overall, the findings from research question one and themes provided by therapists perspective showed that pandemic-induced isolation contributed to increased substance use and worsening mental health symptoms among clients. Isolation disrupted routines, reduced access to support systems, and heightened feelings of loneliness, anxiety, and depression. These factors often led to relapse or escalated use.

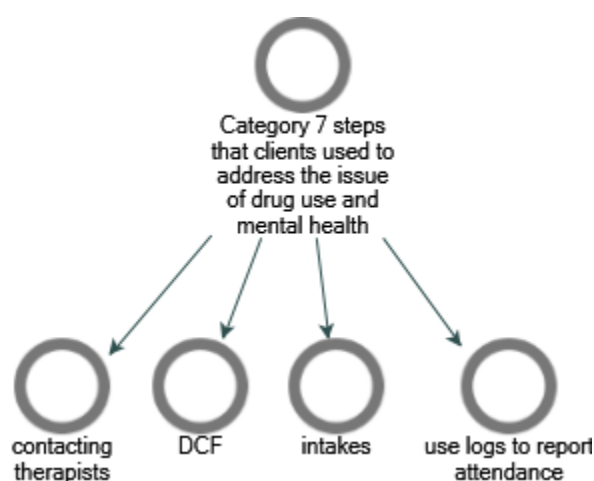
Clinicians adapted by using telehealth, adjusting treatment goals, and emphasizing emotional regulation and crisis management. While some clients benefitted from remote care, others faced barriers such as limited access to technology or safe environments. Overall, therapists described isolation as a key stressor that intensified existing challenges.

Research Question 2: What accommodations and strategies did clinicians use to address the challenges of social isolation during the pandemic?

Theme 3. Theme three Changes and accommodations clinicians made during the COVID-19 pandemic isolation captures the accommodations and strategies clinicians used to address the challenges of social isolation during the pandemic. These different accommodations and strategies are classified into four different categories under this theme therapy techniques and strategies used, changes made to accommodate clients, online and telehealth, and steps that clients used to address the issue of drug use and mental health.

Figure 7

Category 7 Steps That Clients Used to Address the Issue of Drug Use and Mental Health



Category 7 Steps That Clients Used to Address the Issue of Drug Use and Mental

Health. This category includes four codes which include contacting therapists, DCF involvement, intakes, and use logs to report attendance. Contacting therapists code presented how clients got services through contacting their therapists. Participant 5 discussed how clients had to call the office to receive help or treatment services as stated “Treatment planning for clients so they had access. They just had to call to receive services.” Participant 4 discussed how clients only understood the method of calling therapists for services and that was a little difficult because therapists were not able to prescribe medication through that process as stated “The only

method clients understood was contacting therapists, this was difficult because therapists could not provide meds.”

The second code Department of Child and Family Services (DCF) involvement related to clients who suffered from substance use disorder and were ordered by the court to seek help with DCF involvement in the process of maintaining therapy. Participant 7 who worked with courts and DCF-related cases during COVID-19 to maintain the client therapy process stated “I worked with an agency that worked with individuals who struggled with substance use issues and DCF involvement. Completing the tasks required of them from DCF and the courts was what motivated my clients to maintain continuity of care during the height of the pandemic.”

The reference for the code intake includes a description from Participant 5 about the process of the client intake form. Participant 5 described in the code intake that many clients during the pandemic had to fill a report by telephone as the first step of interaction between client and therapist and then move on to telehealth. Participant 5 described that as follows-

Intake via telephone is the first interaction. And then move to telehealth. A telehealth system was our two means like by phone. And by telehealth, people were able to access it. Care. And everyone shared in. Intake, an assessment of. Those that were you know qualified here in the assessment diagnostic assessment

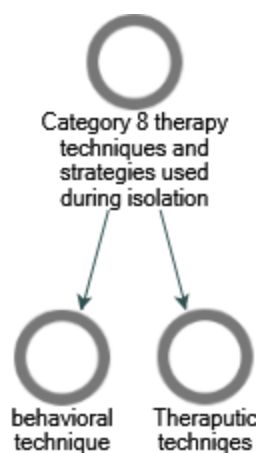
Participant 1 discussed how clients needed to report via email their attendance at services using logs that were signed by the secretary of the meeting developer or chairperson especially recovery meetings, therapy sessions online, face to face, or telephone. Participant 1 discussed this as follows-

Clients that need to report to me regularly. And one of the items that they need to report to me is their attendance at continuing care. Therapy sessions and recovery meetings for

drug addiction and process addiction. And so, typically, at in-person meetings, they get a meeting log. They list a meeting that is signed by the secretary or chairperson of the meeting. And that changed. Yes, they would still list the online meetings. But they would get they would prove their verification not by a signature on a paper log, but rather by obtaining and forwarding to my emails from the secretary or treasurer, which said that they attended the meeting.

Figure 8

Category 8 Therapy Techniques Used During Isolation



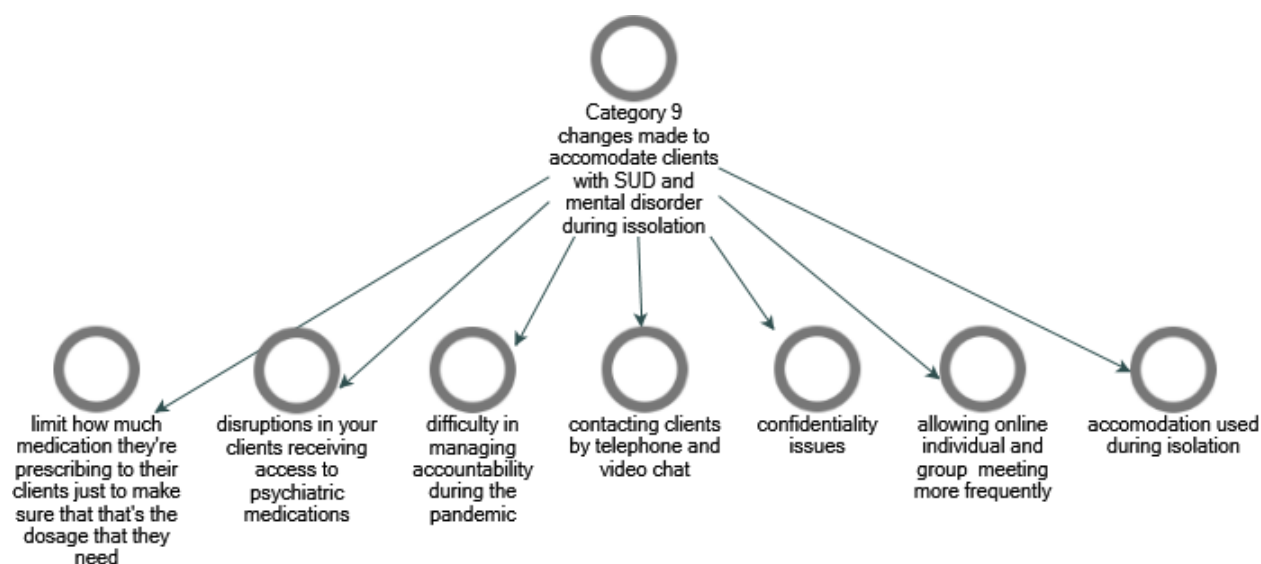
Category 8- Therapy Techniques and Strategies Used During Isolation. This category includes two codes behavioral techniques, and therapeutic techniques. Behavioral technique was adopted during COVID-19 isolation to help with the therapy process for substance abuse. Participant 2 discussed how many therapists and clients adopted the behavioral techniques to help in services with clients suffering from SUD as stated “A lot of them adopted some of the behavioral techniques that I use and teach. Part of my therapy actually, did very well and adhered to those behavioral techniques. As an alternative substance abuse, which is, one of the things that I try to provide that service.”

Participant 5 discussed the use of therapeutic techniques during isolation which was very needed as family, couples therapy, and attachment therapy which was on the rise during the pandemic period. As stated by Participant 5 “For some there was an increase in attachment.

There was a rise in the number of family therapeutic encounters. As well as couples or, partners as far as the reaching out for therapeutic and in therapeutic interventions.”

Figure 9

Category 9 Changes Made to Accommodate Clients with SUD and Mental Disorder During Isolation



Category 9 - Changes Made to Accommodate Clients with Substance Use Disorder and Mental Disorder During Isolation. This category includes seven codes that relate to the accommodations that need to be done by clinicians to help clients stay on track with treatment and manage accountability and controlled prescribed drugs during pandemic-induced isolation. These codes are accommodations used during isolation, allowing online individual and group meetings more frequently, confidentiality issues, contacting clients by telephone and video chats,

difficulty in managing accountability during the pandemic, disruption in your clients receiving access to psychiatric medication, limiting how much medication they are prescribing to their clients to make sure that is the dosage needed.

The accommodation code was discussed by Participant 3 who explained the extended hours of counseling that needed to be implemented to meet the needs of clients as stated, “Accommodations included: longer hours counseling and case management services, increase in client empowerment phone calls to the clients after hours.” Participant 7 discussed how obtaining physical observation of clients was important for them, so they had to drive to the client’s house to meet these expectations and then move the sessions online via telehealth as stated “Being able to obtain a physical observation of the clients I was working with was an important part of my job. So, I would drive out to the client’s home to obtain that observation and then proceed to conduct the sessions over telehealth.”

The code allowing online and individual group meetings more frequently was discussed by Participant 1 which allowed online meetings more frequently and integrated into the treatment process as video calls and individual profile creation to help in the recovery process during the isolation. Participant 1 discussed this as follows-

The accommodations that I made were allowing online meetings more frequently. That is the primary one again. Encouraging videos also. Allowing online therapy sessions.

Individual accounts like of course there was a proliferation of intensive outpatient programs that are done exclusively online. So, I made those accommodations a lot by allowing them to be part of a person's recovery program.

Participant 5 discussed hybrid sessions as telephone, telehealth group, and individual meetings as accommodations needed during isolation with the individual in session for some

clients but with the protocol of isolation in place during those visits which includes asking about symptoms and six-foot distancing and masks. As participant 5 discussed these accommodations as follows-

Some of the accommodations that I made. Were telephone only. Audio-only resources as far as access to counseling. Telehealth individual sessions as well as group sessions.

Doing hybrid sessions with some in session, some clients in session, and some clients.

Via video in-person and video combinations made accommodations as far as with distancing within distancing within rooms. Depending on what point we were at. Being able to have clients and following those protocols for the health protocols.

The code of confidentiality issues was related to online telehealth and Zoom meetings that related to the security of the network which was addressed through client permission documents. Participant 2 discussed the issue of confidentiality as it pertains to Zoom and Facetime which was a problem because of network security issues and the risks which was explained to clients who had to agree and give permission which was documented before using those technologies. Participant 2 discussed these accommodations as follows-

Then there were confidentiality issues. That we had to address because when we choose telehealth Venue Like Zoom and FaceTime time some people don't have computers, some people do, and some people have phones. Not considered a secure network. But with the client's permission with some education about the limitations of Facetime. With my clients who were okay with it and agreed to it then we went ahead and used Facetime, with their permission with an explanation, and their acceptance of any potential risks any security issues that might come from Facetime, which of course there were none, but we had to go over all that and document those things.

The code related to contacting clients by telephone and video chat is related to the accommodations of using these technologies to conduct sessions with clients when in-office sessions were not available. COVID-19 protocol was used if in personal session was conducted. Many had issues connecting to video but after that issue was resolved many requested video chats because wearing a mask was uncomfortable. Participant 4 explained how they had to switch to telephone use and video chats because some people didn't feel comfortable wearing masks during sessions even though sometimes, they had internet disruption but that didn't stop them from using the telephone and video chats which was more convenient. Participant 4 explained this as follows-

The main change was using phone or video calls. The use of masks and increased disinfecting in the counseling office was done as well as having clients avoid the waiting area. I would signal them to come in from the parking lot. This was as successful as it could be. Connection and tech issues were disruptive and for some people wearing a mask made the interaction uncomfortable until everyone was used to the procedure. Participant 6 discussed the use of technology and Apps which would have been more dependable as stated "I transitioned to using technology and contacting clients by phone. Apps could have been more dependable."

The code of managing accountability during isolation provides a view into how sometimes that could have been a problem for some clients, especially while using technology. Since some relied on in-person sessions to stay accountable for their SUD. Participant 5 discussed the difficulty in managing accountability and navigating treatment using technology as stated "Difficult was the ability to navigate and manage accountability for. For those clients, for those individuals seeking help and seeking help and wanting accountability."

The code disruption in clients receiving psychiatric medication provides an overview of how some clients were not able to get access to some medications because of delays caused by medication distribution in some pharmacies because of the pandemic. Participant 4 discussed the issue of delays but also stated that medication was refilled as prescribed “Possibly some initial delays and less frequent visits; however, prescriptions were filled, and psychiatry began to use Telehealth as well.” Participant 6 also discussed the issues of delays in prescription medications as stated “Yes, clients had difficulty getting meds from pharmacy.” Participant 7 discussed that some of their clients who had SUD had to go to clinics for prescription medications and there were long waiting lines as stated “I had a couple of clients who were on suboxone and would have to go to suboxone clinics. My clients would report long lines and inconveniences when obtaining their suboxone dose.”

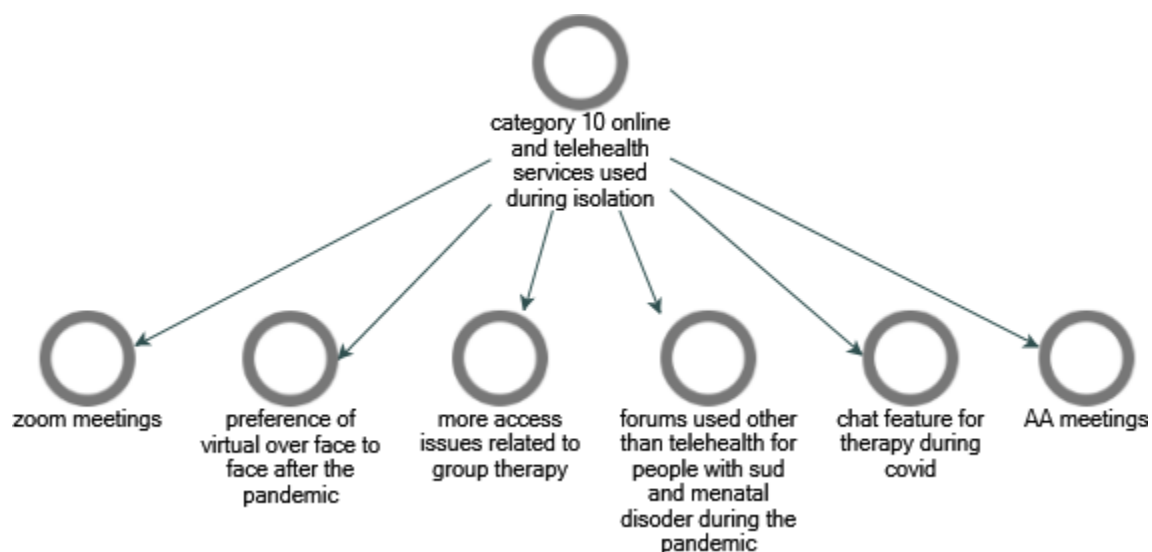
On the other hand, Participant 5 discussed that there were no delays as they were collaborating with a community mental health clinic which had its pharmacy, and prescriptions were filled as needed as stated “I didn't have that experience with any of my clients. They were able to have access to prescriptions adequately. I was working in community mental health at the time so there was a pharmacy on-site at one of the locations and from my understanding we also had Excess to-site providers. And medications on-site as well. And we didn't have that issue.”

The code limiting how many medications clients were prescribed shows how some medications were limited in prescription as Oxycodone. Participant 3 discussed how pain management medication was limited when prescribed as stated “Pain management drugs like Oxy and so on.” On the other hand, Participant 5 did not see any limitation in prescribed medication as stated “The access to naltrexone, vivitrol. Were quite available. And we did not find that there was any shortage in. At the agency I was working with at the time.”

Theme 4. This theme steps that clients used to address the issues based on these changes. This theme included one category which is and steps that clients use to address the issue of drug use and mental health. This includes telehealth meetings as AA, online group therapy, Zoom, and chat features for therapy, There is also more access issues that clients faced during the isolation related to technology.

Figure 10

Category 10 Online and Telehealth Services Used During Isolation



Category 10. Online and Telehealth Services Used During Isolation. This category includes 6 codes that explain the online and telehealth services used during isolation which include AA meetings, chat features for therapy, forums used other than telehealth, more access issues related to group therapy, Zoom meetings, and preference for virtual over face-to-face after the pandemic. Participant 1 discussed how connecting people to AA meetings at the beginning of the pandemic was difficult, but that process became much easier after people got used to the

process as stated: “So it became much easier and easier. I remember at the beginning of the pandemic, trying to connect people to AA meetings online and it was very difficult.” Participant 1 also discusses how AA meetings via telehealth and online employee assistance programs became easier and easier as time passed during the pandemic as stated “Yes, and it became gradually quickly easier and easier, there’s websites online AA meetings help there’s these companies now that just exclusively do telehealth that employer assistance programs It’s just blossomed.” The code chat features for therapy during COVID-19 were discussed by Participant 1 who explained the cons and pros of chat forums participants in groups used with pros of chatting online helps to connect people, but the con is that some group members felt left out as stated “But then you’ve got the chat system or people can talk to each other. There are pluses and minuses. Now the chat feature allows people to talk to each other but then they may be ignoring the rest of the members and the group. So, so that’s kind of a plus and a minus.”

On the other hand, the code forums used other than telehealth for people with SUD and mental disorders during the pandemic were discussed by Participant 1 by providing a variety of forums and apps used during the pandemic as Sober Tool, Radi, and Facebook as stated: “yeah sober tool is a mobile app. Sober Tool that has a forum. That is extremely helpful. And of course, there’s Facebook and Radi, there’s all kinds of. Forums where people use to connect.” Zoom meeting code was another forum used which was a change from the usual and Zoom helped keep people in treatment which was hard during COVID-19. As discussed by Participant 1 Zoom forum helped keep people connected and prove attendance for treatment purposes as stated “Because of the new attendance at online Zoom Meetings and other online meetings. So the way they would prove that they attended. Their recovery meetings and sessions. Involved, that changed.”

On the other hand, coding more access issues related to group therapy provides insight into some problems regarding video calls and ensuring that clients do not just log in and not be in the session or be doing something else instead of listening. Participant 1 discussed this issue to be very common but it's up to the individual in the group to listen and be present or just log in and do something else. Participant 1 discussed that as follows-

The problem is that they can just click on the online meeting, and then just do something else. So that is a problem. An ongoing problem and I'm not sure if you find out how to encourage them to listen, but Somebody can be showing up. And doing something else. That is logging in and not putting the camera on and doing something else while you are talking.

The code Preference of Virtual over Face-to-face after the Pandemic presents how clients after the pandemic chose to do virtual services especially when courts and probation officers approved attending virtual sessions as intense outpatient programs, counseling sessions, and support meetings instead of face-to-face especially clients who had a hard time finding transportation. Participant 2 discussed how many clients chose the online sessions because they were more convenient and approved by the courts and parole officers. Participant 2 discussed this as follows-

Many of them preferred it. To do virtual sessions even after the pandemic simmered down So those people are always struggling with transportation issues. And one of the things COVID did is it gave them another way to access services. Now not only with me but in some cases people who I referred or were referred by someone else like the court or probation officer to other services once we open the door that they could do things virtually, they would attend IOP intensive outpatient programs, individual counseling,

and support meetings all virtually much more comfortably once I helped them and advocated for them to cross that bridge.

In sum, the findings for research question two indicate that clinicians implemented a variety of accommodations and strategies to address the challenges posed by social isolation during the COVID-19 pandemic. Telehealth was widely adopted to ensure continuity of care, allowing for individual and group sessions to continue remotely. Therapists reported increasing scheduling flexibility, conducting more frequent check-ins, and placing greater emphasis on therapeutic rapport to mitigate the effects of disconnection. Many also integrated coping skills training, emotional regulation techniques, and crisis interventions to address rising anxiety, depression, and relapse risk. In cases where clients faced barriers to digital access or safety, clinicians coordinated with community resources and applied harm reduction approaches to maintain engagement and support.

Evaluation of the Findings

The purpose of this qualitative study was to examine clinicians' perspectives on the effect of social isolation during the COVID-19 pandemic on clients with substance use and mental disorders. In addition, the purpose of this qualitative study was to identify the relationship between the conceptual framework of operant learning with relation to factors affecting clients with substance abuse and mental disorders during the pandemic-induced isolation. The coding and analysis of the data resulted in two themes (a) impact of COVID-19 isolation on clients' substance use and mental health; (b) Other variables that affected clients with SUD and mental disorder during social isolation. These themes will be evaluated concerning the literature in the following two sub-sections.

RQ1: How do therapists working with substance users describe the way that pandemic-induced isolation during COVID-19 affected their client's substance use and mental disorder?

Theme 1 – Positive and negative impact of COVID-19 isolation on clients' substance use and mental health. Social isolation and its impact on clients with substance abuse and mental disorders was evident in various ways in this theme as disruption in treatment, the increase of substances and mental disorders as anxiety and stress. First, this disrupted discovery of the clients as is also underscored by Hassett-Walker's (2024) description of how the pandemic affected and disrupted people's recovery efforts. He described this as a "mass trauma-induced experience" (p. 1).

This was also supported by Kim et al. (2020), who discussed how the pandemic was a significant problem for people who were suffering from substance use and mental disorders. Findings aligned to this were included in category three which included issues related to treatment, virtual session problems, contagious issues, and family issues. Kim et al. (2020) continued to show varying systematic reviews that revealed and confirmed the prevalence of comorbid mental disorders in people with substance use disorder. Category three also aligns with Moreno et al. (2021) who stated that social isolation during the pandemic caused direct and indirect disadvantages related to family, social, and treatment support risk effects on people with severe mental disorders, such as socioeconomic disadvantage.

The findings in categories four and five are focused on the impact of social isolation on people with substance abuse and mental disorders through the discussion of how the pandemic-induced isolation-related stressors and restrictions or absence of social support increase the use of substance consumption or relapse. Operant learning theory is evident in this theme clients' behaviors in seeking ways to cope with the induced social isolation by seeking ways to indulge

in substances that help their stress levels which is a form of punishment because it led some to relapse or use more. The clients' behaviors also show as presented by the clinicians that many seek treatment for their problems via telehealth accessibility, AA meetings, group therapy, or other integrated ways during the isolation which aligns with the positive reinforcement of staying sober or trying to stay away from substances by any means available. The absence of positive reinforcement at the beginning of the social isolation phase caused many people to seek substances that led to an increase in abuse and mental disorders based on the data presented above.

These findings in category four and five about the increase of substances and mental disorder align with several publications in the literature. The reduction in many everyday activities as physical activity and lifestyle changes from the isolation aligns with Jeffers et al. (2022) discussion on the problems of social isolation during the pandemic on people with substance use and mental disorders to be further exacerbated. This is linked to mental illness in Jeffers et al. (2022) study that revealed in 2019 pandemic, roughly "20% reported severe mental illness, and 15% reported clinic substance use." (p. 2). The same evidence in this category of findings which can be explained by the prevalence presented by Sayed et al. (2024) study that "The pandemic has led to widespread social isolation, reduced physical activity, and significant lifestyle changes, posing potential risks to individuals' mental and emotional health." (p. 1). Reduction in treatments delivery system that was also present during isolation is prevalence in the study by Melamed et al. (2022) which aligns with the research by addressing the impact of social isolation on people with SUD because it poses a huge threat to vulnerable people with SUD problems regarding disruption in treatment delivery and community aid group sessions (AA).

Theme 2 – Other variables that affected clients with SUD s and mental disorder during social isolation. The specific finding within theme two of factors related to policies implemented during social isolation had an impact on increase of substances as illicit drugs and alcohol which supported by Lamonica et al. (2024) who stated, that “Studies show that the social isolation caused by policies implemented during the COVID-19 pandemic was a probable factor in the increased rates of opioid use and overdose deaths during this time.” (p. 547). This is linked to many problems including the use of various illicit drugs and alcohol among other substances to help treat their anxiety and depression symptoms. Similarly, the same dynamic is evidenced in this category of findings which is explained by the increase in trends of using illicit drugs during isolation as Marijuana for anxiety and stress. Higher risk of use, and mental disorders is supported by LeSaint and Snyder (2020) study that stated how COVID-19 isolation caused people with substance use disorders to be at a higher risk of reuse with risky drug practices, and causing exacerbation of existing or new mental health disorders to arise.

RQ 2: What accommodations and strategies did clinicians use to address the challenges of social isolation during the pandemic?

Theme 3- Changes and accommodations made by clinicians and clients during COVID-19 pandemic. Due to the problems of increased substances and mental disorders the clinicians and clients had to make some changes during the pandemic-induced isolation to provide and receive services. The disruption in the face-to-face services for clients with mental disorders and substance abuse caused an increase in seeking new or advanced interventions. The same dynamic is discussed to show the new integrated strategies into the treatment process to help clients seek treatment by creating online telehealth, services and group therapy sessions which were faced at the beginning with different barriers as the ability for some clients to get

used to online services because they were not familiar with technology or because they had no equipment that would help in that process. This is supported by Melamed et al. (2022) who stated, “Treatment programs for substance use disorders (SUDs) made a transition from in-person to remote care delivery.” (p. 96). This is linked to the discussed issue presented by the SAMHSA (2022) that some clients had with technology use and how telehealth was ideal for some, but not other clients. The same dynamic is evident in this category which recognized that for clinicians to remove the barriers of social isolation, the adoption of telehealth services by clients was necessary for them to receive ongoing treatments. For clients who had no experience with technology, the clinicians needed to create ways to help them through training and creating a workforce that would teach them how to use the technology implemented for telehealth services.

This can be explained by the accommodation of increased and switch to telehealth services provide the client’s treatment during the induced isolation. This is supported by Mark et al.’s (2022) study which stated that addiction treatment using telehealth services expanded to a higher level during the pandemic-induced isolation. The same dynamic is evidenced in creating new online or virtual interventions to help clients suffering from the disorders including telehealth services, AA meetings, and individual and group therapy. This is linked with Soklaridis et al.’s (2020) findings that due to the significant increase in the rate of clients’ mental disorders and substance abuse during the pandemic timely mental health interventions were needed to reduce the aftereffects of the disorders to afflicted clients.

Summary

The trustworthiness of the data in this qualitative research was established through the elements of transferability, dependability, and credibility. These elements ensure that the

findings of the data are reliable. The participants in this qualitative research are seven clinicians who have worked with clients before, during, and after the COVID-19 pandemic in the United States of America. The interviews were conducted via Zoom or email. The interviews were transcribed in Zoom and transferred to NVivo for coding. The first coding process created 96 codes, the second created 75. The third coding process led to the creation of 10 categories which were then divided into three themes that aligned with RQ1 and RQ2. Theme 1 was focused on the Positive and negative impact of COVID-19 isolation on clients' substance use and mental health. This theme included four categories which were lack of treatment, types of substances used, issues affecting clients (mental disorders experienced during isolation). Theme two included two categories which were different social and mental issues affecting clients during social isolation and hidden or lessened variables. Theme three was titled Changes and accommodations made by clinicians during the COVID-19 pandemic. This theme included four categories which were steps that client used to address the issue, therapy techniques and strategies use, changes made to accommodate clients, and online and telehealth therapy techniques and strategies used.

When evaluating the current findings in the context of the literature, the key studies related to Theme 1, and Theme 2 addressed the impact of COVID-19-induced isolation on people with SUD and mental disorders and found how induced isolation impacted the lives of clients negatively and or positively. The key studies related to theme three focused on the changes that clinicians and clients had to go through during the induced isolation to help clients and the changes clients had to experience to seek treatment using various services that worked for some among others.

Chapter 5: Implications, Recommendations, and Conclusions

The problem addressed in this qualitative study was the impact of social isolation on adults with substance abuse and mental disorders. Trucco et al. (2023), and Arena et al., (2021) discussed the impact of the isolation that had mental health implications and that those effects will be experienced over time as well. Taylor et al. (2021) discussed the increase of alcohol and recreational drug consumption during the pandemic to cope with anxiety, as their survey revealed consumptions levels of alcohol to be as high as 10 – 18% for adults, 6 – 8 % cannabis, and 3% Drugs. In keeping with this research problem, the purpose of this study was to better understand how the pandemic induced isolation affected adults during the COVID-19 pandemic. B.F. Skinner's learning theory served as the theoretical framework for this research. It helps explain conditioning of clients to run new technology and conditioning of clinicians to find new online strategies to meet the clients' treatment needs (Center for Substance Abuse Treatment, 1999).

Qualitative descriptive design was used as the primary tool to collect data as it helps amplify the data using a semi structured interviews with 11 open ended questions to collect the rich data from 7 professional clinicians in the field who have worked with clients suffering from substance abuse and mental disorder before, during and after COVID- 19 pandemic. The design was chosen due to the explanatory nature of the research and to be able to gather in depth narrative and description from clinicians' perspective on the effects of social isolation on clients suffering from substance abuse and mental disorders. Doyle et al. (2020) explained that qualitative descriptive design is the most suitable for studies that aim to describe participants experience as it is through straight forward description of experiences and perceptions.

After the approval from the Northcentral University Internal Review Board (IRB) was received recruitment of the counselors began via email. A combination of purposive and snowball sampling techniques were used to recruit seven participants. The saturation of data was reached from seven participants who provided rich and high-quality data during an in-depth interview process. Saturation as Saunder et al. (2017) states it to be maintaining instance of same codes and no new ones occur in the data.

The interviews were conducted in compliance with IRB regulations and those were recorded and transcribed as McMullin (2021) stated that the transcription ensures that the data from research is accurately depicted. Data analysis began after the interview transcription was sent to participants to be verified for accuracy, identified and checked. NVivo was used for organizing and analyzing the data after using thematic analysis. The extraction of themes using thematic analysis of data enabled the identification and extraction of patterns using a various step of systematic thematic analysis as presented by Naeem et al. (2023) “transcript creation and data familiarization; keyword identification; code selection; theme development; conceptualization through the interpretation of keywords, codes, and themes; and, finally, the development of a conceptual model.” (p. 4).

The number of codes that were created in the first phase of data analysis were 96 then they were combined to create 76 which were used to create three themes to provide evidence of understanding and responding to the research questions that were proposed by the researcher from the start of the research process. These themes are Theme 1 – Positive and Negative Impact of COVID-19 Isolation on Clients’ Substance Use and Mental Health; Theme 2 – Other Variables that Affected Clients with SUD and Mental Disorder During Isolation; Theme 3 –

Changes and accommodations made by clinicians and clients during COVID-19 pandemic

Isolation

Four limitations were presented as part of this study which are small sample size, the data collection process, use of an online interview instead of face to face, and researcher bias. The first limitation was the small sample of seven participants, but this was mitigated by achieving saturation which as Vasileiou et al. (2018) states, is reached when no additional issues are identified in the analysis. The second limitation related to the data collection process where the researcher wasn't the one collecting the information directly from the clients suffering from SUD and mental disorder, which can limit the information provided. This was mitigated by collecting data from clinicians who have worked with these clients before, during, and after the pandemic-induced isolation. Based on the third limitation of online interviewing with limited time, comfort, and inability to ask probing questions based on time restraints the researcher overcame this by following a step-by-step procedure as presented in Chapter 3 to ensure that the information presented was what the participant discussed. The last limitation had to do with potential researcher bias regarding the participants' approach to the interview and inclusion or exclusion of information regarding specific questions asked during the interview. This was addressed by staying close to the data by focusing exclusively on what the participants said. The next sections of this chapter will include a discussion of implications, recommendations for future research and practice, and conclusions drawn from the research findings.

Implications

Previous research identified barriers that clients faced that impeded their response to the effects of substance abuse and mental disorders before the pandemic and during the isolation, such as funding, inflexibility of treatment process, and limited providers (Lopez et al, 2022). The

long shift in implementing treatment procedures beginning of COVID-19 isolation led to a gap leading to increased SUD and mental disorders (Melamed et al. 2021). Hence, the current findings addressing the gap by exploring the effects of pandemic induced isolation on the population suffering from substance abuse and mental disorders, with emphasis on the changes and accommodations that clinicians and clients had to accomplish during the pandemic to provide and obtain treatment.

The seven professional clinicians interviewed provided rich data that is essential in understanding the experiences of clients suffering from substance abuse and mental disorders during the induced isolation and finding ways and strategies that clients' treatment continued successfully during the pandemic (Saloner et al., 2021). These findings provided new insight into addressing the problem disorders and recognized the gap of not being ready for such a pandemic when it struck (Blithikioti et al. 2021).

The implications for this research are based on and organized around the two research questions. This section presents valuable key points and issues surfaced during the induced isolation for clients with SUD and mental disorders such as, increase in anxiety and depression and the inability to find treatment services to help cope with these problems. Participants described the accommodation that clients needed during that, as well as the way these needs were met, from the perspectives of the professional clinicians treating them.

Research Question 1 Implication- How do therapists working with substance users describe the way that pandemic-induced isolation during COVID-19 affected their client's substance use and mental disorder?

This research question was developed to explore the positive and negative impacts of social isolation on people suffering from substance abuse and mental disorder, from the

perspective of clinicians describing the impact from their clients' lived experiences. The theme Positive and Negative Impact of COVID-19 Isolation on Clients' Substance Use and Mental Health affirmed that there was a great effect of social isolation on people with substance abuse and mental disorders. The findings in this study aligns with Bayers et al. (2022) which shows that clients not only experienced high levels of substance use but also developed increased levels of mental disorders which were triggered by isolation and caused stress, anxiety, and depression as well as mood changes and helplessness. The literature presented in Chapter 2 of this manuscript verified the themes that were evident through the data analysis process. The varied clinician's perspective showed that clients needed substances that helped them cope with various mental disorders such as anxiety and stress during the isolation. This finding in theme 1 expands upon Satre et al. (2020) study by providing clinicians' firsthand accounts of the way that social isolation during COVID-19 resulted in limited treatment and reduced social support and made interaction among individuals very brief, thus creating various psychological problems.

This led to the second theme, the identification of other issues that affected clients with SUDs and mental disorders during social isolation; and discussed additional factors that affected clients during that period. For example, theme two discussed problems that clients suffered from COVID-19 isolation such as loss of family, friends, and relationship problems which triggered use and increased mental disorders. This theme extends the work of Clark et al. (2022) by illustrating how isolation policies specifically amplified relationship loss and service disruption which led to the wide spread of substance use and mental health increase due to the extended period before treatment and accommodations were made. These exacerbated disparities in treatment access caused strains on many people with substance use and mental disorders because of the uncertainty of the pandemic. The effect and disparities in seeking help thus increased the

spread and caused strains in the mental health and behavioral health communities (Mejia et al., 2024).

Research Question 2 Implications-What accommodations and strategies did clinicians and clients used to address the challenges of social isolation during the pandemic?

The second research question was developed to understand the various changes, strategies, and steps that clinicians and clients took to address the impact of social isolation, which also included creating new treatment strategies and advanced interventions to accommodate clients' needs and the additional or different steps that clients had to take to receive treatment. Thus, the clinician's effort to find ways to help clients and the changes made by clients to seek treatment aligns with the themes from the literature review in Chapter 2. These results corroborate the ideas of Baloh et al. (2024) and Oesterle et al. (2020) which noted how clinicians had to make necessary changes to their treatment delivery services, such as transferring services to telehealth and using other apps to conduct sessions to meet clients' needs and clients had to put in the efforts in learning new technology to receive treatment during the isolation period.

This finding is also consistent with Baloh et al. (2023) that clients needed continued treatment regardless of the situation and counselors' approach to SUD and mental disorder treatment with complete support of new strategies that need to be improved to help clients during these difficult times. Hence it is ideal for clinicians to expand their options that might alter future of treatment strategies by transitioning to a boarder and successful improvement for clients with SUDs and mental disorders through implementation and investment in telehealth infrastructures, training and equipment of clients, and providers with telehealth use, by providing support,

hardware, and changes in laws and regulations necessary for telehealth services (Drake et al., 2020).

Theme 3 advances the theoretical application of operant conditioning by demonstrating adaptive learning among clinicians and clients in telehealth environments. These results are in agreement with Gliske et al. (2022) finding which showed that the pandemic induced isolation forced clinicians and clients to transition to telehealth rapidly during the social isolation period despite often the limited knowledge about the novel format and the feasibility and effectiveness of the process. The importance of learning new strategies, technologies, and interaction tactics contributed to the theoretical framework of learning theory. The study confirms and extends Skinner's operant learning principles, highlighting how reinforcement and adaptation behaviours emerged in response to rapidly changing treatment modalities during the pandemic. The sudden and overwhelming need to isolate forced clients and clinicians to learn new skills. This finding provided an insight into the application of operant learning, as practitioners needed to condition clients to learn new technology and reinforce the new behavior: the use of telehealth for treatment. Similarly, these results seem to be consistent with other research of Lin et al. (2020) which found it necessary to condition providers to use telehealth services to offer treatment to clients in need during the critical time of the induced isolation period. This was especially crucial for older adults who needed to find treatment and who were less likely to use the technology.

This research confirms that various new and modified services and resources were provided to clients during the COVID-19 isolation period (Lin et al. 2020). However, it was the client's responsibility and choice to engage and seek these services after the new implications were put in place. Hence, the clients meeting with clinicians through telehealth and other related services does align with the aspect of conditioning in the theory of operant learning. The social

isolation period resulted an increase in SUDs and mental disorders as stress and anxiety created a shift and this was a problem especially for clients who were unable to utilize the provided resources (Satre et al., 2020). Therefore, these experiences emphasized that it is essential that clinicians put into effect various accommodations to sustain support and improve services offered in case of an emergency or future pandemic. The final implication of this research demonstrates the need to have means and support during crises in case of another pandemic, to ensure the safety of clients suffering from SUDs and mental disorders and ensure reduction in substance use and minimize the rise of mental problems.

Recommendations for Practice

The purpose of this qualitative research study was to show the effects of COVID-19 isolation on clients suffering from SUD and mental disorder from clinicians' perspectives. The noted research also displayed the need for clinicians to find treatment strategies to meet the needs of the affected population of people with SUD and mental disorder during any pandemic (Carvalto & De Sousa, 2020). The data analysis in the research included different findings that demonstrated and aligned with the importance of the increase in SUD and mental disorder during the lockdown due to the lack of treatment and inability to meet the needs of the clients who were seeking help until new policies were put in place (Atlas et al., 2025). The noted research also displayed the need to find treatment strategies to meet the needs of the affected population during any pandemic. The detailed exploration of the clinician's perspectives and experiences supported new insight into the barriers in facing such pandemic induced isolation (Blithikioti et al., 2021).

Therefore, the recommendation for practice is for clinicians to train specific and improved strategies of using technology to implement treatment to clients who suffer from SUD

and mental disorder. Based on Theme 3, which identified rapid transitions to telehealth as effective, it is recommended that clinicians receive ongoing telehealth training to sustain these gains. Since the treatment strategies of using telehealth services worked during the pandemic this strategy needs to be implemented in all facilities that help clients with different mental health disorders. The facilities should provide specific telehealth treatment methods that best serve every individual based on the problem they are facing. This recommendation supports the continuation of accessible care, especially for clients with mobility or transportation limitations. So that they are prepared for future pandemic by implementing and identifying strategies through the education of clients and clinicians. Such development of improved process could be the key to being ahead of any problem. Applying policies that best aid the needs of clinicians and clients might help eliminate future struggles in providing the best treatments for the desired population.

Recommendations for Future Research

The findings from the present qualitative research provided information and knowledge supporting prior discussions of the effects of COVID-19 isolation on people with SUDs and mental disorders. The qualitative research offered the need for new strategies and accommodation to be put into place to help clients suffering from SUD and mental disorders if another pandemic is to happen. The research also revealed the necessity for changes to be made to treatment strategies in order for clinicians to help those clients who were not able to seek help because of the isolation. Thus, the need for future research should be focused on finding new and improved strategies that will benefit both clinicians and clients which will result in better treatment practices for people with SUDs and mental disorders.

The first recommendation is to conduct a qualitative case study to explore the clinicians' and clients' feedback on treatment process. The feedback from clinicians will provide

information on what accommodations or strategies had to be taken into consideration and what helped or worked or didn't for clients with SUD and mental disorder. The clients' feedback will help explain in depth what they were going through during that period and what caused them to seek substances or led to the development of mental problems or what triggered these problems. The clients' perspective was missing from the current study given the research design. Hence, doing a qualitative study to gather such information would be useful.

This would enable the researcher to invite a wider range of participants and thus gather more data about treatment and accommodation strategies during isolation. Hence, future research will provide researchers with a better understanding of successful accommodation and the modifications that are necessary and effective in finding treatment strategies that best serve the clients suffering from SUD and mental disorder (National Academies of Sciences, Engineering, and Medicine, 2021). The feedback will also help provide ideas on how to implement treatment policies to help transition the process in case another pandemic strikes.

The second recommendation for future research is to conduct quantitative research that focuses on the treatment and accommodations strategies to widen the spectrum in further understanding and establishing the focus on different treatment processes from the perspectives of both clients and clinicians. This will provide researchers with valuable information on what generated the best treatment outcomes. Quantitative research includes classifying features using numerical numbers or statistical construction to explain a phenomenon the quantitative research can be useful in collecting necessary statistical data to ensure real or significant results (Shaughnessy, et al. 2009). This study identified initial patterns in clinician adaptation; future longitudinal research could examine the sustainability of these adaptations over time. The research would be set out over a six-month period to review and determine which treatment

process best serves the clients' needs during a pandemic induced isolation period. Given the small sample size and clinician-only perspectives, future research should include client perspectives to validate these findings.

To further integrate the clients' perspectives, the third recommendation is for conducting a qualitative study aimed at clients who have developed SUD and mental disorder during the isolation period and who didn't have prior use. Based on the feedback from the participants in this study some clients suffered from mental disorders such as anxiety, and depression which led to SUD coping with the isolation pressures. The changes the clients reported to clinicians could be the starting point for gathering information on which elements triggered these changes. This could thus provide more awareness to the clinicians regarding factors contributing to the problem. The qualitative research would allow integration of new elements and ideas to capture areas that have not already been included in past research. This would shed light on more accommodation and strategies to be put in place if another pandemic happened.

Another recommendation would be the use of operant learning theory for similar future research as it provides a great framework in providing the reinforcement used to help clients seeking treatment and learning new ways to help in their treatment process such as telehealth and technology use. Similarly, helping clinicians in providing new strategies to support their client's treatment and achieved their goals and needs through positive reinforcement. Thus, providing an opportunity to deepen the understanding of behavioral adaptation in a clinical setting.

Conclusions

The problem addressed was substance abuse and mental disorder among adults related to COVID-19 pandemic-induced isolation. Accordingly, the purpose of this qualitative descriptive study was to integrate the clinician's perspectives to better understand how pandemic-induced

isolation affected adults with substance abuse and mental disorder. The theoretical framework of operant learning theory which explains addiction based on compulsive and impulsive behaviors in relation to learning. The research questions were related to the effect of social isolation during the pandemic and its effects on clients with SUD and mental disorders and the accommodations that clinicians used to address the challenges of the isolation on their clients.

The sample included seven participants from the United States of America who are clinicians that have worked with clients before, during, and after COVID-19 isolation. Research provided sufficient proof that there was a significant impact on substance use and abuse treatment during the pandemic caused by isolation. A qualitative descriptive design was used because it helps in examining the clinicians' experience and interpretation to further explore the research issue and answer questions related to the effects of COVID-19 on people suffering from substance abuse and mental issues.

The data collection process included a semi-structured interview via Zoom of seven clinicians that have worked with clients before, during or after COVID-19. The thematic data analysis process started with 96 codes which were then combined based on similarity and relationship to create 76 codes. NVivo was utilized for analysis and coding as it helped in identifying emergent patterns and themes. After the codes were combined 10 categories were created which generated three themes. The three themes are Theme 1 – Positive and negative impact of COVID-19 isolation on clients' substance use and mental health; Theme 2- Other variables that affected clients with SUD and mental disorder during social isolation; Theme 3– Changes and accommodations made by clinicians and clients during COVID-19 pandemic isolation.

Theme 1 includes information on the impact that COVID-19 had on clients with substance use and mental disorder as the clients engaged in negative behaviors of use of various substances to cope with the negative thoughts, stress, anxiety, and depression. Theme 2 included information on variables that affected clients during the isolation period as social and mental issues and included clinicians identifying and implementing new strategies to help clients face SUD and mental disorder problems when another pandemic strikes again. Theme 3 included the accommodation that clients and clinicians needed to do to seek treatment or provide treatments such as transferring to telehealth and learning new technology by training clinicians and clients to new technology that will help in seeking and implementing treatment.

The information gathered during this research is of significant value because it sheds light on the importance of educating, influencing, and enhancing the many tools needed to overcome such significant problems that affected or may affect the world. Generating further research using both qualitative and quantitative research processes helped understand the deep impact of such pandemics and the strategies that need to be implemented to help the people affected during that critical time. Overall, this study provides essential insights into the lived experiences of clinicians and clients navigating unprecedented challenges. By illuminating both the struggles and adaptive strategies employed, this research offers meaningful guidance for future practice and policy, and opens the door for continued exploration into sustainable treatment delivery models.

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Appendix A

Field Test

These are questions that the participants in the research will ask their clients to get data based on the therapist's feedback. Please do not answer the questions just provide feedback on if these questions are sufficient or if you would like to add anything to them.

1. What are the pressing issues that clients who suffer from substance abuse and mental health issues grapple in regard to finding care from therapists during COVID-19 isolation?
2. Was there any disruption in illicit drugs activity during COVID-19 isolation?
3. How was prescribed drugs controlled during COVID -19 isolation to limit use and misuse?
4. What are the steps that clients used to address the issue of drug use and mental health and how did you improve your care during COVID-19 pandemic isolation>
5. Did the trend of using substances change during COVID-19 isolation? What was the major substance used most during COVID-19 isolation and why?
6. How did substances affect the clients mental state during the isolation period?
7. What is the clients experience in getting telehealth services for substance abuse during COVID-19 isolation?
8. What are the changes made if any to accommodate your needs as a client with substance abuse and mental issues during COVID-19 isolation and were these accommodations successful or not? Why yes or no
9. How did social isolation and support loss affect clients with substance abuse and mental health?

10. What is the hidden impact if any during COVID-19 isolation cause clients with substance abuse and mental issues?
11. Did COVID-19 isolation cause a positive or negative impact on clients with substance abuse and mental issues?

Appendix B

Feedback

The Feedback of the field study that was provided by coworkers from Simply Amazing Family Environment

Field Study 1 Feedback

1. Barriers greater than, lesser than or equal and why.
2. Ok
3. Don't understand the question. Perhaps this is speaking to the notion of regulation on the part of the prescriber?
4. How did client maintain continuity of care during the height of the Pandemic
5. More person centered (individualized)
6. How has the Pandemic affected client's mental state overall, independent of substance use as well as with active use?
7. Ok
8. Ok
9. Ok
10. Ok
11. Ok

Field Study Feedback 2

Here is the feedback I have.

- isolation/quarantine/social distance: Not sure if one word is more leading than the other.
- On questions two and eleven additional questions would be helpful to avoid just a yes or no answer.

Thank you for letting me review your questions.

Appendix C

Field Study

This appendix shows the corrections after the field study feedback.

1. What are the pressing issues that clients who suffer from substance abuse and mental health issues grapple in regard to finding care from therapists during COVID-19 isolation? Barriers greater than, lesser than or equal and why.
2. Was there any disruption in illicit drugs activity during COVID-19 isolation?
3. Was prescribed drugs controlled during COVID -19 isolation to limit use and misuse? And what strategies were used to help in that process?
4. What are the steps that clients used to address the issue of drug use and mental health and How did client maintain continuity of care during the height of the Pandemic?
5. Did the trend of using substances change during COVID-19 isolation? What was the major substances used most during COVID-19 isolation and why?
6. How has the Pandemic affected client's mental state overall, independent of substance use as well as with active use?
7. What is the clients experience in getting telehealth services for substance abuse during COVID-19 isolation?
8. What are the changes made if any to accommodate your needs as a client with substance abuse and mantal issues during COVID-19 isolation and were these accommodations successful or not? Why yes or no
9. How did social isolation and support loss affect clients with substance abuse and mental health?

10. What is the hidden impact if any during COVID-19 isolation cause clients with substance abuse and mental issues?
11. Did COVID-19 isolation cause a positive or negative impact on clients with substance abuse and mental issues?

Appendix D

Recruitment Email/Letter

My name is Majida Hijazi, and I am a doctoral student at the National University. I am conducting a research study to better understand how pandemic-induced isolation during the COVID-19 pandemic affected substance abuse and mental disorders among adults.

I am recruiting individuals who meet all of these criteria:

1. You are a clinician, psychiatrist, or therapist who works with or has worked before during, during, and after COVID -19 pandemic with adult clients suffering from SUD and mental disorder.
2. Lives in the USA

If you decide to participate in this study, you will be asked to do the following activities:

1. Participate in a 1:1 online 60 min interview is scheduled via zoom at your convenience to respond to the provided list of questions which will be recorded for data collection purposes.
2. Review your interview transcript via email for 10-15 minutes.

During these activities, you will be asked questions about:

- During the interview questions related to the effects of COVID-19 induced isolation on clients suffering from substance abuse and mental disorder you have worked with before during or after the pandemic

If you are interested in participating in this study, please refer to the email with the questionnaire attached to it. If you have questions, please contact me at phone number 330-357-7222 or email address m.hijazi7584@o365.ncu.edu

Thank you for considering participating in this voluntary research!

Majida Hijazi

Appendix E

Consent Form

My name is Majida Hijazi, and I am a doctoral student at National University (NU).

I'm asking you to take part in a research study about COVID-19 induced isolation has affected clients with substance abuse and mental disorders. The name of this research is **"Effects of COVID-19 on People with Substance Use Disorder."**

You may participate in this research if you meet all of the following criteria:

3. You are a clinician, psychiatrist, or therapist who works with or has worked before during, during, and after COVID -19 pandemic with adult clients suffering from SUD and mental disorder.
4. You live in the USA.

I hope to include 8-12 people in this research.

Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

What you will be asked to do: If you agree to be in this study, you will be asked to do the following activities:

3. Participate in a 1:1 online 20-60 min interview is scheduled via zoom at your convenience.
4. Review and approve your interview transcript via email for 10-15 minutes.

During these activities, you will be asked questions about:

- The effects of COVID-19 induced isolation on clients suffering from substance abuse and mental disorders you have worked with before, during or after the pandemic.

Risks: There are no foreseeable risks or discomforts associated with this study. You can still skip any question you do not wish to answer, skip any activity, or stop participation at any time.

Benefits: If you participate, there are no direct benefits to you. This research may increase the body of knowledge in the subject area of this study.

Recording: I would like to audio/video record your responses with Zoom during the interview. You can disable the video function of the online meeting platform at any time.

Mandated Reporting: My professional role outside of NU requires me to report suspicion of child or elderly abuse, suspicion of possible harm to self or others, and committed crimes to the appropriate authorities.

Confidentiality: I will keep the records of this study private and take reasonable measures to protect the security of all your personal information. In any report I make public, I will not include any information that will make it possible to identify you. I will securely store your data for 3 years. Then, I will delete electronic data and destroy paper data.

Taking part is voluntary: Participation in this study is completely voluntary. You may quit at any time.

If you have questions: Please ask any questions you have now. If you have questions later, you may contact me at phone number 330-357-7222 or email address m.hijazi7584@o365.ncu.edu

If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) via email at irb@nu.edu

How to sign up for the study: Please send me an email to m.hijazi7584@o365.ncu.edu to indicate your willingness to participate and suggest available times when we can schedule the interview.

Appendix F

Research Questions

1. What pressing issues did your clients who suffered from substance abuse and mental health issues grapple with in regard to finding care from therapists during COVID-19 isolation? Please describe any barriers to access to treatment that were greater, lesser or equal to accessing treatment before or after the pandemic.
2. Was there any disruption in illicit drugs activity during COVID-19 isolation?
3. Were there disruptions in your clients receiving access to psychiatric medications prescribed by their psychiatrists or other prescribing providers during COVID-19 isolation?
4. What were the steps that clients used to address the issue of drug use and mental health and how did clients maintain continuity of care during the height of the Pandemic?
5. Did the trend of using illicit substances change during COVID-19 isolation? What were the major abused substances used by your clients during COVID-19 isolation? How did any issues regarding access to treatment influence increased or decreased substance abuse?
6. How has the Pandemic affected client's mental state overall, independent of substance use as well as with active use?
7. What was the client's experience like to get any telehealth services for substance abuse during COVID-19 isolation?
8. What the changes did you make, if any, to accommodate your clients with substance abuse and mental issues during COVID-19 isolation and were these accommodations successful or not?
Why yes or no
9. How did social isolation and loss of or difficulties getting support affect clients with substance abuse and mental health?

10. Where there hidden or lessor know variables that you observed during COVID-19 isolation that impacted your substance abuse or mental health clients?

11. What positive or negative impacts did COVID-19 isolation have on your clients with substance abuse and mental issues?

Appendix G

Themes created for the research

Theme 1 – Positive and Negative Impact of COVID-19 Isolation on Clients’ Substance Use and Mental Health

- Category 1 – Lack of treatment
- Category 2 – Types of substances
- Category 3 – Issues affecting clients (mental disorders experienced during isolation)
- Category 4 – access of treatment during COVID-19 isolation

Theme 2 – Other Variables that Affected Clients with SUD and Mental Disorder During Isolation

- Category 5 – Impact of social isolation
- Category 6– Different social and mental variables that affected clients during isolation

Theme 3 – Changes and accommodations made by clinicians and clients during COVID-19 pandemic Isolation

- Category 7 -Steps that clients used to address the issue
- Category 8 — Therapy techniques and strategies used
- Category 9 –Changes made to accommodate clients
- Category 10 – Online and telehealth

Research Questions

RQ1

How do clinicians working with substance users describe the way that pandemic-induced isolation during the COVID-19 affected their client’s substance use and mental disorder?

Theme 1 –Positive and negative impact of COVID-19 isolation on clients’ substance use and mental health

- Category 1 – Lack of treatment
- Category 2 – Types of substances
- Category 3 – Issues affecting clients (mental disorders experienced during isolation)
- Category 4– access of treatment during COVID-19 isolation

Theme 2 – Other Variables that Affected Clients with SUD and Mental Disorder During Isolation

- Category 5 – Impact of social isolation
- Category 6 – Different social and mental variables that affected clients during isolation

RQ2

What accommodations and strategies did clinicians use to address the challenges of social isolation during the pandemic?

Theme 3– Changes and accommodations made by clinicians and clients during COVID-19 pandemic isolation

- Category 7 - Steps that clients used to address the issue
- Category 8 — Therapy techniques and strategies used
- Category 9 –Changes made to accommodate clients
- Category 10 – Online and telehealth